POSTER LISTINGS

25TH ANNUAL MEETING OF THE ORGANIZATION FOR HUMAN BRAIN MAPPING

June 9-13, 2019
AUDITORIUM PARCO DELLA MUSICA | ROME
Poster Listings

Poster Category Key
Poster Numbers by Category/Sub-category ........................................... 3

Monday Posters ............................................................................. 5
Tuesday Posters ............................................................................. 63
Wednesday Posters ....................................................................... 120
Thursday Posters ........................................................................... 181
Author Index .................................................................................. 236
Poster Numbers now begin letter (M,T,W,TH) which indicates what day you will present
• Display Days: Your poster should be displayed on your assigned poster board for that day only.
• Set-Up Time: Please set-up your poster from 8:00 – 9:00 am on the day of your assigned presentation. Posters placed before this time, will be removed.
• Poster Stand-By Times:
  – Odd numbered posters will present from 12.45 – 13.45.
  – Even numbered posters will present from 13.45 – 14.45.
• There will be a Poster Reception each evening:
  Monday, June 10: 18.30 – 19.30
  Tuesday, June 11: 17.00 – 18.00
  Wednesday, June 12: 18.15 – 19.15
  Thursday, June 13: 16.00 – 17.00
You may stand by your poster during this time.
• Poster Teardown: Presenters should remove their posters IMMEDIATELY after the poster reception. IMPORTANT! Posters not removed within 30 minutes of the end of the reception teardown time will be recycled.

**MONDAY POSTER CATEGORIES**

**Disorders of the Nervous System:** Autism (M001-M060), Research Domain Criteria studies (RDoC) (M061-M064), Schizophrenia and Psychotic Disorders (M065-M155), Sleep Disorders (M156-M159), Stroke (M160-M210), Traumatic Brain Injury (M211-M246)

**Emotion and Motivation:** Emotion and Motivation Other (M247-M278), Emotional Learning (M279-M285), Emotional Perception (M286-M321), Reward and Punishment (M322-M339), Sexual Behavior (M340-M346)

**Imaging Methods:** MEG (M347-M400), MR Spectroscopy (M401-M414)

**Modeling and Analysis Methods:** Classification and Predictive Modeling (M415-M527), fMRI Connectivity and Network Modeling (M528-M774), Methods Development (M775-M871), Multivariate modeling (M872-M897)

**TUESDAY POSTER CATEGORIES**

**Disorders of the Nervous System:** Anxiety Disorders (T001-T015), Eating Disorders (T016-T027), Medical illness with CNS impact (e.g. chemotherapy, diabetes, hypertension) (T028-T043), Obsessive-Compulsive Disorder and Tourette Syndrome (T044-T055), Other Psychiatric Disorders (T056-T079)

**Imaging Methods:** Anatomical MRI (T080-T168), Diffusion MRI (T169-T233)

**Language:** Language Acquisition (T234-T243), Language Comprehension and Semantics (T244-T278), Language Other (T279-T284), Reading and Writing (T285-T317), Speech Perception (T318-T347)

**Lifespan Development:** Aging (T348-T430), Lifespan Development Other (T431-T453), Normal Brain Development: Fetus to Adolescence (T454-T537)

**Modeling and Analysis Methods:** Bayesian Modeling (T538-T550), Segmentation and Parcellation (T551-T597), Task-Independent and Resting-State Analysis (T598-T651)

**Poster Category Key, continued**

**THURSDAY POSTER CATEGORIES**

**Brain Stimulation Methods:** Deep Brain Stimulation (Th001-Th007), Direct Electrical/Optogenetic Stimulation (Th008-Th012), Invasive Stimulation Methods Other (Th013-Th015), Non-invasive Electrical/ tDCS/tACS/tRNS (Th016-Th037), Non-invasive Magnetic/TMS (Th038-Th060), Non-invasive Stimulation Methods Other (Th061-Th071), Sonic/Ultrasound (Th072-Th074), TDCS (Th075-Th094), TMS (Th095-Th120)

**Disorders of the Nervous System:** Bipolar Disorder (Th121-Th131), Depressive Disorders (Th132-Th201), Disorders of the Nervous System Other (Th202-Th255)

**Higher Cognitive Functions:** Decision Making (Th256-Th294), Executive Function (Th295-Th334), Higher Cognitive Functions Other (Th335-Th359), Imagery (Th360-Th367), Music (Th368-Th393), Reasoning and Problem Solving, Space (Th394-Th396), Time and Number Coding (Th397-Th413)

**Imaging Methods:** EEG (Th414-Th482), Imaging Methods Other (Th483-Th496), Imaging of CLARITY (Th497-Th498), NIRS (Th499-Th527), Non-BOLD fMRI (Th528-Th537), Optical coherence tomography (OCT) (Th538), PET (Th539-Th548), Polarized light imaging (PLI) (Th549)

**Modeling and Analysis Methods:** Exploratory Modeling and Artifact Removal (Th550-Th555), Image Registration and Computational Anatomy (Th556-Th569), Motion Correction and Preprocessing (Th570-Th587), Other Methods (Th588-Th593), PET Modeling and Analysis (Th594-Th599), Univariate Modeling (Th596-Th601)

**Motor Behavior:** Brain Machine Interface (Th602-Th610), Mirror System (Th611-Th619), Motor Behavior Other (Th620-Th627), Motor Planning and Execution (Th628-Th647), Visuo-Motor Functions (Th648-Th657)

**Neuroanatomy:** Anatomy and Functional Systems (Th658-Th670), Cortical Anatomy and Brain Mapping (Th671-Th706), Cortical Cyto- and Myeloarchitecture (Th707-Th713), Normal Development (Th714-Th723), Subcortical Structures (Th724-Th742), Transmitter Receptors (Th743-Th746), White Matter Anatomy, Fiber Pathways and Connectivity (Th747-Th805)

**Social Neuroscience:** Self Processes (Th806-Th819), Social Cognition (Th820-Th854), Social Interaction (Th855-Th886), Social Neuroscience Other (Th887-Th905)

---

**WEDNESDAY POSTER CATEGORIES**

**Disorders of the Nervous System:** Addictions (W001-W048), Alzheimer’s Disease and Other Dementias (W049-W160), Epilepsy (W161-W208), Parkinson’s Disease and Movement Disorders (W209-W278)

**Genetics:** Genetic Association Studies (W279-W297), Genetic Modeling and Analysis Methods (W298-W305), Genetics Other (W306-W311), Neurogenetic Syndromes (W312-W320), Transcriptomics (W321-W328)

**Imaging Methods:** BOLD fMRI (W329-W507), Multi-Modal Imaging (W508-W542)

**Informatics:** Brain Atlases (W543-W573), Databasing and Data Sharing (W574-W595), Informatics Other (W596-W609), Workflows (W610-W638)

**Learning and Memory:** Implicit Memory (W639-W640), Learning and Memory Other (W641-W652), Long-Term Memory (Episodic and Semantic) (W653-W687), Neural Plasticity and Recovery of Function (W688-W711), Skill Learning (W712-722), Working Memory (W723-W757)

**Modeling and Analysis Methods:** Diffusion MRI Modeling and Analysis (W758-W811), EEG/MEG Modeling and Analysis (W812-W863)

**Physiology, Metabolism and Neurotransmission:** Cerebral Metabolism and Hemodynamics (W864-W881), Neurophysiology of Imaging Signals (W882-W893), Pharmacology and Neurotransmission (W894-W902), Physiology, Metabolism and Neurotransmission Other (W903-W906)

---

**Poster Numbers now begin letter (M,T,W,TH) which indicates what day you will present**

- **Display Days:** Your poster should be displayed on your assigned poster board for that day only.
- **Set-Up Time:** Please set up your poster from 8:00 – 9:00 am on the day of your assigned presentation. Posters placed before this time, will be removed.
- **Poster Stand-By Times:**
  - Odd numbered posters will present from 12:45 – 13:45.
  - Even numbered posters will present from 13:45 – 14:45.
- **There will be a Poster Reception each evening:**
  - Monday, June 10: 18.30 – 19.30
  - Tuesday, June 11: 17.00 – 18.00
  - Wednesday, June 12: 18.15 – 19.15
  - Thursday, June 13: 16.00 – 17.00
- **You may stand by your poster during this time.**
- **Poster Teardown:** Presenters should remove their posters IMMEDIATELY after the poster reception.

**IMPORTANT! Posters not removed within 30 minutes of the end of the reception teardown time will be recycled.**
M001 Cortical surface architecture endophenotype and correlates of clinical diagnosis of autism spectrum
Bun Yamagata1, Takashi Itohashi2, Junya Fujino2, Haruhiisa Ohta2, Osamu Takashio2, Motoaki Nakamura2, Nobumasa Kato3, Masaru Mimura2, Ryu-ichiro Hashimoto2, Yuta Aoki2
1Keio University, Tokyo, Japan, 2Showa University, Tokyo, Japan, 3Showa University, Tokyo, Japan

M002 Machine Learning Guided Neurofunctional Markers for High-Functioning Autism Spectrum Disorder
Sheeba Arnold Anteraper1, Kaustubh Potil1,4, Xavier Gue1,5, Gagan Joshi2,6
1Northeastern University, Boston, MA, United States, 2Massachusetts General Hospital, Boston, MA, United States, 3Research Centre Jülich, Jülich, Germany, 4Heinrich-Heine University, Düsseldorf, Germany, 5Massachusetts Institute of Technology, Cambridge, MA, United States, 6Harvard Medical School, Boston, MA, United States

M003 A mechanistic link between deficient synaptic pruning and functional hyper-connectivity in autism
Marco Pagani1, Alice Bertero1, Alessia De Felice1, Kaustubh Supekar2, Stavros Trakoshis3, Alberto Galbusera1, Michael Lombardo1, Vinod Menon2, Massimo Pasqualetti6, Alessandro Gozzi6
1Functional Neuroimaging Laboratory, CNCS, Istituto Italiano di Tecnologia, Rovereto, Italy, 2Stanford University, Stanford, CA, United States, 3Laboratory for Autism and Neurodevelopmental Disorders, University of Cyprus, Cyprus, Cyprus, 4Department of Biology, Unit of Cell and Developmental Biology, University of Pisa, Pisa, Italy

M004 Network differences during an n-back working memory task in adults with autism spectrum disorder
Veronica Yuk1,2, Benjamin Dunkley1,2, Evdokia Anagnostou1,2, Margot Taylor1,2
1Hospital for Sick Children, Toronto, Ontario, Canada, 2University of Toronto, Toronto, Ontario, Canada

M005 Atypical Scaling Between the Inner and Outer Curvature of the Brain in Autism Spectrum Disorder
Tim Schäfer1, Caroline Mann1, Anke Bletsch2, Eva Loth1, Declan Murphy1, Jon Buiterlaar2, Tony Charmant3, Tobias Banaschewski1, Simon Baron-Cohen1, Sven Bolte1, Sarah Durston1, EU-AMIS LEAP consortium1, Christine Eckert1
1Department of Child and Adolescent Psychiatry, University Hospital Frankfurt, Goethe University, Frankfurt am Main, Germany, 2Institute of Psychiatry, Psychology and Neuroscience, King's College London, London, United Kingdom, 3Donders Institute for Brain Cognition and Behavior, Donders Centre for Cognitive Neuroimaging, Nijmegen, Netherlands, 4Child and Adolescent Psychiatry, Medical Faculty Mannheim, University of Heidelberg, Mannheim, Germany, 5Autism Research Centre, Department of Psychiatry, University of Cambridge, London, United Kingdom, 6Center for Neurodevelopmental Disorders (KIND), Center for Psychiatry Research, Stockholm, Sweden, 7Department of Psychiatry, Brain Center Rudolf Magnus, University Medical Center Utrecht, Utrecht, Netherlands, EU-AMIS, London, United Kingdom

M006 Event-related Spectral Perturbations of Auditory Distractor Processing in Adults with Autism
Debra Karthson1
1Stanford University, Stanford, CA, United States

M007 Do Schizophrenia and Autism Spectrum Disorder Share the Same Root? A Neuroimaging Evidence
Yuhui Du1, Zening Fu2, Dongdong Lin1, Godfrey Pearson3, Peter Kochunov4, Mustafa Salman2, Md Abdur Rahaman2, Anees Abrol3, Vince Calhoun4
1School of Computer & Information Technology, Shantou University, Taiyuan, China, 2The Mind Research Network, Albuquerque, NM, United States, 3Departments of Psychiatry, Yale University, New Haven, CT, United States, 4University of Maryland Center for Brain Imaging Research, MD, United States, 5Department of Electrical and Computer Engineering, University of New Mexico, Albuquerque, NM, United States

M008 Cortical Gyration in Individuals with Autism Spectrum Disorder and 22q11.2 Deletion Syndrome
Caroline Mann1, Maria Gudbrandsden1, Anke Bletsch1, Eileen Daly1, Clodagh Murphy1, Rob Wichers2, Vladimir Stoenecheva1, Emily Perry2, Derek Andrews3, Charlotte Blackmore2, Mario Rogdaki1, Leila Kushan2, Carrie Bearden2, Declan Murphy1, Michael Craig2,6, Christine Eckert1,2,3, Margaret Taylor1,2,3
1Department of Child and Adolescent Psychiatry, University Hospital Frankfurt, Frankfurt am Main, Germany, 2Institute of Psychiatry, Psychology and Neuroscience, King’s College London, London, United Kingdom, 3MIND Institute and Department of Psychiatry and Behavioral Sciences, UC Davis, Sacramento, CA, United States, 4Psychiatric Imaging Group, MRC London Institute of Neurocognitive Sciences, Imperial College London, London, United Kingdom, 5Semel Institute for Neuroscience and Human Behavior, UCLA, Los Angeles, CA, United States, 6National Autism Unit, Bethlem Royal Hospital, London, London, United Kingdom

M009 Searching for Multimodal Neuromarkers of Social Deficits in Autism: A Replication Study
Zening Fu1, Jiayu Chen1, Yuhui Du1, Sui Ji1,2, Christine Ecker1,2
1The Mind Research Network, Albuquerque, NM, United States, 2Shanxi University, Taiyuan, China, 3Institute of Automation, Chinese Academy of Sciences, Beijing, China, 4The Mind Research Network University of New Mexico, Albuquerque, NM, United States

M010 OXTR polygenic risk for ASDs impacts right posterior insula volume in two healthy young cohorts
Jinfeng Wang1, Wen Qin1, Jiayuan Xu1, Qiang Xu1, Zhaoxiang Ye2, Chunshui Yu1, Feng Liu1, Tianjin Medical University General Hospital, Tianjin, China

M011 Neuroanatomical underpinnings of ASD-symptomatology in 22q11.2 deletion syndrome and idiopathic ASD
Anke Bletsch1, Caroline Mann1, Eileen Daly1, Declan Murphy1, Rob Wichers2, Vladimir Stoenecheva1, Emily Perry2, Derek Andrews3, Charlotte Blackmore2, Mario Rogdaki1, Leila Kushan2, Carrie Bearden2, Declan Murphy1, Michael Craig2,6, Christine Eckert1,2,3, Margaret Taylor1,2,3
1Department of Child and Adolescent Psychiatry, University Hospital Frankfurt, Frankfurt am Main, Germany, 2Institute of Psychiatry, Psychology and Neuroscience, King’s College London, London, United Kingdom, 3MIND Institute and Department of Psychiatry and Behavioral Sciences, UC Davis, Sacramento, CA, United States, 4Psychiatric Imaging Group, MRC London Institute of Neurocognitive Sciences, Imperial College London, London, United Kingdom, 5Semel Institute for Neuroscience and Human Behavior, UCLA, Los Angeles, CA, United States, 6National Autism Unit, Bethlem Royal Hospital, London, London, United Kingdom

M012 Atypical brain correlates of automatic change-detection in facial expression in Autism
Marie Gomot1, Klara Kovarski1, Monika Szymanska1, Sylvie Roux1, Émanuelle Houy-Durand2, Magali Battý1, Frédérique Bonnet-Brihault1
1UM1253 INSERM, Université de Tours, Tours, France

To view full abstract text and ePosters, visit www.aievolution.com/hbm1901
M013 Superior temporal sulcus rest functional abnormality in children with autism: an MRI-ASL study
Ana Saalivuothi1, Elzo Rechtman1, Hervé Lemaître2, Jean-Marc Tacchella1, Alice Vincon-Leite1, Elise Douard1, Raphaël Calmon1, Anne Philippe1, Nadia Chabane1, David Grévent1, Francis Brunelle1, Nathalie Boddart1, Monica Zilbovicius1
1Inserm U1000, Institut Imagine, Paris, France, 2Hôpital Necker, Paris, France, 3University of Montreal, Montreal, Quebec, 4Institut Imagine, Paris, France, 5Inserm U1000, Centre Cantonal Autisme CHUV, lausanne, Switzerland

M014 Gaze perception, superior temporal sulcus and autism: an rTMS study
Ana Saalivuothi1, Jean-Charles Lamy2, Elzo Rechtman1, Trojan Papar1, Nadia Chabane1, Anne Philippe1, Frédérique Bonnet-Brilhou1, Gilles Martinez1, Hervé Lemaître1, David Grévent1, Raphael Calmon1, Francis Brunelle1, Nathalie Boddart1, Monica Zilbovicius1
1Inserm U1000, Institut Imagine, Paris, France, 2Centre de Neuro-imagerie de Recherche (CENIR), Centre de Recherche de l’Institut du Cerveau et de la, Paris, France, 3Inserm U1000, Centre Cantonal Autisme CHUV, lausanne, Switzerland, 4Institut Imagine, Paris, France, 5Centre Universitaire de Pédiatrie de psychiatrie de Tours, CHU, Tours, France, 6Centre Hospitalier Sainte-Anne, Paris, France

M015 Altered structural brain asymmetry in autism spectrum disorder: analysis via the ENIGMA Consortium
Merel Postema1, Daan van Rooy2, ENIGMA ASD Working Group1, Paul Thompson2, Simon Fisher1, Jan Buitelaar1, Clyde Francks1
1Language and Genetics Department, Max Planck Institute for Psycholinguistics, Nijmegen, Netherlands, 2Department of Cognitive Neuroscience, Donders Centre for Cognitive Neuroimaging, Radboudumc, Nijmegen, Netherlands, 3Imaging Genetics Center, Stevens Neuroimaging & Informatics Institute, Keck, USC, Marina del Rey, CA, United States

M016 BOLD signal variability and complexity in youth with and without autism spectrum disorder
Amanda Easson1, Anthony McIntosh2
1University of Toronto, Toronto, Ontario, Canada, 2Baycrest Health Sciences, Toronto, Ontario, Canada

M017 A Longitudinal MRI Study of Amygdala and Hippocampal Subfields for Infants with Risk of ASD
Guo-Saan Li1,2, Meng-Hsiang Chen1, Kim-Han Thung2, Di Wu2, Quansen Sun1, Dinggang Shen2
1School of Computer Science and Engineering, Nanjing University of Science and Technology, Nanjing, China, 2Department of Radiology and Biomedical Research Imaging Center, Chapel Hill, NC, United States, 3Department of Diagnostic Radiology, Kaohsiung Chang Gung Memorial Hospital, Kaohsiung, Taiwan, 4Department of Biostatistics, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States

M018 Autism Spectrum Disorder Symptoms are Associated with Altered Whole-Brain Functional Connectivity
Kristina Leggett1, Korey Wylie2, Jason Tregellas1,2
1University of Colorado School of Medicine, Denver, CO, United States, 2University of Colorado School of Medicine, Aurora, CO, United States

M019 Cortical correlates of polygenic risk for autism spectrum disorders
Buddhachandra Khundrakpam1, Uku Vainik1, Jinnan Gang1, Gregory Kiar1, Noor Al-Sharif1, Yashar Zeinham1, Alain Dogher2, Alan Evans3
1Montreal Neurological Institute, McGill University, Montreal, Quebec, Canada

M020 Multidimensional Approaches in the Study of Autistic-Like Traits using Behavioral and Imaging Data
Angeline Mihailov1, Cathy Philippe1, Vincent Guillemot1, Antoine Grigis1, Charles Laidi1, Camille Piquet1, Hervé Abdi1, Josselin Houenou1, Vincent Frouin1
1Neurospin CEA, Saclay, France, 2Gif-sur-Yvette, France, 3Pasteur Institute, Paris, France, 4University of Texas at Dallas, Dallas, TX, United States

M021 Endogenous BOLD Signal Complexity of vmPFC is Different Between Autistic Men and Women
Stavros Trakoshis1, Wonsang You2, Simon Baron-Cohen1, Bhismadev Chakrabarti1, Amber Ruigrok1, Ed Bullmore1, John Suckling1, Meng-Chuan Lai1, Michael Lombardo1
1University of Cyprus, Nicosia, Cyprus, 2Children’s National Medical Center, Washington, DC, United States, 3Autism Research Centre, Department of Psychiatry, University of Cambridge, London, United Kingdom, 4University of Reading, Reading, United Kingdom, 5University of Cambridge, Cambridge, United Kingdom, 6The Hospital for Sick Children, Toronto, Ontario, Canada

M022 Effects of Gender on Within- and Between-Network Functional Connectivity in Youth with ASD
Katherine Lawrence1, Leanna Hernandez1, Namita Podgaonkar1, Shulamite Green1, Hilary Bowman1, Susan Bookheimer1, Mirella Doppetta1
1University of California, Los Angeles, Los Angeles, CA, United States

M023 Relationship between Visual Short-term Memory and Corpus Callosum in Autism Spectrum Disorder
Yutaka Matsuoki1, Susumu Yokota2, Teruo Hashimoto1, Yasuyuki Taki3,4, Ryuta Kawashima1,5
1Division of Developmental Cognitive Neuroscience, IDAC, Tohoku University, Sendai, Japan, 2Faculty of Arts and Science, Kyushu University, Fukuoka, Japan, 3Department of Radiology and Nuclear Medicine, IDAC, Tohoku University, Sendai, Japan, 4Division of Medical Neuroimaging Analysis, Tohoku Medical Megabank Organization, Tohoku University, Sendai, Japan, 5Department of Functional Brain Imaging, IDAC, Tohoku University, Sendai, Japan

M024 Deviated Brain Maturity in Intrinsic Functional Architecture in Autism Spectrum Disorder
Yapei Xie1,2,3, Xuhong Liao4, Zhilei Xu1,2,3, Xiaoqing Shou1,2,3, Yong He1,2,3
1State Key Laboratory of Cognitive Neuroscience and Learning, Beijing Normal University, Beijing, China, 2IDG/McGovern Institute for Brain Research, Beijing Normal University, Beijing, China, 3School of Systems Science, Beijing Normal University, Beijing, China

M025 Accelerated decline of homotopic sensorimotor connections in older adults with ASDs
Janice Hau1, Jiwandeep Kohli1, Chris Fong1, Annika Linke1, Mikaela Kinnear1, Alan Lincoln2, Ruth Carper1, Ralph-Axel Müller1
1Brain Development Imaging Lab, San Diego State University, San Diego, CA, United States, 2Alliant International University, San Diego, CA, United States

M026 Oxytocin therapy for Autism: Long-term change in social brain activity after multiple-dose treatment
Sylvie Bernadet1,2, Bort Boets1,2, Jean Steyaert1,2, Kaat Aerts1,2
1KU Leuven, Leuven, Belgium, 2Leuven Autism Research Consortium, Leuven, Belgium
MONDAY, JUNE 10
Odd numbers: 12:45 – 13:45; Even numbers: 13:45 – 14:45; Poster Reception: 18:30 – 19:30

M027 Brain asymmetry stratifies males and females with ASD with different language history profiles
Dorothea Floris1,2, Thomas Wolters2,1, Alberto Llera Arenas1,2,3, EU-AIMS LEAP consortium1, Jan Buitelaar1,2,5, Christian Beckmann2,3,7
1Donders Institute for Brain Cognition and Behavior, Donders Centre for Cognitive Neuroimaging, Nijmegen, Netherlands, 2Department of Cognitive Neuroscience, Radboud University Medical Center, Nijmegen, Netherlands, 3Donders Institute for Brain, Cognition and Behaviour, Centre for Neuroscience, Nijmegen, Netherlands, 4Donders Institute for Brain, Cognition and Behaviour, Radboud University Nijmegen, Nijmegen, Netherlands, 5Charité - Universitätsmedizin Berlin, Berlin, Germany, 7Charité - Universitätsmedizin Berlin, Berlin, Germany

M028 The relationship among polymorphism of NRXN1, EQ-SQ score and brain structure in healthy adults
Yuka Shiotani1, Izumi Matsudaira1, Hikaru Takeuchi2, Chiaki Ono1, Hiroaki Tomita1, Ryuta Kawashima2, Yasuyuki Tak2,3,4
1Department of Nuclear Medicine & Radiology, Institute of Development, Aging, and Cancer, Tohoku Univ, Sendai, Japan, 2Department of Developmental Cognitive Neuroscience, Institute of Development, Aging, and Cancer, Tohok, Sendai, Japan, 3Department of Disaster Psychiatry, International Research Institute of Disaster Science, Tohoku Univ, Sendai, Japan, 4Smart-Aging Research Center, IDAC, Tohoku University, Sendai, Japan, 5Tohoku Medical Megabank Organization, Tohoku University, Sendai, Japan

M029 A Diffusion Weighted Imaging Study of Autism Spectrum Disorder in Preschool-Aged Children
Derek Andrews1, Joshua Lee1, Marjorie Solomon1, Sally Rogers1, David Amaral1, Christine Wu Nordahl2
1UC Davis MIND Institute, Sacramento, CA, United States

M030 Altered structural covariance within functional networks in Autism Spectrum Disorders (ASD)
Nada Kojovic1, John Kochalka2, Elisa Scarlati1, Vinad Menon1, Marie Scher1
1Development Imaging and Psychopathology Laboratory, University of Geneva, Geneva, Switzerland, 2Stanford Cognitive and Systems Neuroscience Laboratory, Palo Alto, CA, United States, 3Stanford University, Palo Alto, CA, United States

M031 Effect of Sex on Brain Regional Homogeneity in Autism Spectrum Disorder
Natalija Kozhemiak1, Adonay Nunes1, Vosly Vakorin1, Urs Ribary1, Sam Doesburg1
1Simon Fraser University, Vancouver, BC, Canada

M032 Thalamic GABA:Glut Ratio is Related to Thalamic Connectivity and Sensory Over-Responsivity in ASD
Emily Wood1, Kaitlin Cummings1, Joseph O'Neill1, Jia Gua1, Mirella Dapretto1, Susan Bookheimer1, Shulamite Green1
1University of California, Los Angeles, Los Angeles, CA, United States, 2Columbia University, New York, NY, United States

M033 Motor Skills and the Action Observation Network in Children with ASD and DCD
Emily Kilroy1, Christiana Butera1, Laura Harrison1, AJ Jayashankar1, Priscilla Ring1, Ryann MacMurdoo1, Lisa Aziz-Zadeh1
1University of Southern California, Los Angeles, CA, United States, 2University of Southern California, Los Angeles, CA, United States, 3University of Southern California, Los Angeles, CA, United States

M034 Development of Connectivity Profiles of Sensorimotor Regions in Autism Spectrum Disorder
Myrthe Faber1, Christina Isokoglu1, Thomas Wolters2, Dorothea Floris2, Erik van Oort1, Marianne Oldehinkel1, Maarten Mennes1, Jan Buitelaar1,4,5, Christian Beckmann2,3,7
1Donders Centre for Cognitive Neuroimaging, Nijmegen, Netherlands, 2Radboudumc, Nijmegen, Netherlands, 3Monash Institute of Cognitive and Clinical Neurosciences and School of Psychological Sciences, Victoria, Australia, 4Karakter Child and Adolescent Psychiatry University Center, Nijmegen, Netherlands, 5University of Oxford, Oxford, United Kingdom

M035 The Autism Mouse Brain Connectome project
Valeria Zerbi1, Marija Markovic2, Marco Pogani1, Markus Rudin2, Michela Matteoli3, Michela Fagiolini1, Yuri Bozi3, Giovanni Provenzano3, Abhishek Banerjee4, Jacob Elleood4, Jason Lerch5, Alessandro Gozzi5, Nicole Wenderoth6
1ETH Zurich, Zurich, Switzerland, 2ETH Zurich, Zurich, Switzerland, 3Istituto Italiano di Tecnologia, Rovereto, Italy, 4ETH Zurich, Zurich, 5Humanitas Clinical and Research Center, Milan, Italy, 6Children's Hospital Boston Harvard, Boston, MA, United States, 7Center for Mind/Brain Sci. (CIMEC), Rovereto, Italy, 8Ctr. for Integrative Biol. (CIBIO), Univ. of Trento, Trento, Italy, 9University of Zurich, Zurich, 10Mouse Imaging Ctr., Hosp. For Sick Children, Toronto, Ontario, Canada, 11University of Toronto, Toronto, Ontario, Canada, 12ETH Zurich, Neural Control of Movement Laboratory, Zurich, Switzerland

M036 Developmental changes in the neural correlates of visual perspective taking in autism
Yi-Jui Li1, Susan Shur-Fen Gau1,2, Tao-Li Chou3,2
1Department of Psychology, National Taiwan University, Taipei, Taiwan, 2Department of Psychiatry, National Taiwan University Hospital, Taipei, Taiwan, 3Graduate Institute of Brain and Mind Sciences, National Taiwan University, Taipei, Taiwan

M037 Alexithymia and Neural Activity of Empathy Networks in Children with ASD During Observation of Faces
Christiano Butera1, Emily Kilroy1, Laura Harrison1, Aditya Jayashankar1, Priscilla Ring1, Ryann MacMurdoo1, Lisa Aziz-Zadeh1
1University of Southern California, Los Angeles, CA, United States, 2University of Southern California, Los Angeles, CA, United States

M038 Regulation of personal space by social interactions in adults with autism: an fMRI study
Claudia Massaccesi1, Alexander GrossåÊ1, Mareike Hubinger1, Lisa Rosenberger1, Helena Hartmann1, Michela Candinì2, Francesca Frassinetti3, Giuseppe Di Pellegrino3, Giorgia Silani1
1University of Vienna, Vienna, Austria, 2University of Bologna, Bologna, Italy

M039 Communicative Intention in Autism Spectrum Disorder: an fMRI Study
Magdalena Schutz1, Angela Ciaramidaro1,2, Grit Hein1, Vassil Iotov2, Ramona Õller2, Daniela Hartmann1, Livia Colle1, Cristina Becchi1, Henrik Wåler1, Christine Freitag1
1Dept. of Child and Adolescent Psychiatry, Psychosomatics and Psychotherapy, Goethe-University, Frankfurt/M, Germany, 2Dept. of Education and Human Sciences, University of Modena and Reggio Emilia, Reggio Emilia, Italy, 3Department of Psychiatry, Psychosomatics and Psychotherapy of the University Hospital Würzburg, Würzburg, Germany, 4Istituto di Psicologia, Università Degli Studi di Torino, Torino, Italy, 5Charité - Universitätsmedizin Berlin, Berlin, Germany

M040 Resting-state connectivity biomarkers define neuropsychological severity of high-functioning autism
Di Chen1, Tianye Jiao1, Miao Cao1, Jianfeng Feng1
1Institute of Science and Technology for Brain Inspired Intelligence, Fudan University, Shanghai, China, 2Institute of Science and Technology for Brain Inspired Intelligence, Fudan University, Shanghai, China, 3Institute of Science and Technology for Brain-inspired Intelligence, Fudan University, Shanghai, China, 4Institute of Science and Technology for Brain Inspired Intelligence, Fudan University, Shanghai, China

M041 Increased Functional Connectivity Within the Default Mode Network in Autism Spectrum Disorder
Iva Ilioska1,2, Marianne Oldehinkel1, Maarten Mennes1, Christian Beckmann2,3,7, Alex Fornito3
1Donders Institute for Brain Cognition and Behavior, Nijmegen, Netherlands, 2Radboud University Medical Center, Department of Cognitive Neuroscience, Nijmegen, Netherlands, 3Brain & Mental Health Laboratory, Monash Institute of Cognitive and Clinical Neurosciences, Melbourne, Australia, 4Centre for Functional MRI of the Brain (FMRIB), University of Oxford, Oxford, United Kingdom, 5Karakter Child and Adolescent Psychiatry University, Nijmegen, Netherlands
M057 Abnormal brain circuit dynamics associated with distinct restricted/repetitive behaviors in autism
Takashi Iwashita1, Yuta Aoki1, Junya Fujino1, Motoaki Nakamura1, Haruhisa Ohta1, Nobumasa Kato1, Ryo-iichiro Hashimoto1
1Showa University, Tokyo, Japan

M058 Altered Resting-State Functional Connectivity of Brain Network in Asperger Syndrome
Bin Lu1, Zeng-Hui Ma2, Chao-Gan Yan1, Jing Liu3
1CAS Key Laboratory of Behavioral Science, Institute of Psychology, Beijing, China, 2Department of Psychology, University of Chinese Academy of Sciences, Beijing, China, 3Peking University Sixth Hospital, Beijing, Beijing, China

M059 Atypical cortico-striatal resting state connectivity in high-functioning autism
Kastubah Supakara1, Srikanth Ryali1, Percy Mistry1, Vinod Menon1
1Stanford University, Stanford, CA, United States

M060 Altered Resting-State Functional Connectivity of Brain Network in Asperger Syndrome
Maedeh Sadat Tahaee1, Emran Talezade Lari1, Somayeh Maleki-Balajoo2, Hamid R. Rabiee1
1Sharif University of Technology, Tehran, Iran, Islamic Republic of, 2Institute of Medical Device and Imaging, National Taiwan University College of Medicine, Taipei, Taiwan

M061 Morphological subtypes in autism and attention-deficit/hyperactivity disorder
Ryu-ichiro Hashimoto1
1Showa University, Tokyo, Japan

M062 Pathological impulsivity and compulsivity correlate with effective connectivity in corticostriatal circuitry
Linden Parker1, Jeggan Tiego1, Kevin Aquino1, Leah Braganzoa1, Samuel Chamberlain1, Leonardo Fontenelle1, Ben Harrison1, Valentina Lorenzetti1, Bryon Patton2, Adeel Razi1, Alex Forntoa1, Murat Yucel1
1Monash University, Melbourne, Australia, 2University of Cambridge, Cambridge, United Kingdom, 3Federal University of Rio de Janeiro, Rio de Janeiro, Brazil, 4The University of Melbourne, Melbourne, Australia, 5Australian Catholic University, Melbourne, Australia, 6University of Newcastle, Newcastle, Australia

M063 Higher striatal and salience network integration underlies disinhibition in a transdiagnostic sample
Xiaozhen You1,2, Junaid Merchant1, Kathryn Flaharty1, Joseph Cherry1, Mary Skapek2, Meredith Tseng1
1Institute of Medical Device and Imaging, National Taiwan University College of Medicine, Taipei, Taiwan, 2Department of Psychiatry, National Taiwan University Hospital, Taipei, Taiwan, 3Graduate Institute of Brain and Mind Sciences, National Taiwan University College of Medicine, Taipei, Taiwan, 4AcroViz Technology, Inc., Taipei, Taiwan, 5Molecular Imaging Center, National Taiwan University Hospital, Taipei, Taiwan

M064 Aberrant Habenula Connectivity in Adolescent Mental Illness
Benjamin Elly1, Jungian Xu2, Lushna Mehr2, Christina Solimene1, Vilma Gabbay2
1Icahn School of Medicine at Mount Sinai, New York, NY, United States, 2Icahn School of Medicine at Mount Sinai, New York, NY, United States

M065 Patterns of Schizophrenia Symptoms: Hidden Structure in the PANSS Questionnaire
Jeremy Lefort-Bernard1, Gool Goel Voraquaux1, Birgit Demml1, Oliver Gruber1, Andre Aleman1, Renaud Jardri2, Iris Sommer1, Bertrand Thirion3, Danilo Batok4
1Uniklinik RWTH Aachen, Aachen, Germany, 2Parietal Team, INRIA, GIF-sur-Yvette, France, 3Department of Psychiatry and Psychotherapy, University of Tubingen, Tubingen, Germany, 4Department of Psychiatry, University of Heidelberg, Heidelberg, Germany, 5BCN Neuroimaging Center, University Medical Center Groningen, University of Groningen, Groningen, Netherlands, 6Univ Lille, CNRS UMR9193, SCALab & CHU Lille, Fontan Hospital, CURè platform, Lille, France, 7UMC Utrecht Brain Center Rudolf Magnus, Utrecht, Netherlands, 8Department of Psychiatry, Psychotherapy, and Psychosomatics, RWTH Aachen University, Aachen, Germany

M066 Higher striatal and salience network integration underlies disinhibition in a transdiagnostic sample
Xiaozhen You1,2, Junaid Merchant1, Kathryn Flaharty1, Joseph Cherry1, Mary Skapek2, Meredith Tseng1
1Institute of Medical Device and Imaging, National Taiwan University College of Medicine, Taipei, Taiwan, 2Department of Psychiatry, National Taiwan University Hospital, Taipei, Taiwan, 3Graduate Institute of Brain and Mind Sciences, National Taiwan University College of Medicine, Taipei, Taiwan, 4AcroViz Technology, Inc., Taipei, Taiwan, 5Molecular Imaging Center, National Taiwan University Hospital, Taipei, Taiwan

M067 Altered Resting-State Functional Connectivity of Brain Network in Asperger Syndrome
Maedeh Sadat Tahaee1, Emran Talezade Lari1, Somayeh Maleki-Balajoo2, Hamid R. Rabiee1
1Sharif University of Technology, Tehran, Iran, Islamic Republic of, 2Institute of Medical Device and Imaging, National Taiwan University College of Medicine, Taipei, Taiwan

M068 Somatosensory-Motor Dysconnectivity Spans Multiple Transdiagnostic Dimensions of Psychopathology
Valeria Kebets1, Avram Holmes2, Csaba Orban3, Siyi Tang1, Jingwei Li1, Nanbo Sun1, Ru Kong1, Russell Poldrack1, B. T. Thomas Yeo4, 5ECE, CIRC, SINAPSE & MNP, National University of Singapore, Singapore, Singapore, 6Yale University, New Haven, CT, United States, 7Stanford University, Stanford, CA, United States

M069 Natural viewing reveals insular dysfunction in first-episode schizophrenia
Jinfeng Wu1, Gang Chen1, Zhi Yang3, Jijun Wang4, Xinian Zuo5
1Key Laboratory of Behavioral Science, Institute of Psychology, Chinese Academy of Sciences, Beijing, China, 2scientific and Statistical Computing Core, National Institute of Mental Health, Bethesda, MD, United States, 3Shanghai Key Laboratory of Psychotic Disorders, Shanghai Mental Health Center, Shanghai, China, 4Brain Science and Technology Research Center, Shanghai Jiao Tong University, Shanghai, China, 5Key Laboratory of Behavioral Science, Institute of Psychology, Chinese Academy of Sciences, Beijing, China

Schizophrenia and Psychotic Disorders
M070 Abnormal morphometric similarity in psychosis is associated with schizophrenia related genes
Sarah Morgan1, Jakob Seiditza, Kirstie Whitaker2, Rafael Romero-Garcia1, Nicholas Clifton3, Cristina Scarpazzra4, Therese van Amelsvoort5, Machtei Marcelis6, Jim van Os6, Gary Donohoe7, David Mathers8, Aidan Corvin9, Andrew Pocklington10, Armin Ranzahanah8, Philip McGuire11, Pete Vertès12, Edward Bullmore9
1Cambridge University, Cambridge, United Kingdom, 2The Alan Turing Institute, London, United Kingdom, 3Cardiff University, Cardiff, United Kingdom, 4King’s College London, London, United Kingdom, 5Maastricht University, Maastricht, Netherlands, 6NIH Galway, Galway, Ireland, 7Trinity College Dublin, Dublin, Ireland, 8JNMH, Bethesda, MD, United States

To view full abstract text and ePosters, visit ww5.aievolution.com/hbm1901

M071 Using ROI functional connectivity during attention to classify schizophrenia and its familial risk
Linda Antonucci1, Nora Penzel1, Giulio Pergola1, Lana Kombelt-Ilankovic2, Shalaila Hao3, Joseph Kampbel4, Leonarda Fazio5, Grazia Cafaro6, Giuseppe Blois7, Alessandro Bertolino8, Nikolao Koutsoulieris1
1Ludwig-Maximilians Universitat (LMU), Munich, Germany, 2University of Bari Aldo Moro, Bari, Italy, 3Clinica Pschiatrica, Policlinico di Bari, Bari, Italy

M072 EEG microstates and the schizophrenia spectrum: evidence for compensation mechanisms
Janir Ramos da Cruz2, Ophelie Favrodi1, Maya Rojinanilv4, Eka Chkonia1,2, Andreas Brand1, Christine Mohr1, Patricia Figueredo1, Michael Herzog2
1École Polytechnique Fédérale de Lausanne (EPFL), Lausanne, Switzerland, 2Instituto Superior Técnico, Universidade de Lisboa, Lisboa, Portugal, 3Bartashvili Centre of Experimental Biomedicine, Tbilisi, Georgia, 4Free University of Tbilisi, Tbilisi, Georgia, 5Tbilisi State Medical University, Tbilisi, Georgia, 6University of Lausanne, Lausanne, Switzerland

M073 Grey matter patterns in First-Episode Psychosis
Francesca Sov,1 Maula Belli1, Cinzia Perlini1, Letizia Squarcina1, Eleonora Maggioni1, Davide Zocca1, Mirella Ruggeri1, Paolo Brambilla1, Jorge Jovicich1
1CIMeC (Center for Mind/Brain Sciences), University of Trento, Mattarello (TN), Italy, 2UC of Psychiatry, Azienda Ospedaliero Universitaria Integrata (AOUI) of Verona, Verona, Italy, 3Department of Neurosciences, Biomedicine and Movement Sciences, University of Verona, Verona, Italy, 4IRCCS “E. Medea” Scientific Institute, Bossia Panini, Lecco, Italy, 5Department of Neurosciences and Mental Health, Fondazione IRCCS Ca’ Granda, University of Milan, Milano, Italy

M074 Exploring morphometric similarity networks in untreated first-episode psychosis
Min Tae Park1, Tushar Das2, Ali Khan3, Kara Dempster2, Mallar Chakravarty4,5, Michael Mackinley4, Lena Papantyropop7,8
1Department of Psychiatry, Western University, London, Ontario, Canada, 2Robarts Research Institute, Western University, London, Ontario, Canada, 3Department of Medical Biophysics, University of Western Ontario, London, Ontario, Canada, 4Department of Psychiatry and Biological and Biomedical Engineering, McGill University, Montreal, Quebec, Canada, 5Cerebral Imaging Centre, Douglas Mental Health University Institute, Montreal, Quebec, Canada, 6Lawson Health Research Institute, London, Ontario, Canada

M075 Neural correlates of cognition in early-onset schizophrenia: a meta-analysis
Vasileios Ioakeimidi1, Kielen Yarrow2, Cornina Haenschel3, Marinos Kyrakopoulos2,3, Danai Dimi4
1Department of Psychology, School of Arts and Social Sciences, City, University of London, London, United Kingdom, 2National and Specialist Ascom Lodge Inpatient Children Unit, South London & Maudsley NHS Trust, London, United Kingdom, 3Department of Child and Adolescent Psychiatry, Institute of Psychiatry, Psychology and Neuroscience, King’s College London, London, United Kingdom, 4Department of Neuroimaging, Institute of Psychiatry, Psychology and Neuroscience, King’s College London, London, United Kingdom

M076 Spatial patterning of brain tissue volume deformation in schizophrenia reflects network architecture
Golia Shafer1, Ross Markello2, Alexandra Tapalpu12, Carolina Makowski1, Patrick Hagmann1, Neil Cashman1,2, Mallar Chakraverty1,2, Alain Daghe1, Bratislav Milic1
1McConnell Brain Imaging Centre, Montreal Neurological Institute, McGill University, Montreal, Quebec, Canada, 2Cerebral Imaging Center, Douglas Mental Health University Institute, McGill University, Montreal, Quebec, Canada, 3Department of Biological and Biomedical Engineering, McGill University, Montreal, Quebec, Canada, 4Department of Radiology, Lausanne University Hospital (CHUV-UNIL), Lausanne, Vaud, 5Department of Medicine (Neurology), University of British Columbia, Vancouver, British Columbia, Canada

M077 Divergent developmental trajectories of hippocampal volume in patient with 22q11.2 deletion syndrome
Valentina Mancini1, Corrado Sandini2, Maria Padula3, Daniela Zoller4, Maude Schneider5, Marie Schae6, Stephan Eliez2
1Developmental Imaging and Psychopathology Laboratory University of Geneva, Geneva, Switzerland, 2Developmental Imaging and Psychopathology Laboratory, University of Geneva, Geneva, Switzerland, 3Friedrich Miescher Institute for Biomedical Research, Basel, Switzerland, 4Developmental Imaging and Psychopathology Laboratory, University of Geneva, Geneva, Switzerland

M078 Dynamics of brain networks provide measures of psychosis and anxiety in 22q11.2 deletion syndrome
Daniela Zoller1,2, Corrado Sandini3, Fikret Ikig Karahanoglu1,2,3, Maria Padula4,5, Marie Schae6, Stephan Eliez2, Dimitri Van De Ville1,2
1Medical Image Processing Laboratory, École Polytechnique Fédérale de Lausanne (EPFL), Lausanne, Switzerland, 2Department of Radiology and Medical Informatics, University of Geneva, Geneva, Switzerland, 3Departmental Imaging an Psychopathology Laboratory, University of Geneva, Geneva, Switzerland, 4Athinaou A. Martinos Center for Biomedical Imaging and Harvard Medical School, Charlestown, MA, United States, 5Department of Radiology, Massachusetts General Hospital, Harvard Medical School, Boston, MA, United States, 6Friedrich Miescher Institute for Biomedical Research, Basel, Switzerland

M079 Functional Network Connectivity Impairments and Core Cognitive Deficits in Schizophrenia
Bhim Adhikari1, L. Elliot Hong2, Hemalatha Sampath3, Joshua Chiappelli1, Nedja Jahanshah2, Paul Thompson2, Laura Rowland2, Vince Calhoun1, Xiaoming Du3, Shuo Chen3, Peter Kuchinov4
1University of Maryland SOM, Catonsville, MD, United States, 2University of Maryland SOM, Baltimore, MD, United States, 3University of Maryland SOM, Baltimore, MD, United States, 4Imaging Genetics Center, Stevens Neuroimaging & Informatics Institute, Keck, USC, VA, United States, 5Imaging Genetics Center, Stevens Neuroimaging & Informatics Institute, Keck, USC, VA, United States, 6International Max Planck Research School - Translational Psychiatry, Munich, Germany, 7International Max Planck Research School - Translational Psychiatry, Munich, Germany, 8University of Bari Aldo Moro, Bari, Italy

M080 Working memory impairment in schizophrenia: a combined fMRI and ‘H-MRS study
Jakob Kaminski1, Tobias Gleich2, Yu Fukuda1, Teresa Kathnagen1, Andreas Hein2, Florian Schlangenhaus1
1Charité-Universitätsmedizin, Berlin, Germany

M081 Comparison of two brain parcellations in functional-connectivity-based classification of psychosis
Johanna Weiske1, Shalaila Hao2,3, Anne Rue1, Linda Betz1, Giulio Pergola1, Nikolaos Koutsoulieris2, Lana Kombelt-Ilankovic2, Linda Antonucci1
1Ludwig-Maximilians Universitat (LMU), Munich, Germany, 2International Max Planck Research School - Translational Psychiatry, Munich, Germany, 3Developmental Imaging an Psychopathology Laboratory, University of Geneva, Geneva, Switzerland

To view full abstract text and ePosters, visit ww5.aievolution.com/hbm1901
M082 Impact of second-generation antipsychotics on white matter structure in adolescent onset psychosis
Claudia Barth, Vera Loning, Tiri Pedersen Gurholt, Ole Andreassen, Anne Myhre, Ingrid Agartz
Norwegian Centre for Mental Disorders Research, Oslo, Norway, 1Department of Psychiatric Research, Diakonhjemmet Hospital, Oslo, Norway, 2Child & Adolescent Mental Health Research Unit, Oslo University Hospital, Oslo, Norway

M083 Preliminary evidence for a functional biomarker of periodic catatonia
Jack Pouget, Clément de Billy, Ludovic Jeanjean, Alexandre Obrecht, Olivier Mainberger, Julie Clauzel, Benoît Schorff, Paulo de Souso, Julien Lamy, Vincent Noble, Lionel Landré, Fabrice Bernot
1Cube (UDS-CNRS), HUS, Strasbourg, France, 2HUS, Strasbourg, France, 3HUS, SAGE (UDS-CNRS), Strasbourg, France, 4INSERM U1114, HUS, Strasbourg, France, 5Cube (UDS-CNRS), Strasbourg, France

M084 Multimodal neuroimaging in schizophrenia via cognitional MRI fusion
Jing Sun, Shile Qi, Theo G. M. van Erp, Juan Bustillo, Rongtang Jiang, Dongdong Lin, Jessica Turner, Eswar Damaraju, Andrew R. Mayer, Yue Cui, Zening Fu, Yuhui Du, Jiayu Chen, Steven G. Potkin, Adrian Preda, Daniel H. Mathalon, Judith M. Ford, James Yovovich, Bryon A. Mueller, Ayse Arus Belger, Sarah C. McEwen, O’Leary Daniel S, Agnes McMahon, Tianzi Jiang, Vince Calhoun
1Institute of Automation, Chinese Academy of Sciences, Beijing, China, 2The Mind Research Network, Albuquerque, NM, United States, 3Department of Psychiatry and Human Behavior, University of California Irvine, Irvine, CA, United States, 4The Mind Research Network, University of New Mexico, Albuquerque, NM, United States, 5Department of Psychology, University of California, Boulder, CO, United States, 6China National Institute of Mental Health, Beijing, China, 7National Institute of Mental Health, Bethesda, MD, United States, 8Shanxi University, Taiyuan, China, 9The Mind Research Network, University of California, Irvine, Irvine, CA, United States, 10Department of Psychiatry, University of California, San Diego, CA, United States, 11Department of Radiology, Imaging and Analysis Center, Duke University, Durham, NC, United States, 12Department of Psychiatry, University of Minnesota, Minneapolis, MN, United States, 13Department of Psychiatry, University of California, San Diego, CA, United States, 14Department of Radiology, University of Iowa Carver College of Medicine, Iowa City, IA, United States, 15University of California, San Francisco, CA, United States, 16University of Southern California, Los Angeles, CA, United States, 17The Mind Research Network University of New Mexico, Albuquerque, NM, United States

M085 Schizophrenia reduces intra- and inter-individual diversity of semantic representations in the brain
Satoshi Nishida, Yukiko Matsumoto, Naganobu Yoshikawa, Shuraku Son, Akio Murakami, Ryusuke Hayashi, Hidehiko Takahashi, Shinya Nishimoto
1National Institute of Information and Communications Technology, Suita, Osaka, Japan, 2Kyoto University, Kyoto, Japan, 3Osaka University, Suita, Osaka, Japan, 4National Institute of Advanced Industrial Science and Technology, Tsukuba, Ibaraki, Japan

M086 Contribution of obesity to subcortical structural differences seen in schizophrenia
Paul Rosser, Armin Birner, Julian Vohringer, Ulfich Schall
1The University of Newcastle, Newcastle, Australia, 2Medical University of Graz, Graz, Austria, 3University of Tuebingen, Tuebingen, Germany

M087 Working Memory Encoding Deficits in Schizophrenia — an MEG Study of Event-Related Fields
Catherine Barnes-Schleuder, Michael Schram, Anna Müller, Alessandro Cunto, Benjamin Peters, Michael Wibral, Andreas Reif, Robert Bitterli
1University Hospital Frankfurt, Goethe University, Frankfurt, Germany, 2Institute of Medical Psychology, Frankfurt, Germany, 3Institute for Medical Psychology, Frankfurt, Germany

M088 Neurocognitive Correlates of Working Memory in Postpartum Psychosis
Olivia Kowalczyk, Astrid Pauls, Montserrat Fusté, Steven Williams, Katie Hazelgrove, Costanza Vecchiò, Gertrude Seneviratne, Carmine Pariante, Paolo Dazzari, Mitu Mehta
1Institute of Psychiatry, Psychology & Neuroscience, King’s College London, London, United Kingdom, 2CIBERSAM, Centro de Investigación Biomédica en Red de Salud Mental, Madrid, Spain, 3National Institute for Health Research (NIHR) Mental Health Biomedical Research Centre at South London and Maudsley NHS Foundation Trust and King’s College London, London, United Kingdom

M089 Inefficient Cerebral Recruitment in Schizophrenia: a 7T fMRI and MEG Study
Jyothika Kumar, Elizabeth Liddle, Sidon Robson, Emma Hall, Lauren Gascoyne, Mohammad Katshu, Lena Polanionyapan, Peter Morris, Peter Liddle
1Division of Psychiatry and Applied Psychology, University of Nottingham, Nottingham, United Kingdom, 2Sir Peter Mansfield Imaging Centre, University of Nottingham, Nottingham, United Kingdom, 3Department of Psychiatry & Robarts Research Institute, University of Western Ontario, London, Ontario, Canada

M090 Abnormal static and dynamic resting-state brain networks in auditory verbal hallucination
Huiyang Geng, Pengfei Xu, Branislava Curcic-Blake, Andre Alemán
1Department of Biomedical Sciences of Cells and Systems, University of Groningen, Groningen, The Netherlands, 2Shenzhen Key Laboratory of Affective and Social Cognitive Science, Shenzhen University, Shenzhen, China

M091 Fronto-Strial-Thalamic Circuit and Cognition in a High-Risk Population to Develop Schizophrenia
Carina Heller, Zora Kikinis, Saskia Steinmann, Nikos Makris, Kevin Antshel, Wanda Fremont, Ioana Coman, Stefan Schweinberger, Thomas Weiss, Sylvain Bouix, Marek Kubicki, Wendy Kates, Martha Shenton, James Levit
1Department of Psychiatry, University Hospital Jena, Jena, Germany, 2Department of Psychiatry, Brigham and Women’s Hospital, Harvard Medical School, Boston, MA, United States, 3University Medical Center Hamburg-Eppendorf, Hamburg, Germany, 4Departments of Psychiatry and Neurology, Massachusetts General Hospital, Harvard Medical School, Boston, MA, United States, 5Department of Psychology, Syracuse University, Syracuse, NY, United States, 6Departments of Psychiatry and Behavioral Sciences, SUNY Upstate Medical University, Syracuse, NY, United States, 7Department of Computer Science, SUNY Oswego, Oswego, NY, United States, 8Department of General Psychology, Friedrich Schiller University Jena, Jena, Germany, 9Department of Clinical Psychology, Friedrich Schiller University Jena, Jena, Germany, 10Department of Radiology, Brigham and Women’s Hospital, Harvard Medical School, Boston, MA, United States, 11VA Boston Healthcare System, Brockton Division, Brockton, MA, United States

M092 Striatal Dopamine and Decreased Prediction Error Coding in Unmedicated Schizophrenia Patients
Teresa Katziphis, Jakob Kaminski, Andreas Heinz, Ralph Buchert, Florian Schlagenhaufer
1Charité-Universitätsmedizin, Berlin, Germany, 2UKE Hamburg, Hamburg, Germany

M093 Genetic risk for schizophrenia is associated with reduced cerebellar volume
Tom Chambers, Xavier Caseras, James Walters, Sophie Legge, George Kirov, Krish Singh
1Cardiff University, Cardiff, United Kingdom

M094 Multimodal analysis of the structural and functional connectivity in psychosis patients
Justyna Beresniewicz, Alexander Craven, Helene Hjemlev, Kenneth Hugdahl, Erik Johsen, Rune Kroken, Else-Marie Løberg, Rene Westerhausen, Kristina Kompus
1University of Bergen, Bergen, Norway, 2University of Oslo, Oslo, Norway
M095 Influence of prenatal maternal inflammation on neonatal neurodevelopment and communicative behaviour
Elisa Guma1, Emily Sneek2, Gabriel A. Deneny2, Shoshana Spring2, Jason Lerch2, M. Mallar Chakravarty3
1Douglas Research Center McGill University, Montréal, Québec, Canada, 2University of Toronto, Toronto, Ontario, Canada, 3Douglas Research Center, McGill University, Montréal, Québec, Canada, 4Mouse Imaging Centre, The Hospital for Sick Children, Toronto, Ontario, Canada

M096 Morphological brain correlates of at-risk mental state
Paul Rossell1, Tim Etkes1, Ulrich Schall2
1The University of Newcastle, Newcastle, New South Wales, Australia

M097 Basal Ganglia Volumetric Changes in Psychotic Spectrum Disorders
Cuzhen Liu1, Bo Cao2, Sim Kang3, Ronqian Yu4
1National University of Singapore, Singapore, Singapore, 2University of Alberta, Alberta, Canada, 3Institute of Mental Health, Singapore, Singapore

M098 Functional Connectivity of Corticostriatal Circuitry and Psychosis-Like Experiences
Kristina Sabarode1, Jeggan Tiego1, Linden Parkes1, Francesco Sforazzini2, Amy Finlay1, Beth Johnson1, An Pinar1, Vanessa Croyley3, Ben Harrison4, Andrew Zalesky3, Christos Pantelis5, Mark Beilgrove6, Alex Fornito3
1Monash University, Melbourne, Australia, 2Monash Biomedical Imaging, Melbourne, Australia, 3University of Melbourne, Melbourne, Australia

M099 Psychiatric disorders associated with disrupted pallidum functional networks
Yuka Nakamura1, Naohiro Okada2, Shinsuke Koike3
1Center for Integrative Science of Human Behavior, The University of Tokyo, Tokyo, Japan, 2Department of Neuropsychiatry, Graduate School of Medicine, The University of Tokyo, Tokyo, Japan, 3University of Tokyo Institute for Diversity & Adaptation of Human Mind, Tokyo, Japan

M100 Subcortical Brain Volumes in Schizotypy Assessed in a Worldwide ENIGMA Study

M101 Psychomotricity and functional changes of sensorimotor system in schizophrenia and bipolar disorder
Paola Magioncalda1, Matteo Martino2, Benedetta Conio3, Niail Duncan2, Timothy Lane4, Matilde Inglese5, Mario Amore6, Georg Northoff7
1University of Genoa, Genoa, Italy, ‘Icahn School of Medicine at Mount Sinai, New York, NY, United States, ‘Taipei Medical University, Taipei, Taiwan, ‘The Royal Institute of Mental Health Research & University of Ottawa, Ottawa, Canada

M102 Progressive subcortical volume loss in treatment-resistant schizophrenia after commencing Clozapine
Giulia Tronchin1, Mohamed Ahmed1, Theophilius Akudjedu1, Brian Hallahan1, Dara Cannon1, Colm McDonald1
1Centre for Neuroimaging & Cognitive Genomics (NICOG), Clinical Neuroimaging Laboratory, National University of Ireland Galway, H91TK33 Galway, Ireland

M103* Brain networks in UKBiobank: polygenic risk for schizophrenia and psychotic-like experiences
Clara Alloza2,3,4, Manuel Blesa Cabeza2,3,4, Mark Bastin2, Colin Buchanan2, Joost Janssen2,5, Jude Gibson2,4, Heather Whalley1, Celsa Arango2,3,5, Simon Cox1, Stephen Lawrie1
1Dept. of Psychiatry, The University of Edinburgh, Edinburgh, United Kingdom, 2Dept. of Child and Adolescent Psychiatry, IISGM, Hospital General Universitario Gregorio Marañón, Madrid, Spain, 3Ciber del Area de Salud Mental (CIBERSAM), Madrid, Spain, 4School of Medicine, Universidad Complutense, Madrid, Spain, 5The University of Edinburgh, Edinburgh, United Kingdom, 6Centre for Cognitive Epidemiology and Cognitive Ageing, University of Edinburgh, Edinburgh, United Kingdom, 7Centre for Cognitive Ageing and Cognitive Epidemiology, University of Edinburgh, Edinburgh, United Kingdom
M128 Persistent functional brain alterations during naturalistic stimulus after first episode psychosis

Giedre Strepinskaitė1, Giulio Rognini2, Nathan Faivre1,2, Jevita Potheegadoo1, Pierre Progría1,2, Patric Hagmann3,4, Philippe Conus5, Kim Do1,2, Olaf Blanken1,2
1Laboratory of Cognitive Neuroscience (LNCO), CNP, BMI, EPFL, Geneva, Switzerland, 2Centre d’Economie de la Sorbonne, CNRS UMR 8174, Paris, France, 3Department of General Psychiatry, CHUV, Lausanne, Switzerland, 4University Hospital of Lausanne, Lausanne, Vaud, 5Department of Radiology, Centre hospitalier universitaire vaudois (CHUV), Lausanne, Switzerland, 6Center for Psychiatric Neuroscience, CHUV, Lausanne, Switzerland, 7Department of Neurology, University of Geneva, Geneva, Switzerland

M129 Using multivariate analysis to predict functional outcome in response to cognitive training

Lana Kambeitz-Iankovic1, Sophia Vinogradov2, Julian Wenzel3, Melissa Fisher2, Shalalia Haas1, Nikolaos Koutsoulieris1, Karuna Subramaniam3
1Ludwig-Maximilian University, Department of Psychiatry, Munich, Germany, 2University of Minnesota, Department of Psychiatry, Minneapolis, MN, United States, 3University of California, San Francisco, San Francisco, CA, United States

M130 Local Dysconnectivity of brain functional network in First-Episode psychosis and 2 months follow-up

Yauwan Zhang1, Chu-Chung Huang2, Jiajia Zhao3, Qiong Xiang4, Ching-Po Lin5, Dengtang Liu6, Chun-Yi Zac Lo7
1Institute of Science and Technology for Brain-inspired Intelligence, Fudan University, Shanghai, China, 2Aging and Health Research Center, National Yang-Ming University, Taipei, Taiwan, 3First-episode Schizophrenia and Early Psychosis Program, Division of Psychotic Disorders, Shanghai M, Shanghai, China, 4Brain Connectivity Laboratory, Institute of Neuroscience, National Yang-Ming University, Taipei, Taiwan

M131 Local Dysconnectivity of brain functional network in First-Episode psychosis and 2 months follow-up

Diana Tordesillas-Gutierrez1, Noelia Rodriguez-Perez1,2, María del Carmen García-González1, Victor Ortiz-García de la Foz3, Esther Setién-Suero1,2, Rosa Ayuso-Arnau1,2, Javier Vázquez-Bourgon1,2, Javier Vázquez-Bourgon2,3, Benedicto Crespo-Facorro1,2,3
1Neuroimaging Unit, Technological Facilities. Valdecilla Biomedical Research Institute IDIVAL, Santander, Spain, 2Emergency Department, Marqués de Valdecilla University Hospital, IDIVAL. School of Medicine, UC, Santander, Spain

M132 GREY matter trajectories in psychosis: preliminary results from PAFIP 10 years follow-up

M133 The effect of second-generation antipsychotics on subcortical volumes in early psychosis

Auria Albacete1, Carolina Makowska2, M. Mallar Chakravarty1, Ritha Joobe1, Ashok K Mallia1, Fernando Cantreras2, José Manuel Menchón2, Martin Lepage2,3
1FIDMAG Research Foundation, Sant Boi de Llobregat, Barcelona, 2Department of Psychiatry, McGill University, Montreal, Canada, 3Douglas Mental Health University Institute, McGill University, Montreal, Quebec, 4PEPP-Montreal, Douglas Mental Health University Institute, Montreal, Canada, 5Psychiatry Department, Bellvitge University Hospital-IDIBELL, Barcelona, Spain, 6Psychiatry Department, Bellvitge University Hospital-Bellvitge Biomedical Research Institute (IDIBE, Barcelona, Spain

M134 Effects of Hierarchical Prediction Errors on Effective Connectivity during Social Learning

Daniel Hauke2, Jakob Heinzel1, Dario Schobö1, Vladimir Litvak1, Katharina Wellstein1, Sara Tominoli1, Christoph Mathys1,2,3, Lionel Rigoux1,2, Klaas Enno Stephan1,2,4, Andreae Diasconescu1,2,3,4
1University Psychiatric Clinics (UKP), Basel, Switzerland, 2University of Basel, Basel, Switzerland, 3Translational Neuromodulation Unit (TNU), University of Zurich & ETH, Zurich, Switzerland, 4Wellcome Centre for Human Neuroimaging, University College London, London, United Kingdom, 5International School for Advanced Studies, Trieste, Italy, 6Max Planck UCL Centre for Computational Psychiatry and Ageing Research, London, United Kingdom, 7Max Planck Institute for Metabolism Research, Cologne, Germany

M135 Working memory in patients with a first-episode psychosis: a longitudinal fMRI study

Sara Martín-García1, Aurora Albacete2, Leire Vazquez3, Silvia Alonso-Landa4, Raymond Salvador5, Paola Fuentes-Claramonte2, Amalia Guerrero-Pedraza1, Salvador Sarro2, Peter McKenna6, Edith Pomaro-Clotet6, Benni Menit Complex Assistent in Salut Mental, Sant Boi de Llobregat, Barcelona, Spain, 1FIDMAG Germanes Hospitalaries Research Foundation, Sant Boi de Llobregat, Barcelona, Spain

M136 Alpha power in visuospatial working memory reveals possible inhibitory deficit in schizophrenia

Ruben Perellón-Alfonso1, Indre Plyktytė1, Grega Repovš2, Borut Skodlar2, Jurij Bon3, 1University Psychiatric Clinic Libljana, Ljubljana, Slovenia, 2Center for Brain & Cognition, University Pompeu Fabra, Barcelona, Spain, 3Department of Psychology, Faculty of Arts, University of Ljubljana, Ljubljana, Slovenia, 4Department of Neurology, University Medical Centre Ljubljana, Ljubljana, Slovenia

M137 Altered Hippocampal Centrality of Coordinated Changes in Intracranial Microstructure in Psychosis

Carolyn Makowska1,2, John Lewis1, Budhachandra Khundrakpam1, Christine Tardif2, Lena Palaniyappan3, Ritha Joobe1, Ashok K Mallia1, Jai Shah2, Michael Badner2, M. Mallar Chakravarty1, Martin Lepage2, Alan Evans1, 1Montreal Neurological Institute, McGill University, Montreal, Quebec, Canada, 2Douglas Mental Health University Institute, Montreal, Quebec, Canada, 3Robarts Research Institute, Western University, London, Ontario, Canada, 4Royal Ottawa Mental Health Centre, Ottawa, Ontario, Canada

M138 Alterations in brain morphology in non-help-seeking adolescents at ultra high risk for psychosis

Ayako Ando1, Peter Parzer1, Rea Fulıp3, Romy Henze3, Romuald Brunner1, Michael Kaess1, Julian Koening1, Franz Resch2, 1Heidelberg University, Heidelberg, Germany, 2Humboldt-Universität, Berlin, Germany, 3University of Regensburg, Regensburg, Germany, 4University of Bern, Bern, Switzerland

M139 Exploring the Schizophrenia and Bipolar Disorder Continuum: a Morphometric and Psychological Study

Sara Sorella1, Gaia Lapomarda1, Roma Siouxalzate1, Irene Messina2, Remo Job1, Alessandro Grecucci2, DipSco, Department of Psychology and Cognitive Sciences, University of Trento, Rovereto (TN), Trento, 1University of Ghent, Ghent, Belgium, 2University of Ulm, Ulm, Germany

M140 Pre-stimulus theta oscillation predicts ERP amplitude modulation due to corollary discharge

Gabriel Turra-Fariña1, Sonja Kotz1, Wael El-Deredy3, Pavel Parz1, Alejandro Weinstein5, Álvaro Caviere5, 1University of Valparaíso, Valparaíso, Valparaíso, 2Maastricht University, Maastricht, Netherlands, 3University of Valparaíso, Valparaíso, 4Universidad Tecnica Federico Santa Maria, Valparaíso, Chile, 5Universidad de Valparaíso, Valparaíso, Valparaíso, 6University of Valparaíso, Valparaíso, Chile

M141 Modulation by the dIPFC and Hippocampus during refractory periods of learning in schizophrenia

Elias Samani1, Asadur Choudry1, Jeffrey Stanley1, Vaibhav Diwadkar2, 1Wayne State University School of Medicine, Detroit, MI, United States

To view full abstract text and ePosters, visit wve5.aievolution.com/hbm1901
M144 Simple models identify biological mechanisms of altered structural network in schizophrenia
Chongwon Paek1, Hoe-jeong Park2,3
1Yonsei University College of Medicine, Yonsei University, Seoul, Korea, Republic of, 2Center for Systems and Translational Brain Sciences, Institute of Human Complexity and Systems Science, Seoul, Korea, Republic of, 3Department of Nuclear Medicine, Radiology, Yonsei University College of Medicine, Yonsei University, Seoul, Korea, Republic of

M143 Multivariate Pattern Analysis Reveals Structural Brain Network Abnormalities in Schizophrenia
Aristeidis Sotiras1, Guray Erus1, Monica Truelove-Hill1, Antonia Kackzurkin1, Ganeesh Chand1, Chiharu Sakoi1, Dominic Dwyer1, Ruben Guri1, Raquel Guri1, Yang Fan1, Theodore Satterthwaite1, Nikolaos Koutsouleris1, Daniel Wolf1, Christos Davatzikos2
1Washington University in St. Louis, St. Louis, MO, United States, 2University of Pennsylvania, Philadelphia, PA, United States, 3University of Pennsylvania, Philadelphia, PA, United States, 4Ludwig Maximilian University, Munich, Germany, 5Ludwig-Maximilians Universitat (LMU), Munich, Germany, 6University of Pennsylvania, Philadelphia, PA, United States

M142 Differences in resting-state effective connectivity on core networks in first episode schizophrenia
Schizophrenia and Psychotic Disorders

M145 Could N-acetylcysteine prevent schizophrenia onset? A preclinical study in the Poly I:C animal model
Chiara Mainenti1, Francesca Cianciulli1, Davide Pizzolato2,3, Enrico Barchi1,2, Giancarlo De Carli1,2,4, Giacomo Reggio1,2,3,4
1Ecole polytechnique fédérale de Lausanne (EPFL), Lausanne, Switzerland, 2Ecole Polytechnique Fédérale de Lausanne, Genève, Switzerland, 3École Polytechnique Fédérale de Lausanne, EPFL, Geneve, Switzerland, 4Laboratoire de Cognitive Neurosciences (LNCN), CNP, BMI, EPFL, Geneve, Switzerland, 5École Polytechnique Fédérale de Lausanne, Lausanne, Switzerland, 6EPFL, Lausanne, Switzerland

M146 Insular Cortex metabolic alterations in Schizophrenia Spectrum Disorders: Preliminary results
Pradeep Gupta1, Oded Gonen1, Hilary Bertsch1, Donald Goff2, Mariana Lazar1
1Department of Biomedical Imaging, Department of Radiology, New York University School of Medicine, New York, NY, United States, 2Department of Rehabilitation Medicine, New York University School of Medicine, New York, NY, United States, 3Department of Psychiatry, New York University School of Medicine, New York, NY, United States

M147 Dynamic Functional Connectivity of the Robotically-Induced Presence Hallucination
Herberto Dhania1, Eva Blondiaux1, Thomas Bolton2, Nathan Faivre1, Giulio Rognini1, Dimitri Van De Ville1, Oflac Binakar2
1Ecole Polytechnique Fédérale de Lausanne (EPFL), Lausanne, Switzerland, 2Ecole Polytechnique Fédérale de Lausanne, Epfl, Lausanne, Switzerland, 3Ecole Polytechnique Fédérale de Lausanne, Lausanne, Switzerland, 4EPFL, GENEVA, Switzerland, 5Laboratory of Cognitive Neuroscience (LNCO), CNP, BMI, EPFL, Geneve, Switzerland, 6École Polytechnique Fédérale de Lausanne, Lausanne, Switzerland, 7EPFL, Lausanne, Switzerland

M148 Reduced Functional Connectivity between Memory and Reward Circuits in Schizophrenia during Learning
Sadid Hasan1, Munaj Huaq1, Asadur Chowdury1, A.J. Robison2, Katherine Thakkar2, Jeffrey Stanley1, Vaibhav Dixadkar1
1Wayne State University School of Medicine, Detroit, MI, United States, 2Michigan State University, Lansing, MI, United States

M149 Clinical High Risk for Psychosis Show Stable Global Functional and Nodal Structural Disconnectivity
Katherine Demmie1, Vijay Mittal1
1Northwestern University, Evanston, IL, United States

M150 Features of the cerebellar structures in schizophrenia and autism spectrum disorder
Chie Marmoto1, Kousoo Saotome2, Yuko Nakamuta1, Akiko Uematsu1, Hidenori Yamase2, Kyoto Kasa3, Shinshu Kake3
1The University of Tokyo, Tokyo, Japan, 2University of Tokyo, Tokyo, Tokyo, 3Graduate School of Arts and Sciences, University of Tokyo, Tokyo, Japan, 4Hamamatsu University School of Medicine, 5Department of Psychiatry, Hamamatsu, Japan, 6Department of Neuropsychiatry, Graduate School of Medicine, The University of Tokyo, Tokyo, Japan, 7University of Tokyo Institute for Diversity & Adaptation of Human Mind, Tokyo, Japan

M151 Predicting prodromal psychosis status using multimodal imaging data in at-risk individuals
Jenna Reiner1, Pablo Polesecki2, Eduardo Castro1, Tiziano Colibazzi1, Cheryl Corcoran2, Guillerma Cecchi2
1IBM TJ Watson Research Center, Yorktown Heights, NY, United States, 2IBM, Yorktown Heights, NY, United States, 3IBM T.J. Watson Research Center, Yorktown Heights, NY, United States, 4Department of Psychiatry, The New York State Psychiatric Institute, Columbia College of Physicians, New York, NY, United States, 5Mount Sinai Icahn School of Medicine, New York, NY, United States

M152 Multimodal imaging of hippocampal dysfunction in psychosis reveals heterogeneity of brain function
Maureen McHugh1, Pratik Talati2, Kristen Armstrong1, Stephan Heckers1
1Vanderbilt University Medical Center, Nashville, TN, United States, 2Massachusetts General Hospital, Boston, MA, United States

M153 The separation of self- and mother-representation in Chinese first-episode schizophrenia
Yanli Zhao1, Danan Zhang1, Shuping Tan2, Shuping Tan2, Shuping Tan2, Shuping Tan2, Shuping Tan2, Shuping Tan2, Shuping Tan2, Shuping Tan2, Shuping Tan2
1Beijing Huilongguan Hospital, Beijing, China, 2Department of Psychology, College of Psychology and Sociology, Shenzhen University, Shenzhen, China, Shenzhen, Guangdong, 3Beijing Huilongguan Hospital, Peking University, Beijing, China

M154 Altered distribution and connectivity of verbal memory brain networks across stages of schizophrenia
Katie Lavigne1, Carolina Makowsk1, Alan Evans3, Martin Lepage2
1Department of Psychiatry, McGill University, Montreal, Quebec, Canada, 2MNI, McGill University, Montreal, Quebec, Canada, 3PEPP-Montréal, Douglas Mental Health University Institute, Montréal, Quebec, Canada

M155 Altered corpus callosum diffusion property associates with hallucination in first episode psychosis
Donni Wang1, Kaiming Zhuo2, Dengtang Liu1, Yao Li2
1Institute for Medical Imaging Technology, Shanghai Jiao Tong University, Shanghai, China, 2School of Biomedical Engineering, Shanghai Jiao Tong University, Shanghai, China, 3School of Psychology, Shanghai Jiao Tong University School of Medicine, Shanghai, China

MONDAY, JUNE 10
Odd numbers: 12:45 – 13:45; Even numbers: 13:45 – 14:45; Poster Reception: 18:30 – 19:30
Sleep Disorders

M156 Changes in cerebellum and parietal cortex associated with obstructive sleep apnea
Pablo Reyes1, Catalina Moncaneano, Vanessa Riveros, Liliana Otero, Felipe Urroz, Patricia Hidalgo2, Andrea del Pilar Rueda2
1Hospital Universitario San Ignacio, Bogota, Colombia, 2Pontificia Universidad Javeriana, Bogota, Colombia

M157 Functional brain alterations in acute sleep deprivation: An ALE meta-analysis
Neoshin Jahaveripour1, Niloofar Shahidipour1, Khadijeh Noori1, Mojtaba Zare1, Julia Camillari1, Angela Laird1, Peter Fox3, Simon B. Eckhoff1, Claudia R. Eckhoff1, Ivana Rosenzwieg1, Habibollah Khaizad2, Masoud Tahmasian10
1Institute of Medical Science and Technology, Shahid Beheshti University, Tehran, Iran, Islamic Republic of, 2Sleep Disorders Research Center, Kermanshah University of Medical Sciences, Kermanshah, Iran, Islamic Republic of, 3Shahid Beheshti University, Tehran, Iran, Islamic Republic of, 4Institute of Neuroscience and Medicine (INM-7), Research Center Jülich, Jülich, Germany, 5Florida International University, Miami, FL, United States, 6University of Texas Health Science Center San Antonio, San Antonio, TX, United States, 7Institute of Clinical Neuroscience and Medical Psychology, Medical Faculty, University Duesseldorf, Duesseldorf, Germany, 8Institute of Clinical Neuroscience and Medical Psychology, Medical Faculty, Heinrich Heine Universit, Duesseldorf, Germany, 9Sleep and Brain Plasticity Centre, Department of Neuroimaging, IOPPN, King’s College London, London, United Kingdom, 10Shahid Beheshti University, Tehran, Iran

M158 Patterns of cortical thickness in prodromal stage of synucleinopathies: a cluster analysis study
Maio Gauer1, Shady Rahayel1, Ron Postuma1, Jacques Montplaisir1, Pierre-Alexandre Bourgoin2, David Rémillard-Pelchat1, Carrier Julie1, Oury Monchar1, Jean-François Gagnon1
1Centre for Advanced Research in Sleep Medicine, Hôpital du Sacré-Cœur de Montréal, Montréal, Canada, 2University of Calgary, Calgary, Alberta, Canada

M159 Sleep spindles characteristics in adults with Autism Spectrum Disorder and Typical Development
Luciana Cirinione1, Nicola Cellini2, Noemi Mazzoni2, Katharina Zinke2, Simona De Falco1, Paola Venu1, Jan Born3, Andrea Caria1
1Department of Psychology and Cognitive Sciences, University of Trento, Rovereto, Italy, 2Department of General Psychology, University of Padova, Padova, Italy, 3Child Psychopathology Unit, IRCCS Eugenio Medea, Bosisio Parini, Italy, 4Institute for Medical Psychology and Behavioural Neurobiology, University of Tübingen, Tübingen, Germany

Stroke

M160 How many different lesion sites can cause selective impairments in verbal short-term memory?
Sherman Gev1, Teodros Trune1, Hayley Woodgate1, Sophie Roberts1, Kate Ledingham1, Rachel Bruce1, Shamima Khan1, Megan Docksey1, Storm Anderson1, Mohamed Segheri1, Thomas Hope1, Jennifer Crinion1, Alex Leff2, Cathy Price3
1University College London, London, United Kingdom, 2Emirates College for Advanced Education, Abu Dhabi, United Arab Emirates, 3UCL Institute of Neurology, London, United Kingdom

M161 Real Time fMRI with Novel MR-Compatible Robotic Device Assesses Neuroplasticity in Chronic Stroke
Shasha Li1, Mark Ottensmeyer1, Gianluca De Novi1, Zeba Qadri1, Loukas Astrakas1, A. Ariya Tzika1
1Massachusetts General Hospital, Harvard Medical School, Boston, MA, United States

M162 Machine-learning predictions of stroke recovery using quantitative tractography-based connectivity
Chun-Hung Yeh1, Xiaoyan Liang1, Chia-Lin Koi1, Leeanne Carey2,3, Alen Connelly1,2
1Florey Institute of Neuroscience and Mental Health, Melbourne, Australia, 2Florey Department of Neuroscience and Mental Health, University of Melbourne, Melbourne, Australia, 3School of Allied Health, La Trobe University, Melbourne, Australia

M163 Real-time fMRI neurofeedback of laterality index from stroke patients: Preliminary study
Dong-Youl Kim1, Yong-Hwan Kim1, Dong-Wha Kang1, Jong-Hwan Lee1
1Korea University, Seoul, Korea, Republic of, 2Department of Neurology, Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea, Republic of

M164 Behavioural profiles & neural correlates of higher-level vision after stroke
Grace Rice1, Sheila Kerry1, Ro Julia Robotham2, Alex Left1, Matthew Lambom Ralph3, Randi Starrfelt3
3MRc Cognition and Brain Unit, University of Cambridge, Cambridge, United Kingdom, 4University College London, London, London, United Kingdom, 5University of Copenhagen, Copenhagen, Denmark

M165 Common and modality-specific network localization of lesions causing hallucinations
NaYoung Kim1,4, David Talsmasov1,4, Juho Joutsa1,4, Ono Wu1,4, Natalia Rost1,4, Estrella Rodriguez1,4, Michael Fox1
1Department and Research Institute of Rehabilitation Medicine, Yonsei University College of Medicine, Seoul, Korea, Republic of, 2Berenson-Allen Center for Noninvasive Brain Stimulation, Beth Israel Deaconess Medical Center, Boston, MA, United States, 3Harvard Medical School, Boston, MA, United States, 4University of Turku, Turku, Finland, 5Athinoula A. Martinsos Center for Biomedical Imaging, Massachusetts General Hospital, Charlestown, MA, United States, 6Department of Neurology, Biomedical Research Institute (IB Sant Paul), Hospital de la Santa Creu i S, Barcelona, Spain, 7Beth Israel Deaconess Medical Center, Boston, MA, United States

M166 Changes in motor planning after Constraint-Induced Movement Therapy in chronic hemiplegia
Philip Dean1, Annette Serr1
1University of Surrey, Guildford, United Kingdom

M167 The Synchronization Lag in Post-stroke: Insights into Motor Function and Structural Connectivity
Xin Wang1, Caio Seguin1, Andrew Zalesky2,3, Wan-wa Wong1, Raymond Kake-yu Tong1
1Department of Biomedical Engineering, The Chinese University of Hong Kong, Hong Kong, China, 2Melbourne Neuropsychiatry Centre, Department of Psychiatry, University of Melbourne, VIC, Australia, 3Department of Biomedical Engineering, University of Melbourne, VIC, Australia

M168 Increased intrinsic connectivity for structural atrophy and functional maintenance after stroke
Yiru Yang1, Yaoqiong Chen1, Shudan Gao1, Zhanjun Zhang2
1Beijing Normal University, Beijing, China

M169 Transcallosal structural connectivity predicts response to bimanual force-coupled training
Ronan Denyer1, Jennifer Ferris1, Mahsa Khoshnam2, Beverley Lassens1, Kaitlin Attard1, Lara Boyd1
1University of British Columbia, Vancouver, BC, Canada, 2Simon Fraser University, Burnaby, BC, Canada

M170 Recovery of stroke-induced aphasia using a novel BCI-based training: a resting state study
Maria Cristina Musso1, Pierre Leve2, Maria Bertodoss1, David Hubner1, Sarah Schwarzkopf1, Cornelius Weiller1, Michael Tangermann3
1Uniklinik Freiburg, Freiburg, GA, United States, 2Department of Radiology, University Medical Center Freiburg, Germany, freiburg, Germany, 3Department of Radiology, University Medical Center Freiburg, Germany, Freiburg, Germany, 4Brain State Decoding Lab, Dept. Computer Science, Albert-Ludwigs-Universität Freiburg, Freiburg, Germany, 5Florida International University, Miami, FL, United States, 6University of Texas Health Science Center San Antonio, San Antonio, TX, United States, 7Institute of Biomedical Engineering, The Chinese University of Hong Kong, Hong Kong, China, 8Department of Neurology, Asan Medical Center, Seoul, Korea, Republic of, 9Department of Biomedical Engineering, University of Melbourne, VIC, Australia

To view full abstract text and ePosters, visit ww5.aievolution.com/hbm1901
<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dynamic remodeling of functional connectivity after stroke restricted to primary motor cortex</td>
<td>Mitsouko Van Assche1, Elisabeth Dirren1, Alexia Bourgeois2, Reto Meuli2, Tobias Kobler2, Andreas Kleinschmidt2, Jonas Richiardi1, Emmanuel Carrera1. 1University Hospitals of Geneva, Geneva, Switzerland, 2University of Geneva, Geneva, Switzerland.</td>
</tr>
<tr>
<td>N-acetylaspartate and Glutamate in Primary Sensorimotor Cortices after Chronic Stroke</td>
<td>Kaitlin Attard1, Jennifer Ferris1, Jason Neve1, Katie Wadden1, Irene Vavassour1, Lara Boyd1. 1University of British Columbia, Vancouver, British Columbia, Canada, 2University of British Columbia, Vancouver, BC, Canada, 3Memorial University of Newfoundland, St. John’s, Newfoundland, Canada.</td>
</tr>
<tr>
<td>N-acetylaspartate and Glutamate in Primary Sensorimotor Cortices after Chronic Stroke</td>
<td>M172 DYNAMIC REMODELING OF FUNCTIONAL CONNECTIVITY AFTER STROKE RESTRICTED TO PRIMARY MOTOR CORTEX - MITSOUKO VAN ASSCHE1, ELISABETH DIRREN1, ALEXIA BOURGEOIS2, RETO MEULI2, TOBIAS KOBLER2, ANDREAS KLEINSCHMIDT2, JONAS RICHIARDI1, EMMANUEL CARRERA1. 1UNIVERSITY HOSPITALS OF GENEVA, GENEVA, SWITZERLAND, 2UNIVERSITY OF GENEVA, GENEVA, SWITZERLAND.</td>
</tr>
</tbody>
</table>
M187 Stroke anatomy reclassified
Anna Bonkhoff1, Tianbo Xu2, Hans Rolf Jäger3, Parashkev Nachev2
1Department of Neurology, University of Cologne, Cologne, Germany, 2Queen Square Institute of Neurology, University College London, London, United Kingdom

M188 Relationship between corpus callosum injury and impaired consciousness in patients with HBI
You Sung Seo1, Sung Ho Jang2
1Department of Physical Medicine and Rehabilitation, College of Medicine, Yeungnam University, Daegu, Korea, Republic of, 2Department of Neurology, Yeungnam University Hospital, Republic of Korea, Daegu, Namku

M189 Botulinum Toxin-A-Related Changes of the Brain Functional Connectivity in Post-Stroke Spasticity
Tomas Veverka1, Pavel Holík1, Petr Kalvovský1, Petr Hlustík1
1Palacky University and University Hospital, Olomouc, Czech Republic

M190 Identifying individual functional profiles for a frontoparietal network in aphasic stroke patients
Romy Lorenz1, Michelle Hajal1, Fred Dick1, Adam Leech2, Fatemeh Geranmayeh3
1University of Cambridge, Cambridge, United Kingdom, 2Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, 3Imperial College London, London, United Kingdom, *Birkbeck, University of London, London, United Kingdom, 4Centre for Neuroimaging Sciences, Institute of Psychiatry, King’s College London, London, United Kingdom

M191 No response for static faces in the right pSTS due to acquired prosopagnosia
Magdalena Siwińska1, David Pitcher2
1University of York, York, United Kingdom, 2York, York, United Kingdom

M192 Brain networks and rotated drawing after stroke: a single case study
Valentina Sebastiani1, Piero Chiacciariello2, Luigi Pavone3, Antonio Sparano3, Giovanni Grilea2, Sara Spadone1, Paolo Capotosto1, Giorgia Commissari2, Antonella Baldassarre3
1I. Department of Neuroscience, Imaging and Clinical Sciences, University “G. D’Annunzio”, Chieti, Italy, 2Department of Neuroscience, University G. D’Annunzio of Chieti, Chieti, Italy, 3NEUROMED, Pozzilli, Italy

M193 Transcallosal Microstructural Integrity and Interhemispheric Inhibition in Chronic Stroke
Erin King1, Alyssa Roeckner1, Cassie Fierro1, Shiyu Lin1, Jacqueline Palmer1, Michael Borich2
1Emory University, Atlanta, GA, United States, 2Emory University, Atlanta, GA, United States

M194 Serotonergic Modulation of Behavioural and Neural Responses During Motor Learning
Eoin Molloy1, Kirsten Mueller2, Bernhard Sehm2, Ahmad Kanaan3, André Pampel1, Christopher Steele2, Vadim Nikulin2, Pierre-Louis Bazin2, Nathalie Beinhöfli2, Gergana Zheleva2, Fabian Plechta2, Kristin Ihle3, MariaBloch4, Ulrike Scharer5, Ralf Regenhan6, Harald Möller7, Arno Villringer5, Julia Sacher5
1Emotion & Neuroimaging Lab, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, 2Max Planck Institute for Cognitive and Brain Sciences, Leipzig, Germany, 3Max Planck Institute for Human Cognitive & Brain Sciences, Leipzig, Germany, 4Max Planck Institute for Human Cognitive & Brain Sciences, Leipzig, Germany, 5Department of Psychology, Concordia University, Montréal, Quebec, Canada, 6Integrative Model-based Cognitive Neuroscience Research Unit, University of Amsterdam, Amsterdam, the Netherlands, 7UNI-Klinikum Hamburg-Eppendorf Department of Anaesthesiology, Hamburg, Germany, 8Division of Clinical Pharmacology, Rudolf-Böhm-Institute of Pharmacology and Toxicology, University, Leipzig, Germany, 9MRI Methods & Development Group, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany

M195 Combining TMS and EEG to assess motor recovery after acute stroke
Caroline Tschepel1, Sebastian Demi2, Marcella Massimini2, Ulf Ziemann1, Gereon Fink1, Christian Greffke2
1Department of Neurology, University Hospital Cologne, Cologne, Germany, 2Institute for Neurosciences and Medicine (INM-3), Research Centre Juelich, Juelich, Germany, 3Department of Biomedical and Clinical Science ‘L. Sacco’, University Milan, Milan, Italy, *Department of Neurology & Stroke, Eberhard-Karls-University Tuebingen, Tuebingen, Germany

M196 The effect of language tasks on neural activation patterns in chronic stroke
Rajani Sebastian1, Zhuonan Yang1, Emily Sherry2, Amy Wright2, Argye Hillis1
1Johns Hopkins University School of Medicine, Baltimore, MD, United States

M197 Multi-class Voxel-based Lesion-symptom Mapping in Chronic Stroke Aphasia
James Higgins1, Sophia Chen1, Todd Parrish1
1Northwestern University, Chicago, IL, United States

M198 Lesion, structural and functional disconnection in stroke: correlation with behavioral scores
Alessandro Salvaglio1,2, Maurizio Corbetta2,3,4,5,6, Michel Thiebaut de Schotten7,8,9
1Padova Neuroscience Center, University of Padova, Padova, Italy, 2Department of Neuroscience, University of Padova, Padova, Italy, 3Padova Neuroscience Center, University of Padova, Padua, Padova, Italy, 4Department of Neurology, Washington University, Saint Louis, MO, United States, 5Department of Radiology, Washington University, Saint Louis, MO, United States, 6Department of Biomedical Engineering, Washington University, Saint Louis, MO, United States, 7BCBLAB, Paris, France, 8Frontlab, Institut du Cerveau et de la Moelle épineure (ICM), UPMC UMRs 1127, Inserm U 1127, CNRS UMR 7225, Paris, France, 9Groupe d’Imagerie Neurofonctionnelle, Institut des Maladies Neurodégénératives UMR S239, CNRS, CEA University of Bordeaux, Bordeaux, France

M199 Functional and Structural Imaging of Sensorimotor Processing in Children with Basal Ganglia Stroke
Cecilia Jobst1, Samantha Goncalves1, Justin Foong1, Nazomu Diamin1, Douglas Cheyne2,3
1The Hospital for Sick Children, Toronto, Ontario, Canada, 2The Hospital for Sick Children, Toronto, Ontario, Canada, 3University of Toronto, Toronto, Ontario, Canada

M200 White-matter connectome neuroplasticity in perinatal stroke relates to clinical motor function
Brandon Craig1, Alicia Hilderley1, Ianxu Long1, Adam Kirton1, Helen Carlson1
1University of Calgary, Calgary, AB, Canada

M201 Characterizing Direct and Indirect Descending Cortical Projections in Post-stroke Individuals
Alejandro Lopez1,2, Jiang Xu3, Justin Liu1, Steven Eicholtz1, Michael Borich1, Trisha Kesar4
1Emory University, Atlanta, GA, United States

M202 Deep Learning-based Detection of DSC-Defined Penumbral Tissue on pCASL in Acute Ischemic Stroke
Kai Wang1, Qinxiang Shou1,2, Samantha Mo1,2, David Liebeskind3, Xin Qiao4, Fabien Scalzo4, Jeffrey Saver5, Noriko Salamon1,2, Danny Wang6
1Lab of Functional MRI Technology, University of Southern California, Los Angeles, CA, United States, 2Shanghai Jiao Tong University, Shanghai, China, 3Neurology, University of California, Los Angeles, CA, United States, 4Radiology, University of California, Los Angeles, Los Angeles, CA, United States, 5Laboratory of Functional MRI Technology, University of Southern California, Los Angeles, CA, United States
M215 Tau PET in Iraq and Afghanistan Veterans with Blast Neurotrauma
Meghan Robinson1, Ann McKeel1, David Salat1, Ann Rasimusson1, Lauren Radigan1, Ciprian Catana1, William Milberg1, Regina McGlinchey1
1Baylor College of Medicine, Houston, TX, United States, 2Boston University School of Medicine, Boston, MA, United States, 3VA Boston Healthcare System, Boston, MA, United States, 4Wayne State University, Detroit, MI, United States, 5A. A. Martins Center for Biomedical Imaging, Charleston, MA, United States

M216 Athletes with sports concussions show distinct tau-PET deposition relative to aging nonathletes
Samuel Guazz1, Alexia Pichet Binette2, PREVENT-AD Research Group1, Sylvio Villeneuve1, Louis De Beaumont1,2
1Hôpital du Sacré-Cœur de Montréal, Montréal, QC, Canada, 2University of Montreal, Montréal, QC, Canada

M217 Impaired Corpus Callosum Modulates Inter-Hemispheric Functional Connectivity in Chronic Mild TBI
Zhuoran Wang1,2, Chuanzhu Sun1, Shan Wang1, Meng Zhang1, Lijun Bai1
1Department of Biomedical Engineering, Xi’an Jiaotong University, Xi’an, China, 2Department of Medical Imaging, the First Affiliated Hospital of Xi’an Jiaotong University, Xi’an, China

M218 Redundancy and resiliency of arousal mechanisms in patients recovering from traumatic coma
Marta Bianciardi1, Saef Izzy2, Bruce Rosen1, Lawrence Wald1, Brian Edlow1
1Department of Radiology, A.A. Martins Center for Biomedical Imaging, MGH and Harvard Medical School, Boston, MA, United States, 2Department of Neurology, Brigham and Women’s Hospital and Harvard Medical School, Boston, MA, United States, 3Department of Neurology, A. A. Martins Center for Biomedical Imaging MGH and Harvard Medical School, Boston, MA, United States

M219 Predictive value of global brain network reorganization after severe traumatic brain injury
Lydia Oujamaa1,2, Chantal Delon Martin3, Sophie Achard4
1Univ. Grenoble Alpes, Grenoble Institut Neuroscience, Grenoble, France, 2Service de Rééducation Post Réanimation Centre Médical de l’Arrètè – CHU Saint Etienne, Saint Etienne, France, 3Univ. Grenoble Alpes, Grenoble Institut des Neurosciences, INSERM, U1216, Grenoble, France, 4Univ. Grenoble Alpes, CNRS, GIPSA-Lab, Grenoble, France

M220 Mapping structural and resting-state connectivity changes after music therapy in TBI patients
Noelia Martinez-Molina1, Sini-Tuuli Siponkoski1, Benjamin Ullan Cowley1, Linda Kuusela2, Sari Laitinen2, Miila Holma3, Mirja Ahlfors3, Paivi Jordan-Kikkin3, Katja Alo-Kauhaluoma4, Susanna Melkas4, Johanna Pekkola1,2, Antoni Rodriguez-Fornells1, Matti Laaine1, Aaze Ylen1, Pekka Rantanen1,2, Sanna Koskinen1,2, Teppo Sarkamo1,2
1Cognitive Brain Research Unit, Department of Psychology and Logopedics, University of Helsinki, Helsinki, Finland, 2HUS Helsinki Medical Imaging Centre, Helsinki, Finland, 3Espoo hospital, Espoo, Finland, 4Private music therapy practitioner, Helsinki, Finland, 5Ludus Rehabilitation Services, Helsinki, Finland, 6Department of Neurology & Brain Injury Outpatient Clinic, Helsinki University Central Hospital, Helsinki, Finland, 7Cognition and Brain Plasticity Group, Bellvitge Biomedical Research Institute, Barcelona, Spain, 8Department of Psychology, Åbo Akademi University, Turku, Finland, 9Rehabilitation unit, Tampere University Hospital, Tampere, Finland, 10Department of Physical and Rehabilitation Medicine, Kanta-Häme Central Hospital, Hämeenlinna, Finland, 11Clinical Neuropsychology Research Group, Dept. of Psychology and Logopedics, Helsinki University, Helsinki, Finland

M221 Gender Differences in Brain Injury: Functional Outcomes, Brain Structure and Proteomic Biomarkers
Maheen Adamson1, Max Gray2, Keith Main3, Margaret McNerney4, Stephanie Kolakowsky-Hayner5, Odette Harris6, Xiaoqian Kang7
1DVBIC/Stanford Medical School Neurosurgery, Palo Alto, CA, United States, 2VA Palo Alto, Palo Alto, CA, United States, 3Defense and Veterans Brain Injury, Silver Spring, MD, United States, 4VA Palo Alto/Stanford Medical School, Palo Alto, CA, United States, 5Ichon School of Medicine at Mt. Sinai, New York, NY, United States, 6DVBIC, VA Palo Alto/Stanford School of Medicine, Palo Alto, CA, United States, 7VA Palo Alto Health Care System, Palo Alto, CA, United States

M222 Effect of Blue Light Therapy on Cortical Volume and Reaction Time following Mild TBI
Sahil Bajaj1, Natalie Dailey1, Adam Raikes1, John Vanuk1, Mareen Weber1, Isabelle Rosso1, Scott Rouch1, William Kilgore1
1University of Arizona, Tucson, AZ, United States, 2McLean Hospital, Belmont, MA, United States

M223 Can network spread determine early degenerative changes associated with traumatic brain injury?
Govinda Poudel1, Juan Dominguez1, Helena Verhelst1,2, Catharine Vander Linden3, Guy Vingerhoets4, Ester Cerin5, Derek Jones6, Karen Caeyenberghs1
1Australian Catholic University, Melbourne, Australia, 2University of Ghent, Ghent, Belgium, 3Ghent University Hospital, Ghent, Belgium, 4Ghent University, Gent, Belgium, 5Cardiff University, Cardiff, United Kingdom

M224 Difference in the ARAS between VS and MCS following traumatic brain injury
HoDong Lee1, SungHo Jang2
1College of Medicine, Yeguam University Hospital, Daegu, Namku, 2College of Medicine, Yeguam University Hospital, Republic of Korea, Daegu, Namku

M225 Dissociating PTSD and Depression in Multimodal Neuroimaging Profiles of Veterans with Mild TBI
Benjamin Wade1, David Tate2, Carmen Velez3, Randall Scheib4, Heather Belanger5, Carlos Jaramillo6, Blessen Eapen7, Mary Newsome8, Brian Taylor9, Sidney Hinds9, Gerald York9,10, Tracy Abildskov1, Erin Bigler11, Elisabeth Wilde12
1University of California, Los Angeles, Los Angeles, CA, United States, 2University of Utah, Salt Lake City, UT, United States, 3University of Missouri-St. Louis, St Louis, MO, United States, 4Baylor College of Medicine, Houston, TX, United States, 5USSOCOM, Tampa, FL, United States, 6Polytrauma Rehabilitation Center, South Texas Veterans Health Care System, San Antonio, TX, United States, 7VA Greater Los Angeles, Los Angeles, CA, United States, 8Virginia Commonwealth University, Richmond, VA, United States, 9Department of Defense/United States Army Medical Research and Materiel Command, Fort Detrick, MD, United States, 10Alaska Radiology Associates, Anchorage, AK, United States

M226 The differential impact of network disconnection on working memory and reasoning after TBI
Amy Jolly1, Gregory Scott2, David Sharp2, Adam Hampshire3
1Imperial College London, London, London United Kingdom, 2Imperial College, London, United Kingdom

M227 Impaired neurovascular coupling in diffuse axonal injury following severe TBI: a resting state study
Chloé Jaroszynski1, Lydia Oujamaa1, Sophie Achard1, Chantal Delon Martin3
1Univ Grenoble Alpes, Grenoble, France, 2Grenoble Institut Neuroscience, Grenoble, France, 3Univ. Grenoble Alpes, CNRS, GIPSA-Lab, Grenoble, F-38000, 4Univ. Grenoble Alpes, Grenoble Institut des Neurosciences, GIN,INSERM, U1216, F-38000 Grenoble, Fran, La Tronche, France
M228 Neural Correlates of Emotion Recognition in Concussed Athletes

Edith Léveillé1, Martine Desjardins1, Gaëlle Dumel1, Dave Saint-Amour1, Caroline Blais2, Peter Scherer2, Louis De Beaumont3

1Université du Québec à Montréal, Montreal, Quebec, Canada, 2Université du Québec en Outaouais, Gatineau, Quebec, Canada, 3Hôpital du Sacré-Coeur de Montréal / University of Montreal, Montreal, QC, Canada

M229 Parameters from Virtual Brain models correlate with cognition of retired ice hockey players

Tyler Good1, Carrie Esopenko1, Brian Levine2, Anthony McIntosh3

1University of Toronto, Toronto, Ontario, Canada, 2Rutgers University, New Brunswick, NJ, United States, 3Baycrest Health Sciences, Toronto, Ontario, Canada

M230 Random Forest Regression to find White Matter Pathways Implicating Working Memory Scores in mTBI

Soumya Ghose1, Radhika Madhavan2, Joseph Masdeu3, Pratik Mukherjee4, Roland Lee5, Michael McCrea6, Gillian Hotz7, Michael Collins8, Anthony Kontos9, Teena Shetty10

1GE Global Research, Niskayuna, NY, United States, 2GE Global Research, Bangalore, India, 3Houston Methodist Research Institute, Houston, TX, United States, 4UCSF, San Francisco, CA, United States, 5University of California, San Diego, CA, United States, 6Medical College of Wisconsin, Milwaukee, WI, United States, 7University of Miami, Miami, FL, United States, 8University of Pittsburgh Medical Center, Pittsburgh, PA, United States, 9Hospital for Special Surgery, New York City, NY, United States

M231 Microstructural differences in both the white- and gray-matter tissue distinguish athletes groups

Bradley Caron1, Lindsay Kitchell1, Brent McPherson1, Daniel Bullock1, Soichi Hayashi1, Derek Keller2, Hu Cheng1, Sharlene Newman3, Nicholas Port4, Franco Pestilli1

1Indiana University, Bloomington, IN, United States, 2Wake Forest University, Winston-Salem, NC, United States

M232 Resting State Functional MRI can Predict Recovery Profiles in Mild Traumatic Brain Injury

Sidharth Abro1, Suresh Joel1, Luca Marinelli2, Joseph Masdeu1, Pratik Mukherjee3, Roland Lee4, Michael McCrea5, Gillian Hotz6, Michael Collins7, Anthony Kontos8, Teena Shetty9

1GE Global Research, Bangalore, India, 2GE Global Research, Niskayuna, NY, United States, 3Houston Methodist Research Institute, Houston, TX, United States, 4UCSF, San Francisco, CA, United States, 5University of California, San Diego, CA, United States, 6Medical College of Wisconsin, Milwaukee, WI, United States, 7University of Miami, Miami, FL, United States, 8University of Pittsburgh Medical Center, Pittsburgh, PA, United States, 9Hospital for Special Surgery, New York City, NY, United States

M233 Longitudinal changes in apparent diffusion coefficient value predicts prognosis for mTBI patients

Soumya Ghose1, Radhika Madhavan2, Chitresh Bhusan1, Jhimil Mitra1, Ek Tsoon Tan1, Luca Marinelli1, Joseph Masdeu1, Pratik Mukherjee2, Roland Lee3, Michael McCrea4, Gillian Hotz5, Michael Collins6, Anthony Kontos7, Teena Shetty8

1GE Global Research, Bangalore, India, 2GE Global Research, Niskayuna, NY, United States, 3GE Global Research, Niskayuna, NY, United States, 4Houston Methodist Research Institute, Houston, TX, United States, 5UCSF, San Francisco, CA, United States, 6University of California, San Diego, CA, United States, 7Medical College of Wisconsin, Milwaukee, WI, United States, 8University of Miami, Miami, FL, United States, 9University of Pittsburgh Medical Center, Pittsburgh, PA, United States, 10Hospital for Special Surgery, New York City, NY, United States

M234 Classifying Concussion in Athletes Using Diffusion Tensor Imaging and Cognitive Evaluation

Monica Ly1, Samantha Scarnati2, Adam Lepley2, Kelly Coleman1, Chi-Ming Chen3, Douglas Casa4

1University of Connecticut, Storrs, CT, United States

M235 Gray matter volume change is associated with gray matter network re-organization one year after mTBI

Angela Martina Mueller1, William Panenka2, Rael Lange3, Jeffrey Brubacher4, Grant Iverson5, Naznin Virji-Babul6

1University of Texas at Dallas/Centers for Vital Longevity, Dallas, TX, United States, 2Department of Psychiatry, University of British Columbia, Vancouver, BC, Canada, 3Defense and Veterans Brain Injury Center, Walter Reed National Military Medical Center, Bethesda, MD, United States, 4Department of Emergency Medicine, University of British Columbia, Vancouver, BC, Canada, 5Department of Physical Medicine and Rehabilitation, Harvard Medical School, Boston, MA, United States, 6University of British Columbia, Department of Physical Therapy, Vancouver, BC, Canada

M236 Local Heterogeneity of Diffusion Tensor Imaging Tractography to Assess Multi-Focal Axonal Injury

Sumit Nigoi1, Abigail Hente1

1Weill Cornell Medicine, New York, NY, United States, 2Cornell University, Ithaca, NY, United States

M237 Abnormalities of Deep and Superficial White Matter in Youth with mTBI

Sonja Stojanovski1, Arash Nazeri2, Christian Lepage3, Aristotle Voineskos4, Anne Wheeler5

1The Hospital for Sick Children, Toronto, Ontario, Canada, 2Mallinckrodt Institute of Radiology, Washington University School of Medicine, Saint Louis, MO, United States, 3Toronto Rehabilitation Institute, Toronto, Ontario, Canada, 4Centre for Addiction and Mental Health, Department of Psychiatry, University of Toronto, Toronto, Ontario, Canada, 5The Hospital for Sick Children, Toronto, Ontario, Canada

M238 Predicting Outcome after Severe Traumatic Brain Injury

Evan Lutkenhoff1, Matthew Wright2, Paul Vespa1, Martin Monti3

1UCI, Los Angeles, CA, United States, 2UCI and Los Angeles Biomedical Research Institute, Los Angeles, CA, United States

M239 Traumatic Brain Injury Severity in a Network Perspective: A Diffusion MRI Based Connectome Study

Reut Raizman1, Ido Tavor2, Sagri Harno3, Chen Hoffmann4, Galia Tzafarty5, Anat Biegon6, Abigail Livny7

1Department of Diagnostic Imaging, Sheba Medical Center, Ramat-Gan, Israel, 2Sackler Faculty of Medicine, Tel-Aviv University, Tel-Aviv, Israel, 3Department of Neuropsychology, Robin Medical Center,Belinson, Petah-Tikva, Israel, 4Department of Radiology and Neurology, Stony Brook University School of Medicine, New York, NY, United States

M240 Dynamic causal modelling of the effects of methylphenidate on corticostral connections following concussion

Maria Bolato1, Sara De Simon2, Adam Hampshire3, David Sharp4

1Imperial College London, London, United Kingdom, 2Imperial College London, London, United Kingdom, 3Imperial College London, London, United Kingdom

M241 Loss of hemispheric asymmetry in neural sources of visual activity in aging following concussion

Tyler Good1, Carrie Esopenko1, Brian Levine2, Anthony McIntosh3

1University of Toronto, Toronto, Ontario, Canada, 2Rutgers University, New Brunswick, NJ, United States, 3Baycrest Health Sciences, Toronto, Ontario, Canada

M242 Default Mode Network & Dorsal Attention Network connectivity in youth with post-concussive syndrome

Rachelle Hof1, Nick Bock1, Geoffrey Hall2, Carol DelMatteo3

1McMaster University, Hamilton, Ontario, Canada

M243 Montréal Neurological Institute’s mTBI Database can predict injury severity

Martin Desjardins1, Danielle Lavoie1, Jean-Marc Lina2, Louis De Beaumont1, Jean-François Gagnon1, pierre Jolicoeur3

1Montréal Neurological Institute, Montréal, QC, Canada, 2Hôpital du Sacré-Coeur de Montréal / University of Montréal, Montréal, QC, Canada, 3Hospital for Sick Children, Toronto, Ontario, Canada, 4École de Technologie Supérieure, Montréal, QC, Canada, 5Hôpital du Sacré-Coeur de Montréal / University of Montréal, Montréal, QC, Canada, 6Centre for Advanced Research in Sleep Medicine, Hôpital du Sacré-Coeur de Montréal, Montréal, QC, Canada, 7University of Montréal, Montréal, QC, Canada

To view full abstract text and ePosters, visit ww5.aievolution.com/hbm1901
M243 Cerebral Blood Flow Changes Associated with Repetitive Head Impact Exposure in Youth Football
Christopher Whitlow\textsuperscript{1}, Orianna Olson\textsuperscript{2}, Jillian Urban\textsuperscript{2}, Elizabeth Davenport\textsuperscript{2}, Youngkyoo Jung\textsuperscript{3}, Jeongchul Kim\textsuperscript{4}, Alexander Powers\textsuperscript{5}, Joel Stitzel\textsuperscript{6}, Joseph Malijan\textsuperscript{7}
\textsuperscript{1}Woke Forest School of Medicine, Winston-Salem, NC, United States, \textsuperscript{2}Woke Forest School of Medicine, Winston-Salem, NC, United States, \textsuperscript{3}University of Texas Southwestern Medical Center, Dallas, TX, United States, \textsuperscript{4}Woke Forest School of Medicine, Winston-Salem, NC, United States

M244 Longitudinal quantification of microhemorrhage effects upon white matter after geriatric concussion
Di Fan\textsuperscript{1}, Maria Calvillo\textsuperscript{1}, Di Fan\textsuperscript{1}, Yu Hu\textsuperscript{1}, Sean Lee\textsuperscript{1}, Lei Cao\textsuperscript{1}, Fan Zhang\textsuperscript{2}, Lauren O’Donnell\textsuperscript{1}, Andrei Irimia\textsuperscript{1}
\textsuperscript{1}University of Southern California, Los Angeles, CA, United States, \textsuperscript{2}Harvard Medical School, Boston, MA, United States

M245 White matter degradation after mild traumatic brain injury revealed by diffusion tensor imaging
Kenneth Rostowsky\textsuperscript{1}, Nikhil Choudhari\textsuperscript{1}, Maria Calvillo\textsuperscript{1}, Sean Lee\textsuperscript{1}, Andrei Irimia\textsuperscript{1}
\textsuperscript{1}University of Southern California, Los Angeles, CA, United States

M246 Intensity gradient segmentation of brain microhemorrhages from susceptibility weighted imaging
Nikhil Choudhari\textsuperscript{1}, Di Fan\textsuperscript{1}, Maria Calvillo\textsuperscript{1}, Sean Lee\textsuperscript{1}, Nathian Chowdhury\textsuperscript{1}, Kenneth Rostowsky\textsuperscript{1}, Yu Hu\textsuperscript{1}, Lei Cao\textsuperscript{1}, Andrei Irimia\textsuperscript{1}
\textsuperscript{1}University of Southern California, Los Angeles, CA, United States

M252 Transient Valence-Dependent Shifts in Intrinsic Network Organization Mediate Mood Congruency Effects
Julian Provenzano\textsuperscript{1}, Philippe Fossat\textsuperscript{1,2}, Philippe Verdun\textsuperscript{3}, Peter Kuppens\textsuperscript{4}
\textsuperscript{1}KU Leuven, Leuven, Belgium, \textsuperscript{2}AP-HP, Hôpital de la Pitie Salpêtrière, Paris, France, \textsuperscript{3}Institut du Cerveau et de la Moelle Épinière, Paris, France, \textsuperscript{4}Maastricht University, Maastricht, Netherlands

M253 Exposure to Environmental and Psychological Stress and Neural Response to Own Infant among Mothers
Pilyoung Kim\textsuperscript{1}, Rebekah Ellis\textsuperscript{1}, Alexander Dufford\textsuperscript{2}, Andrew Erhart\textsuperscript{1}, Melissa Hansen\textsuperscript{1}, Aviva Olsavsky\textsuperscript{1}, Leah Grande\textsuperscript{1}
\textsuperscript{1}University of Denver, Denver, CO, United States

M254 Distinctive MPFC subregions serving comparison to self versus other under promotion motivation
Wi Hoon Jung\textsuperscript{1}, Hockjin Kim\textsuperscript{2}
\textsuperscript{1}Korea University, Seoul, Korea, Republic of

M255 Characteristics of emotional disorder following brain tumor surgery depending on the resected area
Riho Nakajima\textsuperscript{1}, Masashi Kihoshita\textsuperscript{1}, Hirokazu Okita\textsuperscript{1}, Mitsutashi Nakada\textsuperscript{1}
\textsuperscript{1}Kanazawa University, Kanazawa, Japan, \textsuperscript{2}Kanazawa University Hospital, Kanazawa, Japan

M256 Midbrain involvement in anterior insula-mediated emotion regulation
Andrea Caria\textsuperscript{1}, Luciana Cirignione\textsuperscript{2}
\textsuperscript{1}Università degli Studi di Trento, Dipartimento di Psicologia e Scienze Cognitive, Rovereto, Italy

M257 The neural basis of fear experience: A distributed and degenerate model
Yiyu Wang\textsuperscript{1}, Jordan Theriault\textsuperscript{1}, Ajay Satpute\textsuperscript{1}
\textsuperscript{1}Northeastern University, Boston, MA, United States

M258 Acute Exercise Effects on Emotional Face Processing: A fMRI Study at Two Different Intensity Levels
Angelika Schmit\textsuperscript{1}, Jason Martin\textsuperscript{1}, Sandra Rojas\textsuperscript{1}, Ramin Vafa\textsuperscript{2}, Lukas Scheel\textsuperscript{2}, Heiko Strüder\textsuperscript{2}, Henning Boecker\textsuperscript{4}
\textsuperscript{1}University of Bonn, Bonn, Germany, \textsuperscript{2}German Sport University Cologne, Cologne, Germany

M259 Reduced amygdala volume associated with mindfulness practice time and improved negative affect
Tammis Kral\textsuperscript{1}, Kaley Davis\textsuperscript{1}, Lawrence Tello\textsuperscript{1}, Melissa Rosenkranz\textsuperscript{1}, Richard Davidson\textsuperscript{1}
\textsuperscript{1}UW–Madison, Madison, WI, United States

M260 Effects of Exercise on Affective Network Resting State Functional Connectivity: Probing Intensity
Angelika Schmit\textsuperscript{1}, Neeeraj Upadhyay\textsuperscript{1}, Jason Martin\textsuperscript{1}, Sandra Rojas\textsuperscript{1}, Heiko Strüder\textsuperscript{2}, Henning Boecker\textsuperscript{4}
\textsuperscript{1}University of Bonn, Bonn, Germany, \textsuperscript{2}German Center for Neurodegenerative Diseases, Bonn, Germany, \textsuperscript{3}German Sport University Cologne, Cologne, Germany, \textsuperscript{4}University of Bonn, Bonn, Germany

M261 Quantifying connectivity-derived Circuit Scores related to the Negative Valence Domain in Anxiety
Leonardo Totti\textsuperscript{1}, Elena Tuzhilina\textsuperscript{1}, Brooke Staveland\textsuperscript{1}, Bailey Goit-Hosselr\textsuperscript{1}, Sarah Chang\textsuperscript{1}, David Chol\textsuperscript{1}, Melissa Shiner\textsuperscript{1}, Leanne Williams\textsuperscript{1}
\textsuperscript{1}Stanford University, Stanford, CA, United States

M262 High Primary psychopathy traits reveal specific cortical connectivity during emotional stimulation
Silvia Polver\textsuperscript{1}, Antonio Maffei\textsuperscript{1}, Alessandro Angrilli\textsuperscript{1}
\textsuperscript{1}Università degli Studi di Padova, Padova, Italy
**EMOTION AND MOTIVATION**

**Emotional Learning**

M263* The neural networks underlying the impact of emotion regulation on emotional intensity judgment

Navot Naori1, Lina Schaero2, Christiane Rohr3, Simone Shamay-Tsoory4, Hadas Okon-Singer4
1University of Maryland, Rockville, MD, United States, 2Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, GA, United States, 3University of Calgary, Calgary, AB, Canada, 4Department of Psychology, University of Haifa, Haifa, Israel

M264 Decomposing emotions at the brain level using a novel and interactive emotion elicitation task

Joana Letea1, Ben Meuleman2, Patrik Vuilleumier2
1University of Geneva, Geneva, Switzerland, 2University of Geneva, Geneva, Geneva

M265 Theta changes in resting state EEG activity after regulating emotions

Gaia Lopomarda1, Stefania Valeri1, Remo Job1, Alessandro Greccuci1
1Department of Psychology and Cognitive Sciences, University of Trento, Rovereto, Italy

M266* Motivated performance while sleep deprived: reduced ACC and insula recruitment and effort-preference

Stijn Massar1, Julian Lim1, Karen Sasmita2, Michael Chee2
1Duke-NUS Medical School, Singapore, Singapore, 2Cornell University, Ithaca, NY, United States

M267 A Neural Basis for Embodied Emotion

Marianne Reddan1, Luke Chang1, Philip Kragel1, Tor Wager2
1University of Colorado, Boulder, Boulder, CO, United States, 2Dartmouth College, Hanover, NH, United States, 3University of Colorado Boulder, Boulder, CO, United States

M268 Individual differences in hedonic capacity and subjective value representations: an fMRI study

Irene Messing1, Valentina Vellani1, Lisa Dommes2, Julia Boschi2, Petra Bechoner1, Julia Stinger1, Roberto Viviani1
1Universitas Mercatorum, Rome, Italy, 2University of Padua, Padua, Italy, 3University of Ulm, Ulm, Germany, 4University of Innsbruck, Innsbruck, Austria

M269 Hippocampus mediates conceptual generalization effects on pain

Leonie Koban1, Tor Wager2
1InSEAD, Fontainebleau, France, 2University of Colorado Boulder, Boulder, CO, United States

M270 Amygdala functional connectivity during reappraisal related to early life and recent stress

Andrew Sokolowski1, Katarzyna Jednoróg1, Marek Wypych1, Wojciech Dragan1
1The Interdisciplinary Centre for Behavioural Genetics Research, University of Warsaw, Warsaw, Poland, 2Nencki Institute of Experimental Biology, Warsaw, Poland, 3Laboratory of Brain Imaging, Nencki Institute of Experimental Biology of PAS, Warsaw, Poland

M271 Social incentives shape neural circuits underlying cognitive control

Mina Litén1, Sergeja Slipančič1, Anka Siana Ozimić1, Frank Hartmann2, Alan Anticevic2, Grega Repovš3
1Faculty of Economics, University of Ljubljana, Ljubljana, Slovenia, 2Mind & Brain Lab, Department of Psychology, Faculty of Arts, University of Ljubljana, Ljubljana, Slovenia, 3Rotterdam School of Management, Erasmus University, Rotterdam, Netherlands, 4Yale University, New Haven, CT, United States

M272 A meta-analytic connectivity modelling and functional decoding study of emotional processing in OCD

Maria Picó-Pérez1, Pedro Moreira2, Patricio Costa2, Pedro Morgado2, Carles Soriano-Mas2
1Life and Health Sciences Research Institute (ICVS) - School of Health Sciences, University of Minho, Braga, Portugal, 2Bellvitge University-Hospital-Bellvitge Biomedical Research Institute (IDIBELL), Barcelona, Spain

M273 Precuneus-related functional co-activation patterns modulated by mood and cognitive control

Julian Gaviria1, Gwladys Rey1, Thomas Bolton2, Dimitri Van De Ville3, Patrik Vuilleumier4
1University of Geneva, Geneva, Geneva, 2École Polytechnique Fédérale de Lausanne, Genève, Switzerland, 3École Polytechnique Fédérale de Lausanne, Lausanne, Switzerland

M274 Cortical processing of naturalistic visual stimuli is modulated by their emotional content

Antonio Maffei1, Claudio Gentili1, Raluca Georgescu2, Daniel David2, Alessandro Angrilli1
1University degli Studi di Padova, Padova, Italy, 2Babeš-Bolyai University, Cluj-Napoca, Romania

M275 Impersonal causality orientation impacts frontostriatal connectivity during personal choice

Liana Romanik1, Anca-Larisa Sandu1, Gordon Waiter2, Christopher McNeil3, Xueyi Shen1, Mathew Harris1, Jennifer MacFarlane1, Stephen Lowrie1, Ian Deary1, Alison Murray4, Mauricio Delgado2, Douglas Steele2, Andrew McIntosh2, Heather Wholley2
1University of Edinburgh, Edinburgh, United Kingdom, 2Aberdeen Biomedical Imaging Centre, School of Medicine, Medical Sciences and Nutrition, University of Aberdeen, United Kingdom, 3Aberdeen Biomedical Imaging Centre, School of Medicine, Medical Sciences and Nutrition, University of Aberdeen, Aberdeen, Scotland, United Kingdom, 4Aberdeen Biomedical Imaging Centre, University of Aberdeen, Aberdeen, United Kingdom, 5University of Edinburgh, Edinburgh, United Kingdom, 6Medical School (Neuroscience), University of Dundee, Dundee, United Kingdom, 7The University of Edinburgh, Edinburgh, United Kingdom, 8Centre for Cognitive Epidemiology and Cognitive Ageing, University of Edinburgh, Edinburgh, United Kingdom, 9Department of Psychology, Rutgers University, New Brunswick, NJ, United States, 10University of Dundee, Dundee, United Kingdom

M276 Dynamic network reconfiguration after stress: increased flexibility of the precuneus

Nicole Oei1, Johann Krischritz1, Illya Veen2
1University of Amsterdam, Amsterdam, Netherlands, 2Charité - Universitätsmedizin Berlin, Berlin, Germany

M277 Identifying Emotion Schemas using Convolutional Neural Networks and Human Brain Activity

Philip Kragel1, Marianne Reddan1, Kevin LaBar2, Tor Wager1
1University of Colorado Boulder, Boulder, CO, United States, 2Duke University, Durham, NC, United States

M278 Representation and Integration of Goals and Emotional Valence in the Amygdala-Prefrontal Circuitry

Regina Lapate1, Ian Ballard1, Janaye Sakkas1, Mark D’Esposito1
1University of California, Berkeley, Berkeley, CA, United States

To view full abstract text and ePosters, visit www.aievolution.com/hbm1901
M281 Neural substrates of long-term item and source memory for emotional associates: an fMRI study
Carlos Ventura Barti1, Julia Wendt2, Jörg König3, Janine Wirkner1, Martin Lotze4, Alfons Hamm2, Florin Dolcos5, Matthias Weymar6
1University of Potsdam, Greifswald, Germany, 2University of Greifswald, Greifswald, Germany, 3Department of Psychology, University of Greifswald, Greifswald, Germany, 4Herr, Greifswald, Deutschland, 5Psychology Department, Neuroscience Program, and the Beckham Institute for Advanced Science & Techno, Urbana-Champaign, IL, United States, 6Department of Psychology, University of Potsdam, Potsdam, Germany

M282 VMPFC reactivations explain long-term extinction memory retrieval: A registered direct replication
Chuan-Heng Hu2, Elena Andres1, Anna Gerlicher1, Benjamin Meyer1, Oliver Tüscher1, Raffael Kalisch1,2
1Neuroimaging Center (NIC), Johannes Gutenberg University Medical Center, Mainz, Germany, 2Deutsches Resilienz Zentrum (DRZ), Johannes Gutenberg University Medical Center, Mainz, Germany, 3Faculty of Social and Behavioural Sciences Programme group Clinical Psychology, Amsterdam, Netherlands, 4Dept. of Psychiatry and Psychotherapy, Johannes Gutenberg University Medical Center, Mainz, Germany

M283 Opposing roles for amygdala and vmPFC in the return of appetitive conditioned responses
Claudia Ebrahimi1, Lindsay Knight1, Farah Naaz2, Teodora Stoica1, Karisa Hunt1, Brendan Depue1, Claudia Pietrock1, Thomas Fydrich2, Andreas Heinz1
1Tokyo Institute of Technology, Meguro-ku, Tokyo, Japan, 2The University of Tokyo, Minato-ku, Tokyo, Japan, 3International University of Health and Welfare, Narita, Chiba, Japan, 4Kitasato University, Sagamihara, Kanagawa, Japan

M284 Bad intentions: Resistance to change in neural pattern similarity in response to deliberate harm
Lindsay Knight1, Farah Naaz2, Teodora Stoica1, Karisa Hunt1, Brendan Depue1, Claudia Ebrahimi1, Thomas Fydrich2, Andreas Heinz1
1Charité-Universitätsmedizin Berlin, Berlin, Germany, 2Humboldt-Universität zu Berlin, Berlin, Germany

M285 Functional Connectivity Changes Following Emotion Regulation Training
Lindsay Knight1, Farah Naaz2, Teodora Stoica1, Karisa Hunt1, Brendan Depue1
1University of Louisville, Louisville, KY, United States, 2Johns Hopkins University, Baltimore, MD, United States

M286 Source localization of early and late event-related potentials related to affective face perception
Anna Altnsk1, Jaroslav Bledzczyk1, Lukasz Okruszek2
1University of Warsaw, Warsaw, Poland, 2Institute of Psychology, PAS, Warsaw, Poland

M287 A rewarding human smile? An fMRI study investigating canine emotion perception
Magdalena Boch1, Sabrina Kar1, Isabella Wagner1, Christian Windischberger1, Ludwig Huber2, Claus Lamm2
1University of Vienna, Vienna, Austria, 2University of Veterinary Medicine, Vienna, Austria, 3Medical University of Vienna, Vienna, Austria

M288 ALE Meta-Analysis of Audiosvisual Affective Processing
Svetlana Shinkareva1, Chuanji Gao1, Elena Andres1,2, Anna Gerlicher1, Benjamin Meyer1, Oliver Tüscher1, Raffael Kalisch1,2
1Karolinska Institutet, Stockholm, Sweden, 2University of Amsterdam, Amsterdam, Netherlands

M289 Activation in the Amygdala in a Simple and Short Picture Viewing Task
Yasuhiro Kotani1, Nobukiy0 Yoshida2, Yoshih1 Ohgami1, Akira Kunimatsu1, Shigeru Kiryu1, Yusuke Inoue1
1Tokyo Institute of Technology, Meguro-ku, Tokyo, Japan, 2The University of Tokyo, Minato-ku, Tokyo, Japan, 3International University of Health and Welfare, Narita, Chiba, Japan, 4Kitasato University, Sagamihara, Kanagawa, Japan

M290 Emotional experience timecourse explains brain connectivity dynamics during naturalistic stimulation
Gianluca Lettieri1, Giacomo Handjaras2, Emiliano Ricciardi1, Andrea Leo1, Monica Betta1, Paolo Papaie1, Pietro Pietrini1, Luca Cecchetti1
1IMT School for Advanced Studies Lucca, Lucca, Italy

M291 Influence of group membership on emotion categorization: An ultra-high field fMRI Study
Jorge Armony1,2, Marcia Hidalgo-Marques1, Khamal Taverna-Chaim1, Valeria Della Maggiore1, Julien Dayot1, Pedro Valdes Sosa2, Edson Amaro1, Julie Grézes1
1McGill University, Montreal, Quebec, Canada, 2Douglas Mental Health University Institute, Verdun, Canada, 3Universidade de São Paulo, Sao Paulo, Brazil, 4Universidad de Buenos Aires, Buenos Aires, Argentina, 5Cuban Neuroscience Center, Havana, Cuba, 6Ecole normale supérieure, Paris, France

M292 A Multimodal Investigation of Emotional and Reward Relevant Scene Perception
Megan Pikawkski1, Katelyn Oliver2, Margaret Tyre3, Andreas Keil4, Dean Sabatini5
1Bayor College of Medicine, Houston, TX, United States, 2Massachusetts General Hospital, Cambridge, MA, United States, 3University of Georgia, Athens, GA, United States, 4University of Florida, Gainesville, FL, United States

M293 CACNA1C risk variant affects microstructural connectivity of the amygdala
Katharina Koch1, Sophia Stempgarter1, Schwarz Lentz2, Erb Michael3, Mara Thomas1, Klaus Scheffler2, Dirk Wildgruber1, Vanessa Nieratschker1, Thomas Ethofer1
1Clinic for Psychiatry and Psychotherapy, Eberhard-Karls University, Tuebingen, Germany, 2Department of Biomedical Resonance, University of Tuebingen, Tuebingen, Germany, 3Max-Planck Institute for Biological Cybernetics, University of Tuebingen, Tuebingen, Germany

M294 Representations of emotion from the face, body and voice in the brain, an fMRI decoding study
Maarten Vaessen1, Katelyn Oliver2, Margaret Tyre3, Andreas Keil4, Dean Sabatini5
1Bayor College of Medicine, Houston, TX, United States, 2Massachusetts General Hospital, Cambridge, MA, United States, 3University of Georgia, Athens, GA, United States, 4University of Florida, Gainesville, FL, United States

M295 Comparison of emotional modulation of picture-, face-, and word-elicited hemodynamic activity
Carlos Ventura Bort1, Julia Wendt2, Jörg König3, Janine Wirkner1, Martin Lotze4, Alfons Hamm2, Florin Dolcos5
1Charité-Universitätsmedizin Berlin, Berlin, Germany, 2Humboldt-Universität zu Berlin, Berlin, Germany

M296* Emotional experience timecourse explains brain connectivity dynamics during naturalistic stimulation
Nicola Lettieri1, Giacomo Handjaras2, Emiliano Ricciardi1, Andrea Leo1, Monica Betta1, Paolo Papaie1, Pietro Pietrini1, Luca Cecchetti1
1IMT School for Advanced Studies Lucca, Lucca, Italy

M297 Bupropion effect on affective network and subjective emotional smile
Tomoko Hama1,2, Michihiko Koeda3, Yumiko Ikeo1, Amane Tateno1, Tokuhiro Kawara1, Hidenori Suzuki1, Yoshiro Okubo1
1Department of Neuropsychiatry, Nippon Medical School, Tokyo, Japan, 2Bunkyo Gakuin University, Tokyo, Japan, 3Faculty of Social and Behavioural Sciences Programme, University of Tokyo, Tokyo, Japan, 4Dept. of Psychiatry and Psychotherapy, Johannes Gutenberg University Medical Center, Mainz, Germany

M298 Tune in to the right frequency. EEG time frequency effects during emotion regulation
Alessandro Grecucci1,2, Simone Sulzpiro1,2, Remo Job1,2
1DIPSCO, Department of Cognitive and Computational Sciences, University of Trento, Rovereto (TN), Trento, 2DIPSCO, Trento, Italy, 3DIPSCO, Rovereto, Trento, 4DIPSCO, Rovereto, Trento

Emotional Perception

To view full abstract text and ePosters, visit ww5.aievolution.com/hbm1901
M299* Spatio-temporal dynamics of the cerebral representations of emotion in voice
Bruno Giordano1, Caroline Whiting2, Nikolaus Kriegeskorte3, Sonja Katz4, Joachim Grass5, Pascal Belin6
1CNRS, Marseille, France, 2University of Glasgow, Glasgow, United Kingdom, 3Zuckerman Mind Brain Behavior Institute, Columbia University, New York, United States, 4MaxPlanck Institute, Maastricht, Netherlands, 5University of Münster, Münster, Germany, 6Institut de Neurosciences de la Timone, Marseille, France

M300 Cortico-subcortical interactions underlying anxiety elicitation and regulation during driving
Takafumi Sasaoka1, Takiko Harada2, Daichi Sato3, Nanae Michida4, Hironobu Yonezawa5, Masatoshi Tokayama6, Takahide Nouzawa7, Shigeto Yamawaki8
1Brain, Mind, and KANSEI! Sciences Research Center, Hiroshima University, Hiroshima, Japan, 2Graduate School of Biomedical & Health Sciences, Hiroshima University, Hiroshima, Japan, 3Mazda Motor Corporation, Hiroshima, Japan, 4Office of Industry-Academia-Government and Community Collaboration, Hiroshima University, Hiroshima, Japan

M301 Intracranial-EEG evidence of temporal pole - amygdala dynamics with picture, music and movie stimuli
Saurabh Sonkusare1,2, Vinh Thai Nguyen3, Rosalyn Moran4, Johan van der Meer5, Yudan Ren6, Nikitas Koussis7, Sashia Dionisi8, Michael Breaskpear9, Christine Guo10
1QIMR Berghofer Medical Research Institute, Brisbane, Australia, 2School of Medicine, The University of Queensland, Brisbane, Australia, 3King’s College, London, United Kingdom, 4Mater Advanced Epilepsy Unit, Mater Hospitals, Brisbane, Australia

M302 Dynamic neuronal changes induced by therapeutic tapping - implications for anxiety treatment
Nicola König1, Sarah Steber2, Sonja Rossi3
1Leopold-Franzens-University Innsbruck and Medical University of Innsbruck, Innsbruck, Austria, 2Leopold-Franzens-University Innsbruck, Medical University of Innsbruck, Innsbruck, Austria, 3Department for Hearing, Speech, and Voice Disorders, Medical University of Innsbruck, Innsbruck, Austria

M303 Repeatability of Facial Emotion Processing in Healthy Controls for Time Points 13 Weeks Apart
M. David Diggs1, Adam Goodman2, Jane Allendorfer3, Caroline Byington4, Rodolphe Nenert5, Jerzy Szofarski6
1The University of Alabama at Birmingham, Birmingham, AL, United States

M304 Neurobehavioral response to acute psychosocial stress is a valid measure for clinical interventions
Adam Goodman1, M. David Diggs2, Neha Balachandran3, Pranav Kakulamarri4, Jane Allendorfer5, Jerzy Szofarski6
1University of Alabama at Birmingham, Birmingham, AL, United States

M305 The human brain basis of visual threat perception in nearby virtual space
Aline de Borst1,2, Beatrice de Gelder1,2
1University College London, London, United Kingdom, 2Maastricht University, Maastricht, Netherlands

M306 The affective auditory network and symptoms severity in schizophrenia: A meta-analytic and VBM study
Veronika Mueller1, Edna-Clarisse Ciesliak2, Pia Barischt3, Andre Aleman4, Birgit DeMtl5, Oliver Gruber6, Lydia Kogler7, Iris Sommer8, Renaud Jodar9, Simon Eickhoff2
1Institute of Systems Neuroscience, Medical Faculty, Heinrich Heine University, Duesseldorf, Duesseldorf, Germany, 2BCN Neuroimaging Center, University Medical Center Groningen, University of Groningen, Groningen, Netherlands, 3Department of Psychiatry and Psychotherapy, University of Tubingen, Tübingen, Germany, 4Department of Psychiatry, University of Heidelberg, Heidelberg, Germany, 5UMC Utrecht Brain Center Rudolf Magnus, Utrecht, Netherlands, 6Univ Lille, CNRS UMR9193, SCALab & CHU Lille, Fontan Hospital, CURE platform, Lille, France

M307 Visual processing of emotional stimuli following right temporal lobe resection – an fMRI study
Johanna Kissler1, Lea Marie Steghorst1, Malena Mielke1, Martin Wegrzyn2, Friedrich Wörmann3, Christian Bien4
1Bielefeld University, Bielefeld, Germany, 2Epilepsy Centre Bethel, Bielefeld, Germany, 3University of Bielefeld, Bielefeld, Germany

M308 Brain potentials during emotional facial expressions and scenes: An EEG/ERP study
Dr Proshanto Saha1
1Gujarat Forensic Sciences University, Gandhinagar

M309 “You’re you’re smiling”: how facial expressions affect visual recognition of emotions
Francesco Benuzzi1, Daniela Ballotta1,2, Carlo Porro1,2, Paolo Nichelli3, Fausta Lui4
1Department of Biomedical, Metabolic and Neural Sciences, University of Modena and Reggio Emilia, Modena, Italy, 2Center for Neuroscience and Neurotechnology, University of Modena and Reggio Emilia, Modena, Italy, 3AOU Modena, Modena, Italy, 4Neurology Unity, NOCSAE Hospital, Modena, Italy

M310 Multivariate analysis of affective body perception using postural and kinetic features of movement
Marta Payo Solanos1, Maarten Vaessen2, Beatrice de Gelder1,2
1Department of Cognitive Neuroscience, Maastricht University, Maastricht, Netherlands, 2Department of Computer Science, University College London, London, United Kingdom

M311 Kangaroo Care Intervention Effect on Preterm Adolescents Emotional Empathy Neural Activation Pattern
Adi Ulmer Yaniv1, Roy Salomon2, Ruth Feldman3
1Bar Ilan University/Interdisciplinary Center, Ramot Gan, Israel, 2Bar Ilan University, Ramot Gan, Israel, 3IDC, Herzliya, Israel

M312 Population Variation in Fear Contagion is Associated with right TPJ Connectivity to the Amygdala
Anna-Lisa Schuler1, Martin Tik2, Christoph Kraus3, Daniele Plabigoni4, Andreas Hahn1, Katharina Paul1, Stuart Reed2, Manfred Klöbl1, Bastian Auer3, Rupert Lanzenberger1, Claus Lamm1, Christian Windischberger1
1Medical University of Vienna, Vienna, Austria, 2University of Vienna, Vienna, Austria

M313 Dynamic human and avatar facial expressions elicit different cortical but not subcortical responses
Lorena Kegel1,2, Julia Bauer3, Peter Brugger4, Sascha Frühholz5, Thomas Grunwald6, Peter Hilfiker7, Martin Kurthen8, Miriam Loetscher3,4, Dieter Mersch5, Anton Rey6, Teresa Soiflfrank7, Bettina Steiger8, Joerg Sternagel9, Michel Weber5, Hennric Jokeit1
1Swiss Epilepsy Clinic, Zurich, Switzerland, 2Department of Psychology, University of Zurich, Zurich, Switzerland, 3Neuropsychology Unit, Department of Neurology, University Hospital Zurich, Zurich, Switzerland, 4Institute of Psychology, University of Bern, Bern, Switzerland, 5Institute for the Performing Arts and Film, Zurich University of the Arts, Zurich, Switzerland, 6Institute for Critical Theory, Zurich University of the Arts, Zurich, Switzerland

M314 Effective connectivity within the core-system of face perception revisited: a meta-analytic approach
Roman Kessler1, Kristin Zimmermann2, Verena Schuster3,4, Andreas Janssen1,2
1Laboratory for Multimodal Neuroimaging, University of Marburg, Marburg, Germany, 2Center for Mind, Brain, and Behavior, Giessen & Marburg, Germany, 3Laboratory for Multimodal Neuroimaging, Marburg, Germany, 4Core-Unit Brainimaging, Faculty of Medicine, University of Marburg, Marburg, Germany
M315 Sensorimotor contributions to auditory emotion recognition in children: A resting-state fMRI study
Cesar Lima1, Ana Isabel Correia1, Paula Branco1, Marta Martins2, Ana Mafalda Reis2, Nuno Martins3, São Luis Castro2
1Instituto Universitário de Lisboa (ISCTE-IUL), Lisbon, Portugal, 2Instituto Universitário de Lisboa (ISCTE-IUL), Lisbon, Portugal, 3Serviço Médico de Imagem Computorizada (SMIC), Porto, Portugal

M316 Precocious human amygdala responses to subliminal fearful but not angry faces
Quex Guex1, Constantino Méndez-Bértola1, Stephan Moratti2, Bryan Strange3, Laurent Spinelli4, Margrit Seeck5, Patrick Vuilleumier6, Judith Dominguez-Borras7
11984, Genève, Switzerland, 2Facultad de Psicología, Madrid, Spain, 3Department of Experimental Psychology, Madrid, Spain, 4Laboratory for Clinical Neuroscience, Madrid, Spain, 5EEG and Epilepsy Unit, University Hospital of Geneva, Geneva, Switzerland, 6Université de Genève, Geneva, Switzerland, 7Université de Geneva, Geneva, Switzerland

M317 The Impact of the strategy used to create facial emotional stimuli on the neural basis of observers
Cristina Scarpazza1, Giuseppe Sartori2, Alessio Miolla3
1University of Padova, Padova, Italy, 2University of Padova, Padova, Italy

M318 Alexithymia, not Autistic Traits, Predicts Eye Gaze and Emotional Face Integration: Behavioral + ERP
Kal Lou1, Fun Lou1, Hong Xu2
1Nanyang Technological University, Singapore, Singapore

M319 Effects of left versus right temporal lobe resection on emotional stimuli processing - An EEG-study
Malena Mielke1, Alexandra Mehlmann1, Lea Marie Steighorst2, Christian Bien2, Johanna Kissler1
1Institute of Neurology, University Hospital of Leipzig, Leipzig, Germany, 2Clinic of Cognitive Neurology, Leipzig School of Medicine, Leipzig, Germany

M320 Intranasal Oxytocin Attenuates the Neural Circuitry and Its Connectivity to Dynamic Angry Faces
Xu Chen1, Yuanxiao Mo2
1Southwest University, Chongqing, China, 2University of North Carolina at Chapel Hill School of Medicine, Chapel Hill, NC, United States

M321 Distinct neural patterns of contextual modulation during dynamic facial expression perception
Yoon Kyoung Choi1, Hae-Jeong Park2
1Yonsei University, Seoul, Korea, Republic of, 2Yonsei University College of Medicine, Seoul, Korea, Republic of

M322 A Computational Model for Dopamine Transmission in the Human Brain
Kathleen Wenck1, Annette Horstmann1, Arno Villringer2,3,4,5
1Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, 2IFB Adiposity Diseases, Leipzig University Medical Center, Leipzig, Germany, 3Clinic of Cognitive Neurology, Leipzig University Hospital Center, Leipzig, Germany, 4Mind & Brain Institute, Berlin School of Mind and Brain, Humboldt-University, Berlin, Germany, 5Department of Medical Engineering and Biotechnology, University of Applied Sciences, Jena, Germany

M323 Acute serotonergic modulation of neural response during punishment – a pharmacological fMRI study
Carolin Lew1,2, Karsten Mueller1, Janis Reinelt1, Ralf Regenthal1, Hadas Okon-Singer1, Erika Forbes6, Arno Villringer1, Julia Sacher7, Ira Lindenburger1
1Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, 2International Max Planck Research School on Neuroscience of Communication, Function, Structure and Plasticity, Leipzig, Germany, 3Department of Psychiatry and Psychotherapy, Medical School, University of Tuebingen, Tuebingen, Germany, 4Division of Clinical Pharmacology, Rudolf-Boehm-Institute of Pharmacology and Toxicology, University, Leipzig, Germany, 5Department of Psychology, University of Hofa, Hofa, Israel, 6University of Pittsburgh, Pittsburgh, PA, United States

M324 Identification of distinct subregions within dopaminergic midbrain and nucleus accumbens
Anja Richter1, Fabian Reinhardt2, Bernd Kraemer3, Oliver Gruber4
1Department of Psychiatry, University of Heidelberg, Heidelberg, Germany

M325 De-coupling feedback valence and information-gain in reinforcement learning
Ido Toren1, Roni Paz1
1Weizmann Institute of Science, Rehovot, Israel

M326 Evidence for striatal prediction error signaling during fear extinction in humans
Kathleen Thiels1, Kenneth Yuan1, Anna Gerlicher1, Raffael Kalisch2
1University Medical Center Mainz/ German Resilience Center, Mainz, Germany, 2University Medical Center Mainz, Mainz, Germany, 3Department of Clinical Psychology, University of Amsterdam, Amsterdam, Netherlands, 4Neuroimaging Center (NIC), Johannes Gutenberg University Medical Center, Mainz, Germany

M327 Prediction of sensation-seeking from functional connectivities of the medial orbitofrontal cortex
Zhuo Wan1, Edmund Rolls1,2,1, Wei Cheng1, Jianfeng Feng2
1University of Warwick, Coventry, United Kingdom, 2Oxford Centre for Computational Neuroscience, Oxford, United Kingdom, 3Institute of Science and Technology for Brain Inspired Intelligence, Fudan University, Shanghai, China

M328 Incentive processing modulates activity in a ventral striatum-hippocampus network: Data from the HCP
Filip Grill1,2, Lars Nyberg2,3, Anna Rieckmann1,2
1University of Umeå, Umeå, Sweden, 2Umeå Center for Functional Brain Imaging, Umeå University, Umeå, Sweden, 3Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany

M329 Neural representation of positive and negative outcome learning via taste
Jennifer Sadler1, Grace Shearrer1, Niccolale Acosta1, Kyle Burger1
1University of North Carolina at Chapel Hill, Chapel Hill, NC, United States

M330 Neural Activation in the Reward Network is Associated with Inattentive Symptoms of ADHD
Max Owen1, James MacKillop2, Shannon McNally3, Iris Balodis4, Lawrence Sweet3
1University of North Carolina at Chapel Hill, Chapel Hill, NC, United States, 2McMaster University/Peter Boris Centre for Addiction Research, Hamilton, Ontario, 3University of Georgia, Athens, GA, United States

M331 Intranasal insulin decreases dopamine signaling in the striatum - a combined PET/MRI study
Malena Mielke1,2, Dominik Blum2, Benjamin Jaghutriz3, Christian la Fougère2, Andreas Fritsche3,1, Matthias Reimold2, Martin Heni3,1, Hubert Preissl1
1Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, 2IFB Adiposity Diseases, Leipzig University Medical Center, Leipzig, Germany, 3Clinic of Cognitive Neurology, Leipzig University Hospital Center, Leipzig, Germany, 4Mind & Brain Institute, Berlin School of Mind and Brain, Humboldt-University, Berlin, Germany, 5Department of Medical Engineering and Biotechnology, University of Applied Sciences, Jena, Germany

M332 Intranasal insulin decreases dopamine signaling in the striatum - a combined PET/MRI study
Stephanie Kullmann1, Dominik Blum2, Benjamin Jaghutriz1,2, Benjamin Bender1, Hans-Ulrich Haering3, Christian la Fougère2, Andreas Fritsche3,1, Matthias Reimold2, Martin Heni3,1, Hubert Preissl1
1Institute of Diabetes Research and Metabolic Diseases, University of Tuebingen, Tuebingen, Germany, 2Institute of Pathology, University of Tuebingen, Tuebingen, Germany, 3Department of Nuclear Medicine and Clinical Molecular Imaging, University of Tuebingen, Tuebingen, Germany, 4Department of Internal Medicine IV, University of Tuebingen, Tuebingen, Germany, 5Department of Diagnostic and Interventional Neuroradiology, University of Tuebingen, Tuebingen, Germany

To view full abstract text and ePosters, visit ww5.aievolution.com/hbm1901
M332 Wanting and liking of food and social rewards: the role of dopamine and opioids
Giorgia Silani1, Sebastian Korbi2, Claudia Massaccesi1, Sebastian Götzensdrofer1, Matthias Willeit2, Christoph Eisenegger1
1University of Vienna, Vienna, Austria, 2Medical University of Vienna, Vienna, Austria

M333 Impulsivity modulates neural reward response and motor inhibition: An awake dog fMRI study
Anna Gdbor1, Nóra Bunford2, Márta Gácsi3, Attila Andics1
1MTA-ELTE ‘Lendület’ Neuroethology of Communication Research Group, Budapest, Hungary, 2MTA-ETT ‘Lendület’ Developmental and Translational Neuroscience Research Group, Budapest, Hungary, 3Department of Ethology, Eötvös Lorand University, Budapest, Hungary

M334 Neural Computations for Aversive Pavlovian Learning in Humans
Karita Ojala1, Athina Tzavari2, 3, Antoine Lutti2, Dominik Bach2, 3
1Dept. of Psychiatry, Psychotherapy and Psychosomatics, Psychiatric Hospital, University of Zurich, Zurich, Switzerland, 2Neuroscience Centre Zurich, University of Zurich, Zurich, Switzerland, 3LREN, Department of Clinical Neurosciences, Lausanne University Hospital, Lausanne, Switzerland, 4Wellcome Centre for Neuroimaging, University College London, London, United Kingdom

M335 Reward system connectivity during self-regulation with non-drug reward imagery in cocaine users
Matthias Kirschner1, 2, Amelie Haugg1, Philipp Stampfl1, Etna Engeli1, Lea Hulka1, James Sulzer1, Erich Seifritz1, Alain Dagher1, Frank Scharnowski1, Marcus Herder1, Ronald Sladky1
1Montreal Neurological Institute, McGill University, Montreal, Quebec, Canada, 2Psychiatric Hospital, University of Zurich, Zurich, Switzerland, 3University of Texas, Austin, TX, United States, 4University of Vienna, Vienna, Austria

M336 Emotional instability trait is associated with negative correlations in ventral striatal activation
Frida Bayard1, Nathalie Wrobel1, Christoph Abe1, Eva Henje Blom1, Predrag Petrovic1
1Karolinska Institutet, Stockholm, Sweden, 2Umeå University, Umeå, Sweden

M337 Anatomical and functional signatures “at rest” of the human habenula in subclinical traits
Jesus Adrian-Ventura1, Anastasia Cherednichenko1, Lidon Marin-Marin1, Esteban Villar-Rodriguez1, Victor Costumero1, Víctor Avila1
1Department of Psychiatry, Psychotherapy and Psychosomatics, Psychiatric Hospital, University of Zurich, Zurich, Switzerland, 2Neuroscience Centre Zurich, University of Zurich, Zurich, Switzerland, 3LREN, Department of Clinical Neurosciences, Lausanne University Hospital, Lausanne, Switzerland, 4Wellcome Centre for Neuroimaging, University College London, London, United Kingdom

M338 Brain activity during the anticipation (but not delivery) of rewards is diminished in adult ADHD
Marc Bennett1, Hanni Kiss1, Rachel Knight1, Francesca Farina1, Clare Kelly1, Robert Whelan1
1IMCRP – Cognition and Brain Science Unit, University of Cambridge, Cambridge, United Kingdom, 2Trinity College Institute of Neuroscience, Trinity College Dublin, Dublin, Ireland, 3Nuffield Department of Clinical Neurosciences, Oxford, UK

M339 Impact of Chronic Pain on Neural Responses to Monetary Reward and Loss
Lauren Cardon1, Vincent Koppelmans1, Jon-Kar Zubieta1, Tiffany Love1
1Department of Radiology, Drum Tower Hospital, Medical School of Nanjing University, Nanjing, China, 2Department of Andrology, Drum Tower Hospital, Medical School of Nanjing University, Nanjing, Nanjing, China

M340 Kisspeptin enhances brain processing in response to olfactory and visual cues of attraction in men
Lysia Demetriou1, Lisa Yang1, Matthew Wolf1, Edward Mills1, David Zargaran1, Mark Sykes1, Joulia Prague1, Ali Abbard1, Eugeni Rabiner1, Alex Coommins1, Waljit Dhillo1
1Imperial College London, London, United Kingdom, 2Invicro London, London, United Kingdom

M341 Functional Disorder in Lifelong Premature Ejaculation Evaluated by Sparse Representation-Based Brain
Jiaming Lu1, Jiaxuan Jin1, Xin Zhang2, Zhao Qing1, Sichu Wu1, Qinglei Zhang3, Bin Zhu1, Ming Li1, Yutian Dai1, Bing Zhang1
1Department of Radiology, Drum Tower Hospital, Medical School of Nanjing University, Nanjing, China, 2Department of Andrology, Drum Tower Hospital, Medical School of Nanjing University, Nanjing, Nanjing, China

M342 Effects of Pair bond formation in Prairie vole brain Functional Connectivity
Ma Fernanda Lopez1, Juan Ortiz1, Francisco Camacho1, N Diaz1, Larry Young2, Raul Paredes1, Wendy Portillo1, Sarael Alcauter1
1Universidad Nacional Autonoma de Mexico, Queretaro, Qro, Mexico, 2Inst. Nacional de Perinatologia, Isidro Espinosa de los Reyes, Mexico, 3Ctr. for Oxytocin and Social Cognition, Emory Univ., Atlanta, GA, United States

M343 Central Processing of Affective Penile Touch — An fMRI Study
Gerben Ruessink1, 2, Francis McLgore1, Hakan Olausson1, Camilla De Jong1, Marcel Waldinger1, 2, Remco Renken1, 3, Jan-Bernard Marsman1, 3, Janinko Georgiadis1, 3
1Department of Biomedical Sciences of Cells and Systems, University Medical Center Groningen, Groningen, Netherlands, 2University of Groningen, Groningen, Netherlands, 3School of Natural Sciences & Psychology, Liverpool John Moores University, Liverpool, United Kingdom, 4Center for Social and Affective Neuroscience, Linköping University, Linköping, Sweden, 5Institute of Neuroscience and Physiology, University of Gothenburg, Gothenburg, Sweden, 6Department of Pharmacology and Physiology, Drexel University College of Medicine, Philadelphia, PA, United States, 7Department of Andrology, The First Affiliated Hospital, Sun Yat-sen University, Guangzhou, China

M344 Neural Correlates of Sexual Orientation in Men: Brain Activity During Mental Rotation
Monika Falkierska-Zukowska1, Dawid Droździel1, Marek Wypych1, Artur Marchewka1, Wojciech Dragoun2
1The Interdisciplinary Centre for Behavioural Genetics Research, Faculty of Psychology, University of Warsaw, Warsaw, Poland, 2Laboratory of Brain Imaging, Nencki Institute of Experimental Biology, Polish Academy of Sciences, Warsaw, Poland

M345 Subcortical Brain Shapes and Cortical Networks Identify Premature Ejaculation Individuals
Bing Zhang1, Jiaming Lu1, Jiaxuan Jin1, Huiting Wang1, Peng Han1, Yiming Mo1, Baibing Yang1, Xin Zhang1, Zhao Qing1, Lihua Yuan1, Ying Chen1, Zhishun Wang1, Yutian Dai2
1Department of Radiology, Drum Tower Hospital, Medical School of Nanjing University, Nanjing, China, 2Department of Andrology, Drum Tower Hospital, Medical School of Nanjing University, Nanjing, Nanjing, China

M346 Structural brain differences related to gender and sexual orientation
Mikhail Votinov1, 2, Katharina S. Goerlich1, Elke Smith1, Tobias Wensing2, 3, Thomas Nickl-Jockschat4, Ute Hobel5
1Department of Psychiatry, Psychotherapy and Psychosomatics, RWTH Aachen University Hospital, Aachen, Germany, 2Institute of Neuroscience and Medicine 10, Research Center Juelich, Juelich, Germany, 3University of Groningen, Groningen, Netherlands, 4Institute for Systems Neuroscience, Medical Faculty, Heinrich-Heine University Düsseldorf, Düsseldorf, Germany, 5Department of Psychiatry, Iowa Neuroscience Institute, University of Iowa, IA, United States
M349 Long-term effects of interictal epileptiform discharge on cognitive development and sociality
Yutaka Kato1, Yuichi Takei1, Satoshi Umetsu2, Hajime Tabuchi1, Masaru Mimura3, Masato Fukuda2
1Tsuji Mental Hospital, Tatebayashi, Gunma-Prefecture, Japan, 2Department of Psychiatry and Neurosciences, Gunma University Graduate School of Medicine, Maebashi, Gunma, Japan,
3Department of Psychology, Keio University, Tokyo, Japan, 4Department of Neuropsychiatry, Keio University, Tokyo, Japan

M351 A high-performance compact magnetic shield for optically pumped magnetometer-based MEG
Tetsu Hirose1, Paul Dowman2, Mina Fukai2, Noriko Sakurai2, Masato Fukuda1, Yuichi Takei1, Minami Tagawa1, Takehumi Ohki1, Noriko Sakurai2, Masato Fukuda1
1Department of Psychiatry and Neurosciences, Gunma University Graduate School of Medicine, Maebashi, Gunma-Prefecture, Japan, 2Tsuji Mental Hospital, Tatebayashi, Gunma-Prefecture, Japan,
3Department of Multi-Disciplinary Sciences, Tokyo University Graduate School of Arts and Sciences, Komaba, Meguro-ku, Tokyo

M354 Protracted beta activity in left IFG/AI and delayed response inhibition in anxiety: An MEG study
Ariel Roxburgh1, Brian Cornwell2,3
1Swinburne University, Flemington, VIC, 2Swinburne University, Melbourne, Australia

M355 Intra-Session Reliability as a Quality Metric for Pre-Surgical Mapping with Magnetoencephalography
Mary Miedema1,2, Maher Quraan2, Steven Beyea3,2, Tim Bardouille1,2
1Institute of Physics and Atmospheric Science, Dalhousie University, Halifax, NS, Canada, 2Biomedical Translational Imaging Centre, IWK Health Centre, Halifax, NS, Canada, 3Dept. of Diagnostic Radiology, Dalhousie University, Halifax, NS, Canada

M353 MEG spectral signature relates to cognitive functioning in the oldest-old population
Alessandra Griffo1, Nienke Legdeur2, Martijn van den Heuvel1, Cornelis Stam3, Pieter Visser4,5, Anjan Hillebrand2
1Dutch Connectome Lab, Department of Complex Trait Genetics, Vrije Universiteit Amsterdam, Amsterdam, Netherlands, 2Alzheimer Center Amsterdam, Department of Neurology, Vrije Universiteit Amsterdam, Amsterdam, Netherlands, 3Department of Clinical Neurophysiology and MEG Center, Vrije Universiteit Amsterdam, Amsterdam, Netherlands, 4Department of Psychiatry & Neuropsychology, School for Mental Health and Neuroscience, Maastricht University, Maastricht, Netherlands

M348 The relationship between self-monitoring and resting connectome in bipolar disorder: An MEG study
Su Shu1,2, Lang Qin1, Jia-Hong Gao2,3
1Center for MRI Research, Academy for Advanced Interdisciplinary Studies, Peking University, Beijing, China, 2McGovern Institute for Brain Research, Peking University, Beijing, China, 3School of Psychology, the University of Hong Kong, Beijing, China

M357 Music reconstruction from MEG data using deep generative neural networks
Meng-Hung Lee1, Yong-Sheng Chen2, Li-Fen Chen1
1Institute of Brain Science, National Yang-Ming University, Taipei, Taiwan, 2Department of Computer Science, National Chiao Tung University, Hsinchu, Taiwan, 3Integrated Brain Research Unit, Division of Clinical Research, Department of Medical Research, Taipei, Taiwan

M356 Dynamic organization of brain networks underpinning connectome fingerprinting: a MEG study
Ariel Roxburgh1, Brian Cornwell2
1Swinburne University, Flemington, VIC, 2Swinburne University, Melbourne, Australia

M352 Altered Functional Networks in Gliomas Patients: A Resting State Magnetoencephalographic Study
Fatemeh Shekoohi-Shoofi1, Federico Chella2, Massimo Caulo2, Vincenzo Palatino3, Riccardo Navarra4, Vittorio Pizzella5, Laura Marzetti6, Karim Jerbi7
1Department of Neuroscience, Imaging and Clinical Sciences, “G. d’Annunzio” University, Chieti, Italy, 2Institute for Advanced Biomedical Technologies (I TAB), “G. d’Annunzio” University, Chieti, Italy, 3Department of Diagnostic Imaging, University of Foggia, Ospedali Riuniti Hospital, Foggia, Italy

M355 Intra-Session Reliability as a Quality Metric for Pre-Surgical Mapping
Mary Miedema1,2, Maher Quraan2, Steven Beyea3,2, Tim Bardouille1,2
1Institute of Physics and Atmospheric Science, Dalhousie University, Halifax, NS, Canada, 2Biomedical Translational Imaging Centre, IWK Health Centre, Halifax, NS, Canada, 3Dept. of Diagnostic Radiology, Dalhousie University, Halifax, NS, Canada

M358 Neural Underpinnings of Speech Mental Imagery
Lingxi Lu1,2,3, Jingwei Sheng4, Jia-Hong Gao2,4
1PKU-IDG/McGovern Institute for Brain Research, Peking University, Beijing, China, 2Center for MRI Research, Academy for Advanced Interdisciplinary Studies, Beijing, China, 3School of Psychological and Cognitive Sciences, Peking University, Beijing, China, 4School of Physics, Peking University, Beijing, China

M359 Large-scale brain integration patterns differ in focused-attention and open-monitoring meditation
Annalisa Pascrella1, Daphne Bertrand-Dubois2, David Meinui2, Tarek Lajnef3, Vittorio Pizzella4,5, Laura Marzetti6, Karim Jerbi7
1Institute for Applied Mathematics ‘M. Picone’, National Research Council (CNR), Roma, Italy, 2Computational & Cognitive Neuroscience Lab (CoCo Lab), Université de Montréal, Montreal, QC, Canada, 3Institut de Neurosciences de la Timone (INT), Université Aix-Marseille, Marseille, France, 4Department of Neuroscience, Imaging and Clinical Sciences, “G. d’Annunzio” University, Chieti, Italy, 5Institute for Advanced Biomedical Technologies, G. d’Annunzio University Chieti, Chieti, Italy

M347 Alterations of Heartbeat Evoked Magnetic Fields (HEFs) during Disgusting Sound Listening
Tetsu Hirose1, Paul Dowman2, Mina Fukai2, Daiki Soma2, Daiki Soma2, Tatsuru Kitamura3, Kyung-Min An4, Shoryoku Hino1, Tetsuya Takahashi5, Yuko Yoshimura6, Yoshiaki Miyagishi7, Mitsuhiro Kikuchi8
1Kanazawa University, Kanazawa, Japan, 2Department of Cognitive Science, Australian Macquarie University, Sydney, Australia, 3Kanazawa University, Kanazawa, Japan, 4Kanazawa University, Kanazawa, Japan, 5Kanazawa University, Kanazawa, Japan, 6Department of Psychiatry, Ishikawa Prefectural Dokuritsu Hospital, Kanazawa, Japan, 73 Department of Neuropsychiatry, Ishikawa Prefectural Takamatsu Hospital, Kanazawa, Japan, 8Uozu Shinkei Sanatorium, Uozu City, Japan

M350 Vector Spherical Harmonic Framework for Assessing the Complexity and Dimensionality of Magnetic Data
Zachary Bednarke1, Samu Taulu2
1Department of Physics, Institute for Learning and Brain Sciences, University of Washington, Seattle, WA, United States

29
To view full abstract text and ePosters, visit ww5.aievolution.com/hbm1901
M360 Imaging the hippocampal system during a multi-item working memory task using magnetoencephalography
Lars Costers1, Jeroen Van Schependonck2,3, Jorine Laton1, Johan Bajot4, Xavier De Tiège5, Serge Goldman1, Miguel D’Hoooge1, Marie D’Hoooge6, Guy Nagels7
1Vrije Universiteit Brussel, Brussels, Belgium, 2UZ Brussel, Brussels, Belgium, 3University of Oxford, Oxford, United Kingdom, 4Université Libre de Bruxelles, Brussels, Belgium, 5National MS Center Melsbroek, Melsbroek, Belgium

M361 A new tool for paediatric functional brain imaging
Ryan Hill1, Niall Holmes2, Caroline Hartley3, James Leggett4, Gillian Roberts1, Tim Tierney5, Vishal Shah6, Mark Woolrich7, Gareth Barnes8, Richard Bowtell9, Rebecca Slater8, Matthew Brookess2
1University of Nottingham, Nottingham, Nottinghamshire, 2University of Nottingham, Nottingham, United Kingdom, 3University of Oxford, Oxford, United Kingdom, 4Wellcome Centre for Human Neuroimaging, London, United Kingdom, 5QuSpin Inc., Louisville, CO, United States, 6University of Nottingham, Nottingham

M362 Unraveling working memory task with long-range phase synchronization and local synchronization
Jaakko Syrjälä1, Alessio Basti1, Roberto Guidotti1, Laura Marzetti2, Vittorio Pizzella2
1Department of Neuroscience, Imaging and Clinical Sciences, “Gabriele D’Annunzio” University, Chieti, Italy, 2Institute for Advanced Biomedical Technologies, “Gabriele D’Annunzio” University, Chieti, Italy

M363 Brain networks become more connected according to the progression of amyotrophic lateral sclerosis
Pierpaolo Sorrentino1, Rosaria Rucco1, Francesca Jacini1, Francesca Troisi2, Anna Lardone2, Fabio Basele2, Cinzia Femia2, Gabriella Santangelo1, Maria Rosaria Monsurro3, Gioacchino Tedeschi3, Giuseppe Sorrentino1,2
1University of Naples Parthenope, Naples, Campania, 2university of Campana Vanvitelli, Naples, Campania

M364 Associations between speech envelope and auditory cortical response during conversation
Jon Howells1, Brigitte Stevens1, Dustin Trust1
1University of New Mexico, Albuquerque, NM, United States

M365 Magnetoencephalography During A Cognitively Demanding Saccadic Eye Movement Task In Anorexia Nervosa
Andrea Philippou1, Larry Abe2, Susan Rosselli3, Caroline Gurvich1, David Castle1, Will Woods4
1Swinburne University of Technology, Melbourne, VIC, 2The University of Melbourne, Melbourne, Australia, 3Swinburne University of Technology, Melbourne, Australia, 4Monash Alfred Psychiatry Research Centre, Melbourne, Australia

M366 Neuromotor control of speech movements: Studies with MEG-compatible articulography
Blake Johnson1, David Meng2, Pascal van Lieshout3, Douglas Cheyne4
1Macquarie University, Sydney, New South Wales, 2University of Toronto, Toronto, Ontario, Canada, 3Hospital for Sick Children Research Institute, Toronto, Ontario, Canada

M367 Imaging human cortical responses to intraneural microstimulation using MEG
George O'Neill1, Roger Watkins2, Rochelle Ackerley1, Eleanor Barratt3, Sengupta Ayari4, Michael Asghari5, Rosa Sanchez Panchuelo1, Matthew Brooke6, Paul Glover7, Wessberg Johan8, Susan Francis1, University of Nottingham, Nottingham, United Kingdom, 1University of Gothenburg, Gothenburg, Sweden, 2Institute for Tourisme, Marseille, France, 3University of Cambridge, Cambridge, United Kingdom

M368 Changes in the cortical motor response in recent-onset and established schizophrenia
Lauren Gascoyne1, Matthew Brooke2, Mohammad Katshu3, Peter Liddle4, Peter Morris5
1University of Nottingham, Nottingham

M369 Reliability of MEG neural power spectra and synchrony across time and scanner types
Benjamin Dunkley1, Zahra Emami2, Tim Bardouille3
1The Hospital for Sick Children, Toronto, ON, 2Hospital for Sick Children, Toronto, Ontario, 3Dalhousie University, Halifax, Nova Scotia, Canada

M370 Multiset canonical correlation analysis of MEG reveals stimulus-modality independent language areas
Sophie Arang1, André Morquand2, Annika Hulten3, Peter Hagoort1, Jan Mathijs Schoffelen4
1Donders Institute for Brain, Cognition and Behaviour, Nijmegen, Gelderland, 2Donders Institute, Radboud University, Nijmegen, Netherlands, 3Aalto University, Espoo, Finland, 4Max Planck Institute for Psycholinguistics, Woudastraat 1, 6525 XD Nijmegen, the Netherlands, 5Donders Institute for Brain, Cognition and Behaviour, Nijmegen, Netherlands

M371 Perception and Representation of the Dynamic Elements of Expressive Facial Motion in MEG
Nicola van Rijswijck1, Oliver Garrod2, Meng Lu3, Katarzyna Jaworska1, Rachael Jack4, Philippe Schyns5
1Institute of Neuroscience and Psychology, University of Glasgow, Glasgow, United Kingdom

M372 Probing cortical excitability using rapid frequency tagging
Alexander Zhigalov1, Jim Herring2, Jerome Herpers3, Til Ole Bergman4, Ole Jensen5
1School of Psychology, University of Birmingham, Birmingham, United Kingdom, 2Donders Institute, Radboud University Nijmegen, Nijmegen, Netherlands, 3Laboratory for Neurophysiology and Psychophysiology, KU Leuven, Leuven, Belgium, 4Department of Neurology and Stroke, University of Tübingen, Tübingen, Germany

M373 The effects of age on brain network dynamics in MEG resting-state data
Roni Tibor1, Darren Price2, David Nestor3, Richard Henson4
1University of Cambridge, Cambridge, United Kingdom

M374 Suicidal thoughts are related to theta band connectivity: An MEG study
Allison Nugent1, Elizabeth Bollard2, Jessica Gilbert1, Matthew Brookess3, Carlos Zarate4
1NIH, Bethesda, MD, United States, 2University of Nottingham, Nottingham, UK

M375 Methylphenidate Normalizes Patterns ofPremotor Beta Desynchronization in ADHD Children
Cecilio Mazzetti1, Niels ter Huurne1, Jan Buiter2, Ole Jensen3
1Donders Institute for Brain, Cognition and Behaviour, Nijmegen, Gelderland, 2Donders Institute for Brain Cognition and Behavior, Donders Centre for Cognitive Neuroimaging, Nijmegen, Netherlands, 3School of Psychology, University of Birmingham, Birmingham, United Kingdom

M376 Application of Hidden Markov Models to Detect Bursts of Beta Activity in Resting State MEG Data
Zelekha Abid1, Matthew Brookess2, Mark Woolrich1, Andrew Quinn2
1The University of Nottingham, Nottingham, United Kingdom, 2University of Nottingham, Nottingham, 3University of Oxford, Oxford, United Kingdom, 4Oxford Centre for Human Brain Activity, Oxford, United Kingdom

M377 Measuring MEG Functional Connectivity using Coincident Bursts in Transient Beta Oscillations
Zelekha Abid1, Matthew Brookess2
1The University of Nottingham, Nottingham, United Kingdom, 2University of Nottingham, Nottingham, United Kingdom
M393 NeuroPycon: A Python-based package for advanced MEG, EEG and fMRI connectivity analyses
David Meunier1, Annalisa Pascarella2, Dmitrii Altukhov3, Mainak Jas4, Tarek Lojnej5, Etienne Commisson6, Karim Jerbi6
1Aix Marseille Univ, CNRS, I3N, Inst Neurosci Timone, Marseille, France, 2Institute for Applied Mathematics, M’Picone, National Research Council (CNR), ROMA, Italy, 3Moscow State Pedagogical University, Moscow, Russian Federation, 4Massachusetts General Hospital, Charlestown, MA, United States, 5Computational & Cognitive Neuroscience Lab (CoCo Lab), Université de Montréal, Montréal, QC, Canada

M394 Association between Schizotypy and Gamma Band Oscillations measured with Magnetoencephalography
Angelantonio Tavella1, Tiziana Quarto1, Leonardo Fazio1, Giuseppe Biasi1,2, Alessandro Bertolino1,2, Giulio Pergola1
1Department of Basic Medical Sciences, Neuroscience and Sense Organs, University of Bari Aldo Moro, Bari, Italy, 2Institute of Psychiatry, Bari University Hospital, Bari, Italy, 3Lieber Institute for Brain Development, Johns Hopkins Medical Campus, Baltimore, MD, United States

M395 Detecting high frequency brain oscillations in MEG with Oversampled Temporal Projection
M396 Effects of cognitive load on cortical oscillations during a pattern learning task using MEG
Silvia Isabella1, Douglas Cheyne1,2
1University of Toronto, Toronto, Ontario, Canada, 2Hospital for Sick Children, Toronto, Ontario, Canada, 3Hospital for Sick Children, Toronto, Ontario, Canada, 4University of Toronto, Toronto, Ontario, Canada

M397 Gut-brain interaction: probiotic Bifidobacterium longum 1714 affects MEG resting-state connectivity
Davide Sometti1, Christoph Braun1, Huiying Wang1, Paul Enck1
1University of Tübingen, Tübingen, Germany

M398 Brain networks controlling the perception of the emotional valance
Kajal Dijit Singh1,2,3, Chiara Fioravanti1, Adham Elshahabi1, Sergio Ruiz1, Ranganatha Sitaram1, Christoph Braun1
1Department of Neurology, Goethe University Frankfurt, Germany, Frankfurt am Main, Hessen, 2MEG Center, University of Tübingen, Tübingen, Germany, 3GTC-University of Tübingen, Tuebingen, Germany, 4Pontifica Universidad Catolica de Chile, Santiago, Chile, 57) Institute for Biological and Medical Engineering, Schools of Engineering, Medicine and Biology, Santiago, Chile, 6University of Tübingen, Tübingen, Germany

M399 Convolutional neural network for epileptic seizure detection using magnetoencephalography signals
Shimeng Liu1, Till Nicke1, Midori Nakajima1, Hiroshi Otsubo1, Ash Parameswaran1, Teresa Cheung1
1Simon Fraser University, Burnaby, Canada, 2Hospital for Sick Children, Toronto, Ontario, Canada, 3Simon Fraser University, Vancouver, BC, Canada

M400 Using multiple head positions to increase MEG sensor density
Matthew Courtemanche1, Teresa Cheung1
1Simon Fraser University, Coquitlam, BC, Canada, 2Simon Fraser University, Vancouver, BC, Canada

M401 Functional Magnetic Resonance Spectroscopy of response inhibition at 7T
Chris Vriend1, Niels de Jonge1, Jannie Wijnen1, Wietse van der Zwaag2, Petra Pouwels1, Liesbeth Reneman1, Odelie van den Heuvel1, Anouk Schraant1, Amsterdam UMC, Amsterdam, Netherlands, 2VUMc, 3UMC Utrecht, Utrecht, Netherlands, 4Spinoza Center, Amsterdam, Netherlands, 5AMC

M402 Dynamic MRS measurements of GABA, glutathione and ethanol
Muhammad Saeed1, Anna Wang1, Mark Mikkelson1, Georg Oeltzschner1, Jeff Boissoneault2, Eric Porges2, Richard Edden1
1Department of Radiology, The Johns Hopkins University School of Medicine, Baltimore, MD, United States, 2Department of Clinical and Health Psychology, University of Florida, Gainesville, FL, United States

M403 A multi-regional neuroinflammatory factor that characterises HIV-infected children at 11 years
Amy Graham1, Martha Holmes2, Francesca Little1, Els Dobbels1, Mark Cotton1, Barbara Laughton1, Andre van der Kouwe2, Erneta Meintjes1, Frances Robertson1
1University of Cape Town, Cape Town, South Africa, 2Stellenbosch University, Cape Town, South Africa, 3Massachusetts General Hospital, Boston, MA, United States, 4Harvard Medical School, Boston, MA, United States, 5Cape Universities Body Imaging Center, Cape Town, South Africa

M404 Elevated cortical glutamate levels after TBS in TRD: A surface-based MRS analysis approach
Benjamin Spurny1, Philipp Moser1, Rene Seiger1, Eva Heckovar1, Mathis Godbersen1, Paul Michenthaler1, Patricia Handschu1, Jakob Unterholzer1, Murray Reed1, Georg Kranz1, Pia Baldinger-Melich1, Siegfried Kasper1, Wolfgang Bogner1, Rupert Lanzenberger1
1Department of Psychiatry and Psychotherapy, Medical University of Vienna, Vienna, Austria, 2Department of Biomedical Imaging, Medical University Vienna, Vienna, Austria, 3Department of Rehabilitation Sciences, The Hong Kong Polytechnic University, Hung Hom, Hong Kong

M405 Longitudinal analysis of brain metabolite levels in perinatally HIV infected children from ages 5-11
Noelle van Billigen1, Frances Robertson2, Martha Holmes3, Mark Cotton4, Barbara Laughton1, Andre van der Kouwe2, Erneta Meintjes5, Francesca Little1, 1University of Cape Town, Cape Town, South Africa, 2Department of Human Biology, MRC/UCT Medical Imaging Research Unit, University of Cape Town, Cape Town, South Africa, 3Dept. of Paediatrics and Child Health and Tygerberg Children’s Hospital, Stellenbosch University, Cape Town, South Africa, 4Department of Radiology, Massachusetts General Hospital, Boston, MA, United States of America, 5Department of Human Biology, MRC/UCT Medical Imaging Research Unit, University of Cape Town, Cape Town, Western Cape

M406 Association Between Functional Connectivity-Guided Cortical GABA and Clinical Pain in Fibromyalgia
James Bishop1, Matthew Sacchet1, Keith Sudheimer1, Merve Guler1, Atif Faerman2, Katy Simpson3, Danielle DeSouza1, David Spiegel1, Nolan Williams4
1Stanford University, Palo Alto, CA, United States, 2Palo Alto University, Palo Alto, CA, United States

M407* 7T Combined fMRI-IMRS, multiscale investigation of the motor cortex during active and resting states
Jacob Levenstein1, William Clarke2, Betina Ip3, Jon Campbell2, Uzay Emir1, Peter Bandettinni1, Charlotte Stagg2
1University of Oxford / National Institutes of Health, Oxford, United Kingdom, 2University of Oxford, Oxford, United Kingdom, 3Purdue University School of Health Sciences, Indianapolis, IN, United States, 4National Institute of Mental Health, Bethesda, MD, United States, 5Oxford University, Oxford, United Kingdom
M408 Identification of Brain Metabolites Specific to Major Depressive Disorder using 7T 1H-MRS
Youngku Song1, Sungho Tak1, E-Nae Cheong1, Chaejoon Cheong3, Gyunggoo Cho2
1Korea Basic Science Institute, Cheongju, Korea, Republic of; 2Korea Basic Science Institute, Daejeon, Korea, Republic of

M409 Test-retest reliability of GABA and Glx with JPRESS, PRESS, and MEGA-PRESS MRS sequences
Eric Pittman1, Alyssa Salaciak1, Marie-Lise Bélard1, Stephanie Tullio1, Rainaam Patel1, Christine Tardi2, M. Natasha Raja1, Gabriel A. Devenyi1, Jamie Neary1, M. Malar Chakravarty1
1Douglas Mental Health University Institute, McGill University, Montreal, Quebec, Canada, 2Montreal Neurological Institute and Hospital, McGill University, Montreal, Quebec, Canada

M410 Comparison of the Magnetic Resonance Spectroscopy Thermometry measurements in 7T and 3T scanners
Marcin Sirczuk1, Bartosz Kossowski2, Michał Fiedorowicz1, Nikodem Hryniewicz1, Ewa Piątkowska-Janka1, Piotr Bogorodzki1,2,3
1Polish Academy of Sciences, Nalecz Institute of Biocybernatics and Biomedical Engineering, Warsaw, Poland, 2The Institute of Radioelectronics and Multimedia Technology, WEITI, PW, Warsaw, Poland, 3Polish Academy of Sciences, Mossakowski Medical Research Centre, Warsaw, Poland

M411 Applying the 1HMRS method to evaluate levels of GABA and Glx of patients with tinnitus
Joanna Wójcik1, Katarzyna Ciesło1, Tomasz Wołak1, Agnieszka Pluta1, Piotr Skarżyński1
1Institute of Physiology and Pathology of Hearing, Warsaw, Poland, 2Amir Amedi’s Lab, Hebrew University, Jerusalem, Israel, 3World Health Centre, Warsaw, Poland, 4Institute of Physiology and Pathology of Hearing, Institute of Sensory Organs, Medical University, Warsaw, Poland

M412 Test-retest reliability of GABA and Glx with JPRESS, PRESS, and MEGA-PRESS MRS sequences at 3T
Arwa Baeshen1, Patrik Wyss1,2, Anke Henning1,2, Ruth O’Gorman3, Spyros Kollias4, Lars Michels5
1University of Zurich Hospital, Zurich, Switzerland, 2Institute for Biomedical Engineering, University and ETH Zurich, Zurich, Switzerland, 3Max Planck Institute for Biological Cybernetics, Tubingen, Germany, 4Department of Radiology, Swiss Paraplegic Centre, Nottwil, Switzerland, 5MR Centre, Children’s University Hospital, Zurich, Switzerland, 6University Hospital of Zurich, Zurich, Switzerland, 7Department of Neuroradiology, University Hospital Zurich, Switzerland

M413 Simultaneous spectral editing of seven low-concentration brain metabolites at 3T with HERCULES
Georg Oeltschne1, Muhammad Saleh1, Daniel Rimbaut1, Mark Mikkelsen2, Nicolas Puts1, Richard Edden1,2
1Department of Radiology and Radiological Science, The Johns Hopkins University School of Medicine, Baltimore, MD, United States, 2F. M. Kirby Research Center for Functional Brain Imaging, Kennedy Krieger Institute, Baltimore, MD, United States, 3Division of Biomedical Engineering, University of Cape Town, Cape Town, South Africa

M414 Mechanisms underlying age-related improvements in planning ability through adolescence
Maria Perica1, Finnegan Calabro2, Will Foran1, Hoby Hetherington1, Victor Yushmanov1, Beatriz Luna1
1University of Pittsburgh, Pittsburgh, PA, United States, 2University of Pittsburgh, Pittsburgh, PA, United States, 3University of Pittsburgh MR Research Center, Pittsburgh, PA, United States

M415 Distinct brain signature of immature loss sensitivity and reward-related decision making in children
Madeleine Snyder1, Weidong Cao1, Katherin Duberg1, Aarthi Padmanabhan1, Travis Bradley2, Olivia Altamirano2, Yamika Alinsa3, Victor Carrion1, Vinod Menon3
1Stanford Medicine, Palo Alto, CA, United States, 2Stanford University, Palo Alto, CA, United States, 3Stanford University, Palo Alto, CA, United States

M416 Predicting response to motor therapy in chronic stroke patients using Machine Learning
Ceren Toplu1, Dylan Edwards2, Aaron Boes3, Douglas Lobar1, K. Zoë Tsagari1, Joshua Silverstein5, Heather Lane2, Mert Sabunci1, Charles Liu4, Amy Kuceyeski4
1Department of Radiology, Well Cornell Medical College, New York City NY, United States, 2Moss Rehabilitation Research Institute, Elkins Park, PA, United States, 3Iowa Neuroimaging and Noninvasive Brain Stimulation Laboratory, Departments of Pediatrics, Neurology, Iowa City, IA, United States, 4Department of Neurology, Well Cornell Medical College, New York City, NY, United States, 5Burke Neurological Institute, White Plains, NY, United States, 6School of Electrical and Computer Engineering, and Meing School of Biomedical Engineering, Cornell, Ithaca, NY, United States, 7University of Southern California, Los Angeles, CA, and Rancho Los Amigos National Rehabilitation Center, Downey, CA, United States, 8Department of Radiology and Brain and Mind Research Institute, Well Cornell Medicine, New York City, NY, United States

M417 Multi-modality, Multi-study automated image-based classification & prediction of Alzheimer’s disease
Alle Meije Wink1, Betty Tjims1, Viktor Wotschel1, Silvia Inga1, Erasmo Sanz-Arigito2, Sven Hailer2, Pablo Martinez-Lage Alvarez1, Wiesje van der Flier1, Frederik Barkhof1, Alzheimer’s Disease Neuroimaging Initiative2
1Amsterdam University Medical Centre, Amsterdam, Noord-Holland, 2University of Bordeaux, Bordeaux, France, 3University of Geneva, Geneva, Switzerland, 4CITA Alzheimer, San Sebastian, Spain, 5University of Southern California, Los Angeles, CA, United States

M418 Identifying subtypes in mood and anxiety disorders with task-based connectivity and machine learning
Christina Young1, Sahar Harati1, Tali Ball1, Andrea Goldstein-Piekarski1,2, Leanne Williams1,2
1Univ Rennes, Inria, CNRS, VISAGES ERL U-1228, F-35000, Rennes, France, 2Université Rennes, Inria, CNRS, IRISA UMR 6074, PANAMA team, F-35000, Rennes, France

M419 High-order Laplacian Regularized Low-rank Representation for Brain Disease Diagnosis
Aimei Dong1,2, Mingliang Wang2,3, Mingxia Liu*2
1University of Science and Technology, Jinan, China, 2University of North Carolina at Chapel Hill, Chapel hill, NC, United States, 3National University of Aeronautics and Astronautics, Nanjing, China

M420 Can we learn from coupling EEG-fMRI to enhance neuro-feedback in EEG only?
Claire Gury1, Pierre Maurel1, Lorraine Perronnet1, Remi Grison2, Christian Banillot3
1Univ Rennes, Inria, CNRS, INSEEM, IRISA UMR 6074, VISAGES ERL U-1228, F-35000, Rennes, France, 2Univ Rennes, Inria, CNRS, IRISA UMR 6074, PANAMA team, F-35000, Rennes, France
M421 Emotion analysis based on multi-class common spatial features of scalp EEG
Peiyang Li1, Haiyong Zhang2, Tingyi Tan1, Cunba Li1, Xuyong Zhu1, Wei Wang1, Zhangyong Li1, Peng Xu1, Yin Tian1
1School of Bioinformatics, Chongqing University of Posts and Telecommunications, Chongqing, China, 2Center for information in medicine, University of Electronic Science and Technology of China, Chengdu, China, 3School of Bioinformatics, Chongqing University of Posts and Telecommunications, Chongqing, Chongqing, China

M422 Intuitive visualization for convolutional neural networks detecting brain diseases in MRI scans
Eman Marzban1,2, Stefan Teipel3, Martin Dyska4
1Cairo University, Giza, Egypt, 2German Center for Neurodegenerative Diseases (DZNE), Rostock, Germany, 3University Medicine Rostock, Rostock, Germany

M423 Estimating brain age using errors-in-variables
Zeboir Ary1, Verena Heise1, Stephen Smith1, Clare Mackay1, Mark Jenkinson1
1FMRIB, Welcome Centre for Integrative Neuroimaging, University of Oxford, Oxford, United Kingdom, 2Nuffield Department of Population Health, University of Oxford, Oxford, United Kingdom, 3Department of Psychiatry, University of Oxford, Oxford, United Kingdom

M424 Image and text understanding of human brain as measured by fMRI using deep neural network
Hyun-Chul Kim1, Ju-Hyeon Lee1, Jinsu Kim1, Sungjo Jo1, Jong-Hwan Lee1
1Korea University, Seoul, Korea, Republic of

M425 Dynamic Functional Connectivity Fingerprint from Deep Neural Network for Individual Identification
Ju-Hyeon Lee1, Hyun-Chul Kim1, Jong-Hwan Lee1
1Korea University, Seoul, Korea, Republic of

M426 DNN With Greedy Layer-Wise Parameter-Free Weight Sparsity Control for fMRI Data Classification
Niv Lustig1, Jong-Hwan Lee1
1Korea University, Seoul, Korea, Republic of

M427 Robust predictions of individual reading ability from connectivity across distinct cognitive states
Rongtoo Jiang1,2, Nianming Zuo1,3, Peiyang Li1, Shu Xiang2,1, Yingjun Zhao1, Tianzi Jiang1,2,4, Jing Niv Lustig1,2, Jong-Hwan Lee1
1Korea University, Seoul, Korea, Republic of, 2University of Auckland, Auckland, New Zealand, 3University of Jena, Jena, Germany

M428 3D convolutional neural network extracts shift/scale-invariant features to classify fMRI volumes
Hanh Vu1, Hyun-Chul Kim1, Jong-Hwan Lee1
1Korea University, Seoul, Korea, Republic of

M429 Discriminating neurofibromatosis and healthy children with multimodal MRI and machine learning
Federico Nemni1, Fabien Cignetti2, Christine Assaïante3, Stephanie Maziera1, Frederique Audic1, Patrice Péran1, Yves Chaix1
1INSERM-UMR1214, Toulouse, France, 2Univ. Grenoble Alpes, Grenoble, France, 3Aix Marseille Univ, Marseille, France, 4CHU Timone-Enfants, Marseille, France, 5CHU Toulouse, Toulouse, France

M430 A whole-brain multimodal discrimination of Parkinson's Disease, Multiple System Atrophy and Controls
Federico Nemni1, Anne Pavy-Le Traon2, Phillips Owen3, Monique Gollstczy4, Wassilios Meissner4, Olivier Rascol5, Patrice Péran1
1INSERM-UMR1214, Toulouse, France, 2Institut des Maladies Métaboliques et Cardiovasculaires, Toulouse, France, 3CHU Toulouse, Toulouse, France, 4New Zealand Brain Research Institute, Christchurch, New Zealand

M431 Trans-diagnostic/cross-stage neuroimaging markers for risk of schizophrenia and bipolar disorder
Hugo Schnack1, Julia Binnewies1, Nikita Setamorn1, Neeltje van Haren2, Rene Kahn3, Marion Hillegers3
1FMC Utrecht, Utrecht, Netherlands, 2Department of Psychiatry, Brain Center Rudolf Magnus, University Medical Center Utrecht, Utrecht, Netherlands, 3Erasmus MC, Rotterdam, Netherlands

M432 Can (unsupervised) feature extraction classify Alzheimer patients better than whole-brain analysis?
Tom Wilderjans1, Jeffrey Durieux1, Marisa Koin1, Frank de Vos1, Tijn Schouten1, Reinhold Schmidt2,3, Mark de Rooij1, Serge Rombouts1
1Methodology & Statistics Unit, Institute of Psychology, Leiden University, Leiden, Netherlands, 2Clinical Division of Neurogeriatrics, Department of Neurology, Medical University of Graz, Graz, Austria

M433 Modeling and Exploring Brain Development with Discriminative Machine Learning
Mingli Zhang1, Yuhong Guo2, Christian Desrosiers3, Noor Al-Sharif1, Jean-Baptiste Poline1, Alan Evans1
1MRI, McGill University, Montreal, Quebec, Canada, 2Carleton University, Ottawa, Ontario, Canada, 3Ecole de Technologie Superieure, Montreal, Quebec, Canada

M434 Early personalized treatment prediction model derived from subgroups in depression
Xinyi Wang1,2, Yurong Sun1,2, Huan Wong1,2, Rui Yan1, Shui Tian1,2, Hao Tang1, Zhijian Yao1,2, Qing Lu1
1School of Biomedical Sciences & Medical Engineering, Southeast University, Nanjing, China, 2Child Development and Learning Science, Key Laboratory of Ministry of Education, Nanjing, China, 3Department of Psychiatry, Affiliated Nanjing Brain Hospital, Nanjing Medical University, Nanjing, China, 4Nanjing Brain Hospital, Medical School of Nanjing University, Nanjing, China

M435 Are Machine Learning Methods Generalizable in Children and Adolescents?
André Zugman1, Pedro Pan2, Rodrigo Bressan2, Marcelo Hoexte2, Giovanni Salum4, Andrea Jackowski5
1Universidade Federal de Sao Paulo, Sao Paulo, Brazil, 2Universidade Federal de Sao Paulo, Sao Paulo, Brazil, 3Universidade Federal de Sao Paulo, Sao Paulo, Brazil, 4Department of Psychiatry, Federal University of Rio Grande do Sul, Porto Alegre, Brazil

M436 Multi-ROI 3D-CNNs: a Generalized Discriminator of Motor Imagery from a Functional Brain Image
Tomofumi Nakano1, Shohei Kato1, Epifanio Bagarinao2, Akihiro Yoshida3, Mika Ueno4, Toshiharu Nakai5
1Nagoya Institute of Technology, Nagoya, Japan, 2Nagoya University, Nagoya, Japan, 3National Center for Geriatrics and Gerontology, Ohbi, Japan

M437 Development of sex differences in brain structure characterized using machine learning
Florian Kurth1, Christian Gaser2, Eileen Luders1
1University of Auckland, Auckland, New Zealand, 2University of Jena, Jena, Germany
M438 Quantitative radiomic features in multisite AD: classification, longitude progress, biological basis
Kun Zhao1,2, Yanhui Ding1, Ying Han3, Yong Fan3, Tong Han3, Dan Jin3,3, Bing Liu1,2,3, Jie Lu3, Chengyuan Song4, Pan Wang5,6, Dawei Wang5, Qin Wang3, Kaibin Xu4, Hongwei Yang4, Hongxiang Yao4, Yujian Zheng4, Chunsui Yu2, Bo Zhou4, Xinping Zhou5, Yuying Zhou6, Tianzhi Jiang5,6, Xi Zhang5, Yong Liu1,2,6
1School of Information Science and Engineering, Shandong Normal University, Jinan, China, 2Brainetome Center & National, Institute of Automation, Chinese Academy of Sciences, Beijing, China, 3Department of Radiology, Xuanwu Hospital of Capital Medical University, Beijing, China, 4Department of Radiology, Tianjin Huanyu Hospital, Tianjin, China, 5School of Artificial Intelligence, University of Chinese Academy of Sciences, Beijing, China, 6Center for Excellence in Brain Science and Intelligence Technology, Institute of Automation, Chinese Academy of Sciences, Beijing, China, 7Department of Radiology, Xuanwu Hospital of Capital Medical University, Beijing, China, 8Department of Neurology, Qilu Hospital of Shandong University, Jinan, China, 9Department of Neurology, Tianjin Huanyu Hospital, Tianjin, China, 10Institute of Geriatrics and Gerontology, Chinese PLA General Hospital, Beijing, China, 11Department of Radiology, Qilu Hospital, Jinan, China, 12Department of Radiology, Chinese PLA General Hospital, Beijing, China, 13Department of Radiology, Tianjin Medical University General Hospital, Tianjin, China

M440 Interpreting machine learning models in neuroimaging: a unified framework
PLA General Hospital, Beijing, China, 11Department of Radiology, Qilu Hospital, Jinan, China, 12Department of Radiology, Chinese PLA General Hospital, Beijing, China, 11Department of Radiology, Qilu Hospital, Jinan, China, 12Department of Radiology, Chinese PLA General Hospital, Beijing, China, 11Department of Radiology, Tianjin Medical University General Hospital, Tianjin, China

M441 Predicting Tumour Grade and Survival of Brain Tumour Patients Using DTI Texture Analysis in SVM
Golestan Karami1, Marco Giuseppe Orlando2, Massimo Caulo3, Cosimo Del Gratta4
1ECE, CIRC, SINAPSE & MNP, National University of Singapore, Singapore, Singapore, 2Nanyang Technological University, Singapore, Singapore, 3National University of Singapore, Singapore, Singapore, 4Psychology, Singapore, Singapore, 5Department of Electrical and Computer Engineering, ASTAR-NUS Clinical Imaging Research Centre, Singapore, Singapore

M442 Classification of Multiple Sclerosis patients using a histogram-based K-Nearest Neighbors algorithm
Sara Rebar2, Daniel Delahaye2, Stéphane Puechmorel2, Pierre Maréchal2, Florence Nico2, Isabelle Berry1
1INSERM Toulouse Neuroimaging Center, Toulouse, France, 2Ecole Nationale de l’Aviation Civile, Toulouse, France, 3Institut de Mathématiques de Toulouse, Toulouse, France, 4Centre Hospitalier Universitaire de Toulouse, Toulouse, France

M443 Regional brain connectivity patterns distinguish males from females
Susanne Weiß1, Kustuhb Patil2, Felix Hoffstaedter3, Simon Eckhoff4
1Universitätsklinikum Düsseldorf, Institute of Systems Neuroscience, Düsseldorf, Germany, 2Research Centre Jülich, Jülich, Germany, 3FZ Jülich, Jülich, Germany, 4Forschungszentrum Jülich, Jülich, Germany

M444 Graph Fourier Transform of temporal signals based on structural connectomes can boost classification
Abdelbasset Brahimi1, Nicolas Farrugia2
1IMT Atlantique, Brest, France

M445 Classification and Analysis of a Magnetoencephalography Dataset using Convolutional Neural Networks
Jon Garry1, Cam-CAN2, Tim Bardouille3
1Dalhousie University, Halifax, Nova Scotia, 2University of Cambridge, Cambridge, United Kingdom, 3National University of Singapore, Singapore, Singapore

M446 From a deep learning model to the brain: Inferring morphological markers and their relation to aging
Gidon Levakov1, Gideon Rosenthal1, Tommy Riklin Raviv2, Ilan Shelef3, Gaia Avidan1
1Ben-Gurion University of the Negev, Beer-Sheva, Israel

M447 A model-based approach to estimating phase response curves of TMS-modulated EEG oscillations
Takayuki Onozono1, Yuka Okazaki1, Keichi Kitajo1,2,3
1RIKEN, Wako, Saitama, Japan, 2National Institute for Physiological Sciences, Okazaki, Aichi, Japan, 3The Graduate University for Advanced Studies (SOKENDAI), Okazaki, Aichi, Japan

M448 Investigating Task Effects on Brain Activity During Stimulus Presentation in MEG
MARIYA TONEVA1, OTILA STRETCU1, BARNABAS POCCSO1, TOM MITCHELL1
1Carnegie Mellon University, Pittsburgh, PA, United States

M449 Longitudinal prediction of cognitive decline using multimodal MRI
Tijn Schaou1,2, Frank van de Ven3,4, Sanneke van Roooden3, Mark Bout4,5, Rogier Feis1,2, Jessica Foster-Dingley1, Justine Moonen1, Roos van der Mast1, Mark de Rooij1, Jeroen van der Grond1, Sergei Rombouts1
1Leiden University, Leiden, Netherlands, 2LUMC, Leiden, Netherlands

M450 Multi-modal Data Integration for Early AD Detection and Progression
Hadi Hosseini1
1University of Michigan, Ann Arbor, MI, United States

M451 Using Machine Learning to Predict Age and Dementia from Neural Frequency and Complexity Measures
Aleksa Ikuka1, Tristan Bekinschtein1, Richard Henson1, Daniel Bo2
1University of Cambridge, Cambridge, United Kingdom, 2University Of Cambridge, Cambridge, United Kingdom

M452 Deep Learning for Accurate Brain Age Prediction from 14503 UK Biobank T1 Images
Han Peng1,2, Andreas Vedaldi3, Stephen Smith3
1FMRIB, Wellcome Centre for Integrative Neuroimaging, University of Oxford, Oxford, United Kingdom, 2Visual Geometry Group, Department of Engineering, University of Oxford, Oxford, United Kingdom

M453 Resting-state and task connectome predictive modeling in subjects with mild cognitive impairment
Benjamin Hamstead1,2, Julia Luing1, Allison Moll1, Anjkat Bhaukum1, Scott Peter1
1University of Michigan, Ann Arbor, MI, United States, 2VA Ann Arbor Healthcare System, Ann Arbor, MI, United States
M473 Brain Network Differences via Sparse Connectivity Analysis
Alessandro Crimi1, Fabio Sambataro2, Vittorio Munino3, Diego Sona4
1University Hospital of Zurich, Zurich, Switzerland, 2University of Udine, Udine, Italy, 3Istituto Italiano di Tecnologia, Genoa, Italy, 4Istituto Italiano di Tecnologia, Genova, Italy

M474 Systematic Overestimation of Accuracies in Predictive Structural Magnetic Imaging Studies of MDD
Claas Kaehler1, Micah Cearns2, Nils Opel1, Scott Clark1, David Mehler1, Daniel Emden1, Nils Winter1, Ramona Leenings1, Simon B. Eickhoff2, Volker Arolt2, Bernhard Baune3, Xiaoyi Jiang4, Udo Dannlowski5, Tim Hahn6
1The University of Munster, Munster, Germany, 2The University of Adelaide, Adelaide, Australia, 3Cardiff University, Cardiff, United Kingdom, 4Forschungszentrum Jülich, Jülich, Germany, 5University of Muenster, Muenster, Germany, 6The University of Melbourne, Melbourne, Australia, 7University of Munster, Munster, Germany

M475 Deep Chronnectome Learning Via Full Bidirectional Long Short-Term Memory for Schizophrenia Diagnosis
Weizheng Yan7, Vince Calhoun7, Tianzi Jiang8,9, Jing Su1,2
1Brainnetome Center, Institute of Automation, Chinese Academy of Sciences, Beijing, China, 2University of Chinese Academy of Sciences, Beijing, China, 3The Mind Research Network University of New Mexico, Albuquerque, NM, United States

M476 Brain Age, A New Biomarker
Feng Song1, Yaojing Chen1, Jianan Xia1, Zhanjun Zhang1
1Beijing Normal University, Beijing, China

M477 Classification of Autism based on Resting-state fMRI using Convolutional Neural Networks
Jongwoo Choi1,2, Xiaofu He1,3
1The New York State Psychiatric Institute, New York, NY, United States, 2Department of Statistics, Columbia University, New York, NY, United States, 3Department of Psychiatry, Columbia University, New York, NY, United States

M478 Functional connectivity tells more than behaviors in the classification of neurodevelopment disorder
Hyunseok Bahng1,2, Soowon Jo1, Yoonkyung Choi3,4,5, Hae-Yoon Choi6,7, Sung Min Park8, Joohan Kim9, Hae-Jeong Park6,10,11
1Brain Korea 21 PLUS Project for Medical Science, Yonsei University College of Medicine, Seoul, Korea, Republic of, 2Department of Nuclear Medicine and Radiology, Yonsei University College of Medicine, Seoul, Korea, Republic of, 3Department of Nuclear Medicine and Radiology, Yonsei University, Seoul, Korea, Republic of, 4Institute of Human Complexity and Systems Science, System Science Center f, Seoul, Korea, Republic of, 5Dept. of Cognitive Science, Yonsei University, Seoul, Korea, Republic of, 6Department of Nuclear Medicine and Radiology, and Severance Biomedical Science Institute, Yonsei University, Seoul, Korea, Republic of, 7Institute of Human Complexity and Systems Science, System Science Center for Brain and Cognition, Yonsei University, Seoul, Korea, Republic of, 8Bioconvergence, Integrated Science and Engineering Division, Underwood International College, Yonse, Seoul, Korea, Republic of, 9Department of Communication, Yonsei University, Seoul, Korea, Republic of, 10Center for Systems and Translational Brain Sciences, Institute of Human Complexity and Systems Scien, Seoul, Korea, Republic of, 11Department of Nuclear Medicine and Radiology, and Severance Biomedical Science Institute, Yonsei University College of Medicine, Seoul, Korea, Republic of

M481 Decoding 3D Random Contrast Images based on fMRI
Hongna Zheng1, Li Yao1,2, Zhiying Long2
1College of Information Science and Technology, Beijing Normal University, Beijing, China, 2State Key Laboratory of Cognitive Neuroscience and Learning, Beijing Normal University, Beijing, China

M482 Prediction of future cognitive scores and dementia onset in Mild Cognitive Impairment patients
Manon Ansart1, Ninon Burgos1, Olivier Colliot2, Didier Durrleman1
1ARAMIS Lab, Inserm U1127, CNRS UMR 7225, UPMC, ICM, Inria, Paris, France, 2AP-HP, Hôpital de la Pité-Salpêtrière, Paris, France

M483 Classifying Major Depression Using GAN Based on Dynamic Functional Network Connectivity
Jianlong Zhao1,2,3, Dongmei Zhi1,2, Weizheng Yan1,2, Xiaohong Ma3,4,5, Luxian Lv3,6, Qing Ke7, Yongfeng Yang2,3,4,5, Tianzi Jiang1,2,3,11,12
1Brainnetome Center and National Laboratory of Pattern Recognition, Institute of Automation, Chinese, Beijing, China, 2University of Chinese Academy of Sciences, Beijing, China, 3Huaxi Brain Research Center, West China Hospital of Sichuan University, China, 4Psychiatric Laboratory and Mental Health Center, the State Key Laboratory of Biotherapy, West China Hospital of Sichuan University, China, 5Department of Psychiatry, Henan Mental Hospital, The Second Affiliated Hospital of Xinxiang Medical, Xinxiang, China, 6Henan Key Lab of Biological Psychiatry, Xinxiang Medical University, Xinxiang, China, 7Department of Neurology, the First Affiliated Hospital, Zhejiang University School of Medicine, Hangzhou, Zhejiang, China, 8Department of Electrical and Computer Engineering, University of New Mexico, Albuquerque, NM, United States, 9Chinese Academy of Sciences Center for Excellence in Brain Science, Institute of Automation, Beijing, China

M484 Event-related potentials predict individual differences in inhibitory control
Laura Rueda Delgado1, Laura O’Halloran1, Nadja Enz1, Kathy Ruddy1, Hanni Kissl1, Marc Bennett1, Francesca Farina2, Lee Jollans1, Nigel Valeyre1, Robert Whelan1
1Trinity College Dublin, Dublin, Ireland
M485 Childhood Maltreatment Accelerates Brain Aging in Healthy Adults – A Bayesian Multi-Level Approach
Tim Hahn1, Marie Beisemann1, Nils Winter2, Ramona Leenings2, Daniel Emden2, Claas Kaehler2, Nils Oelp1, Ronny Redlich1, Jonathan Repple1, Dominik Grotegerd1, Katharina Dohn1, Katharina Förster1, Dario Zaramba1, Elisabeth Leehr1, Jozcha Bohnlein1, Susanne Meinert1, Verena Enneking1, Walter Heinde2, Harald Kuge1, Volker Aro1, Tilo Kircher3, Igor Nenadic3, Christian Gaser3, James Cole4, Marco Hermesdorfer5, Klaus Berger6, Jens Sommer6, Olaf Steinsträter6, Andreas Jansen6, Udo Dannowski6
1The University of Münster, Münster, Germany, 2University of Münster, Münster, 3The University of Münster, Münster, Germany, 4University of Münster, Münster, Germany, 5Jena University Hospital, Jena, Germany, 6King’s College London, London, United Kingdom, 7Core-Unit BrainImaging, Faculty of Medicine, University of Marburg, Marburg, Germany

M486 Detecting Abnormal Functional Connectivity Patterns Using Stacked Autoencoders
Miguel Fernandes1, Lila Jorg2, Nadia Cande3, Catarina Duarte1, Miguel Castelo-Branco2, Susana Novais-Santos2, Pedro Almeida2, Alexandre Andrade1
1Instituto de Biofisica e Engenharia Biomédica, Faculdade de Ciências da Universidade de Lisboa, Lisboa, Portugal, 2Coimbra Institute for Biomedical Imaging and Translational Research, ICNAS, University of Coimbra, Coimbra, Portugal

M487 Fine-grained, image-based severity score of brain connectivity in prematurely-born adolescents
Neil Oxtoby1, Serafeim Loukas2, Daniel Alexander1, Djalel-Eddine Meskaldji3
1University College London, London, United Kingdom, 2University of Geneva, Geneva, Switzerland, 3Swiss Federal Institute of Technology, Lausanne, Vaud

M488 Prediction of depression using multiple volumetric measures, subcortical regions and subfields
Thomas Vanicek1, Alexander Koutsky2, Gregor Gryglewski1, Rene Seiger1, Manfred Klöß1, Mathis Godbersen1, Jakob Unterholzner1, Murray Reed1, Paul Michenthaler1, Andreas Hahn1, Siegfried Kasper1, Rupert Lanzenberger1
1Medical University of Vienna, Vienna, Austria, 2Medical University Vienna, Vienna, Austria

M489 Modeling heterogeneity in task fMRI in a large cohort using deep autoencoders
Mariam Zabihi1, Christian Beckmann2, André Marquand3
1Regional Ministry of health in Valencia Region, Burriana, Castellón, 2Regional Ministry of health in Valencia Region, Valencia, Spain, 3Clinica las Condes, Santiago, Chile, 4Príncipe Felipe Research Center, Valencia, Spain, 5University of Valencia, Valencia, Spain, 6University of Marburg, Marburg, Germany

M490 Gender Differences in Brain Structure
Jose Manuel Sobant Torres1, Joaquim Montell Serrano2, Gonzalo Rojas Costa2, Marcelo Galvez2, Francisco Garcia1, Amparo Oliver1, María de la Iglesia-Vaya1
1Regional Ministry of health in Valencia Region, Burriana, Castellón, 2Regional Ministry of health in Valencia Region, Valencia, Spain, 3Clinicas las Condes, Santiago, Chile, 4Principe Felipe Research Center, Valencia, Spain, 5University of Valencia, Valencia, Spain, 6University of Marburg, Marburg, Germany

M491 Multimodal integration of brain images for MRI based prediction of schizophrenia diagnosis
Raymond Salvador1, Almália Guerrero-Pedraza1, Salvador Sarró1, Peter McKenna1, Edith Pomarol-Clotet1
1FIDMAG Germanes Hospitalarias Research Foundation, Barcelona, Spain, 2Benito Menni CASM, Sant Boi de Llobregat, Spain, 3FIDMAG Germanes Hospitalarias Research Foundation, Sant Boi de Llobregat, Barcelona, Spain, 4Fundación para la Investigación y la Docencia María Angustias Giménez - FIDMAG Research Foundation, Barcelona

M492 A CNN-based classification of healthy elders, early and late MCI and AD using DTI-derived FA images
Yu-Cheng Pei1, Yi-Ping Chao2, Jih-Rong Chen2
1Chang Gung Memorial Hospital, Taoyuan, Taiwan, 2Chang Gung University, Taoyuan, Taiwan

M493 An Improved Estimate of the cardiac signal from fMRI by slice averaging and multibranch CNN
Serdar Aslan1, Blaise Frederick2
1University of Medical School, Boston, MA, United States, 2McLean Hospital / Harvard University, Belmont, MA, United States

M494 Classification of Central Vertigo Using Machine Learning Algorithm with Clinical Questionnaire
Su-Kyeong Jang1, Yong-Hwan Kim1, Eun-Jae Lee1, Rum-Soon Kim2, Dong-Wha Kang2
1Department of Neurology, Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea, Republic of, 2Department of Neurology, Kyung Hee University Hospital, Seoul, Korea, Republic of

M495 The problem of correlated trial-by-trial parameter estimates in fMRI decoding – solved
Joram Soch2, Carsten Allefeld2, John-Dylan Haynes1,2,4,5,6,7,8
1Bernstein Center for Computational Neuroscience, Berlin, Germany, 2Center for Advanced Neuroimaging, Berlin, Germany, 3Berlin School of Mind and Brain, Berlin, Germany, 4Clinic for Neurology, Charité-Universitätsmedizin, Berlin, Germany, 5Department of Psychology, Humboldt-Universität, Berlin, Germany, 6EXC NeuroCure, Charité-Universitätsmedizin, Berlin, Germany, 7EXC Science of Intelligence, Technische Universität, Berlin, Germany, 8CRC Volution and Cognitive Control, Technische Universität, Dresden, Germany

M496 Quantifying brain age prediction uncertainty from imaging using scalar-on-image quantile regression
Marco Polama1, Shahin Tavakoli2, Julia Brettschneider1,2, Thomas Nichols1
1University of Warwick, Coventry, United Kingdom, 2The Alan Turing Institute, London, United Kingdom, 3Big Data Institute, University of Oxford, Oxford, United Kingdom

M497 Predicting progression to Alzheimer’s disease from clinical and imaging data: a reproducible study
Jorge Samper-Gonzalez1, Ninnon Burgos1, Simona Bottani1, Marie-Odile Habert1, Theodoros Evgeniou2, Stéphane Epelbaum2, Olivier Collet2
1ARAMIS Lab, ICM, INSERM U1127, CNRS UMR 7225, Sorbonne University, Inria, Paris, France, 2Laboratoire d’Imagerie Biomédicale, Sorbonne Université, INSERM U 1146, CNRS UMR 7371, Paris, France, 3INSÉAD, Fontainebleau, France

M498 A social neuro-computational approach to autism: diagnostic validity of inter-brain connectivity
Imme Zillekens1,2, Guillaume Dumais1, Juha Lahnakoski1, Kai Vogeley1, Marc Tittgemeyer1, Leonhard Schilbach1
1Bernstein Center for Computational Neuroscience, Berlin, Germany, 2Berlin Center for Advanced Neuroscience Berlin, Germany

M499 Predicting subject age in the youth mega sample using connectome-based predictive modelling
Corey Honier1, Saige Rutherford2, Kristino Rapuano3, Dave O’Connor1, Mike Angstadt1, Dustin Schmeidler1, Chandra Srivada1, Todd Constable1
1Yale University, New Haven, CT, United States, 2University of Michigan, Ann Arbor, United States, 3University of Michigan, Ann Arbor, MI, United States
M500 AVRA: Automatic Visual Ratings of Atrophy from MRI images using Deep Learning
Gustav Mårtensson1, Daniel Ferreira Padilla2, Lena Cavallin1, J-Sebastian Muehlebeck1, Lars-Olof Wahlund1, Chunliang Wang2, Eric Westmar1
1Karolinska Institute, Stockholm, Sweden, 2KTH Royal Institute of Technology, Stockholm, Sweden

M501 Brain-Signal Decoding Using Features Compared to End-to-End Representation Learning
Lukas Gemein1, Robin Tibor Schirmeister1, Tonio Ball1
1University Medical Center Freiburg, Freiburg, Germany

M502 Towards sparse hierarchical graph classifiers for autism spectrum disorder identification
Anibal Heinsfeld1, Alexandre Franco1, Michael milham1
1Child Mind Institute, New York, NY, United States

M503 Harnessing the Imagined: Developing Motor Imagery for Real-time fMRI-based Therapy
Stephen (LaCorte)1, Jonathan Lisinski2, Owen Morgan2, Cheire Mare2
1Virginia Tech Carilion Fralin Biomedical Research Institute, Roanoke, VA, United States, 2Johns Hopkins University School of Medicine, Baltimore, MD, United States

M504 Response To Treatment In Depression: Multi-class Predictive Utility Of Morphometric Features
Prodeep Reddy Roamang1, Jee-su Suh1, Stephen Arnott1, Benicio Frey1, Stefanie Hassel1, Jacqueline Harris1, Mojdeh Zamyadi2, Raymond Lam1, Roumen Milev2, Daniel Mueller3, Susan Rotzinger4, Sidney Kennedy5, Glenda McQueen6, CAN-BIND Investigator Team7, Stephen Strathern1
1Baycrest Health Sciences, Toronto, Ontario, Canada, 2McMaster University, Hamilton, ON, Canada, 3Rotman Research Institute, Toronto, Ontario, Canada, 4University of Calgary, Calgary, AB, 5Rotman Research Institute, Toronto, Ontario, Canada, 6UBC, Vancouver, BC, Canada, 7Queen’s University, Kingston, ON, Canada, 8Centre for Addiction and Mental Health, Toronto, ON, Canada, 9St. Michael’s Hospital, Toronto, ON, Canada, 10Canadian Biomarker Integration Network for Depression, Toronto, ON, Canada, 11Baycrest and University of Toronto, Toronto, Ontario, Canada

M505 How serious is data leakage in deep learning studies on Alzheimer's disease classification?
Debbrata Kumar Sahaj1, Eswar Damaroju1, Barmaly Rashid2, Anees Abro3, Sergey Plis4, Vince Calhoun5
1University of New Mexico, Albuquerque, NM, United States, 2The Mind Research Network, Albuquerque, NM, United States, 3Harvard Medical School, Boston, MA, United States, 4The Mind Research Network, Albuquerque, NM, United States

M506 Leveraging shared connectivity to aggregate heterogeneous datasets into a common response space
Samuel Nastase1, Yun-Fei Liu2, Kenneth Norman1, Uri Hasson1
1Princeton University, Princeton, NJ, United States, 2Johns Hopkins University, Baltimore, MD, United States

M507 Beware of feature selection bias! Example on Alzheimer’s disease classification from diffusion MRI
Junhao Wen1, Jorge Samper-Gonzalez2, Alexandre Routier2, Simona Bottani1, Didier Dormont1, Stanley Durrleman3, Olivier Colliot1, Ninon Burgos2

M508 Towards sparse hierarchical graph classifiers for autism spectrum disorder identification
Anibal Heinsfeld1, Alexandre Franco1, Michael milham1
1Child Mind Institute, New York, NY, United States

M509 A combinatorial approach to improve classification accuracy in resting state fMRI data
Debbrata Kumar Sahaj1, Eswar Damaroju1, Barmaly Rashid2, Anees Abro3, Sergey Plis4, Vince Calhoun5
1University of New Mexico, Albuquerque, NM, United States, 2The Mind Research Network, Albuquerque, NM, United States, 3Harvard Medical School, Boston, MA, United States, 4The Mind Research Network, Albuquerque, NM, United States

M510 Joint tempo-occipital connectivity reflects higher-order function associated with conscious states
Georgios Antonopoulos1,2, Ron Kupers3,4,5, Laurent Cohen6,7, Sami Abboud7, Steven Laureys1,2, Atheno Demertzif1,2
1GIGA Consciousness, GIGA Research Institute, University of Liège, Liège, Belgium, 2Coma Science Group, Neurology Department, CHU University Hospital of Liège, Liège, Belgium, 3BRAINlab, Department of Neuroscience, Panum Institute, University of Copenhagen, Copenhagen, Denmark, 4Unite COSY, Institute of Neuroscience, Université Catholique de Louvain, Brussels, Belgium, 5Harland Sanders Chair in Visual Science, School of Optometry, University of Montreal, Montreal, Quebec, Canada, 6Neurology Department, Hôpital de la Salpêtrière, Paris, France, 7PICNIC Lab, Institut du Cerveau et de la Moelle épineure, Hôpital de la Salpêtrière, Paris, France, 8Physiology of Cognition Research Lab, GIGA Research Institute, University of Liège, Liège, Belgium

M511 How serious is data leakage in deep learning studies on Alzheimer's disease classification?
Debbrata Kumar Sahaj1, Eswar Damaroju1, Barmaly Rashid2, Anees Abro3, Sergey Plis4, Vince Calhoun5
1University of New Mexico, Albuquerque, NM, United States, 2The Mind Research Network, Albuquerque, NM, United States, 3Harvard Medical School, Boston, MA, United States, 4The Mind Research Network, Albuquerque, NM, United States

M512 Joint tempo-occipital connectivity reflects higher-order function associated with conscious states
Georgios Antonopoulos1,2, Ron Kupers3,4,5, Laurent Cohen6,7, Sami Abboud7, Steven Laureys1,2, Atheno Demertzif1,2
1GIGA Consciousness, GIGA Research Institute, University of Liège, Liège, Belgium, 2Coma Science Group, Neurology Department, CHU University Hospital of Liège, Liège, Belgium, 3BRAINlab, Department of Neuroscience, Panum Institute, University of Copenhagen, Copenhagen, Denmark, 4Unite COSY, Institute of Neuroscience, Université Catholique de Louvain, Brussels, Belgium, 5Harland Sanders Chair in Visual Science, School of Optometry, University of Montreal, Montreal, Quebec, Canada, 6Neurology Department, Hôpital de la Salpêtrière, Paris, France, 7PICNIC Lab, Institut du Cerveau et de la Moelle épineure, Hôpital de la Salpêtrière, Paris, France, 8Physiology of Cognition Research Lab, GIGA Research Institute, University of Liège, Liège, Belgium

M513 Graph convolutional network with sparse representation in resting-state fMRI for MDD identification
Eunjin Jun1, Jiyeon Lee1, Byung-Joo Ham2, Heung-Il Suk1
1Department of Brain and Cognitive Engineering, Korea University, Seoul, Korea, Republic of, 2Department of Biomedical Sciences, Korea University, Seoul, Korea, Republic of

M514 Structural-Functional CNN for Predicting Subject-Specific Neurocognitive Measurements
Ying-Chia Liu1,2, Steven Baete3, Xiuyuan Wang2,3, Fernando Bodda1,2
1Center for Biomedical Imaging, Department of Radiology, NYU School of Medicine, New York, United States, 2Center for Advanced Imaging Innovation and Research (CAIIR), NYU School of Medicine, New York, United States
**M515** BOLD power spectral density differentiates patients with pathological consciousness

Saerel Alcauter1, Manon Carrière2, Federico Raimondo2, Charlotte Martiat1, Vincent Bonhomme3,4,5, Muriel Kirsch6, Luaba Tshibanda7, Steven Laureys1,2, Fernando Barrios1, Athena Demertzis2

1Neuroscience Institute, National Autonomous University of Mexico (UNAM), Queretaro, Mexico, 2Coma Science Group, GIGA-Consciousness, GIGA Research Institute, University of Liège, Liège, Belgium, 3Neurology Department, CHU University Hospital of Liège, Liège, Belgium, 4University of Liège, Liège, Belgium, 5Anesthesia and Intensive Care Laboratory, GIGA Consciousness, GIGA Research Institute, University of Liège, Belgium, 6Department of Anesthesia and Intensive Care Medicine, CHU University Hospital of Liège, Liège, Belgium

**M516** Dynamic Time Warping for Brain MEG Analysis

Sharmistha Jat1, Tara Pirmia2, Tom Mitchell2

1Indian Institute of Science, Bengaluru, India, 2Carnegie Mellon University, Pittsburgh, PA, United States

**M517** A Data-Driven Clustering of Subjects Based on Brain Activation Reveals Phenotypic Group Differences

Hannah Loss1, Nicholas Alligaier1, Philip Specht2, Nicholas Fontaine1, Shana Adise1, Alexandra Potter1, Hugh Garavan1

1University of Vermont, Burlington, VT, United States

**M518** Spectral Graph Wavelet Transform as a feature extractor for machine learning in neuroimaging

Yusuf Pilavci1, Nicolas Farrugia2

1Politecnico di Milano, Milano, Italy, 2IMT Atlantique, Brest, France

**M519** Deep-learning based prediction of IDH genotype in gliomas using perfusion-weighted MRI

Kyu Sung Choi1, Bumseok Jeong2, Seung Hong Choi2

1KAIST, Daejeon, Korea, Republic of, 2KAIST, Daejeon, KS, 3Department of Radiology, Seoul National University Hospital, Seoul, Republic of Korea, Seoul, Korea, Republic of

**M520** Effects of maternal anxiety during gestation on individual brain aging in 28 years old offspring

Katja Frankel1, Charlotte Sleurs2, Gergioso Kambamu Tolosie1, Leonardo Garcia Barrado1, Matthias Schwab1, Bea van den Bergh4

1University Hospital Jena, Germany, Jena, Germany, 2KU Leuven, Leuven, Belgium, 3Hasselt University, Diepenbeek, Belgium, 4University of Leuven, Leuven, Belgium

**M521** Simulated TMS-EEG Biofeedback Using Automated Neural Architecture Search and Transfer Learning

Scott Heston1, Michael Borich2

1Georgia Institute Of Technology, Atlanta, GA, United States, 2Emory University, Atlanta, GA, United States

**M522** Patient-tailed prediction of neuropathology in cognitive impairment using neuroimaging biomarkers

EunChong Lee1, Hon Soo Yoo2, Byoung Seok Ye3, Joon-Kyung Seong3

1School of Biomedical Engineering, Korea University, Seoul, Korea, Republic of, 2Department of Neurology, Yonsei University College of Medicine, Seoul, Korea, Republic of

**M523** Amyloid PET Positivity Prediction using Multimodal MRI of AD Patient through the Deep Neural Network

Sungkyu Bang1, Yeong-Hun Park1, Min Soo Byum2, Dahyun YF3, Jun Ho Lee3, Younghwa Lee3, Yu Kyeong Kim5, Kyoung Mi Kang3, Chul-Ho Sohn6, Dong Young Lee3, Jong-Min Lee1

1Hanyang University, Seoul, Korea, Republic of, 2Medical Research Center Seoul National University, Seoul, Korea, Republic of, 3Seoul National University Hospital, Seoul, Korea, Republic of, 4SMG-SNU Boramae Medical Center, Seoul, Korea, Republic of, 5Seoul National University College of Medicine, Seoul, Korea, Republic of

**M524** A large-scale fMRI data set at 7T towards the reconstruction of motor and natural images

Alexander Kroener1, Rick van Hoof1, Mario Senden1, Rainer Goebel1

1Maastricht University, Maastricht, Netherlands

**M525** Learning function from structure in large-scale networks

Laura Suarez1, Gregory Kian1, Andrew Dayle1, Alan Evans3, Bratislav Mišić2

1McConnell Imaging Center, Montreal, QC, Canada, 2McGill University, Montreal, QC, Canada, 3Montreal Neurological Institute, Montreal, QC, Canada

**M526** Age and sex inferred from brain morphology using deep-learning

Pierre Besson1, Todd Parrish1, Appolos Katsaggelos2, S. Bandt1

1Northwestern University, Chicago, IL, United States, 2Department of Electrical Engineering and Computer Science, Northwestern University, Evanston, IL, United States, 3Department of Neurological Surgery, Feinberg School of Medicine, Northwestern University, Chicago, IL, United States

**M527** Predicting Alcohol Dependence from Brain Structure Alone

Nicholas Allgaier1, Sage Hahn1, Scott Mackey2, Patricia Connord1, Hugh Garavan1

1University of Vermont, Burlington, VT, United States, 2Université de Montréal, Montréal, Quebec, Canada

---

**fMRI Connectivity and Network Modeling**

**M528** Dynamic mode decomposition of rest and task fMRI time series

Raphael Liegeois1, Jeremy Casorso2, Xiaolu Kong2, Wang Chi3, Dimitri Van De Ville1, B. T. Thomas Yeo2

1École Polytechnique Fédérale de Lausanne, Lausanne, Switzerland, 2Department of Electrical and Computer Engineering, ASTAR-NUS Clinical Imaging Research Centre, Singapore, Singapore

**M529** Physiologic noise co-activation pattern in default mode network

Wanyong Shen1, Xia Lu2, Katherine Koeng1, Mark Lowe1

1Cleveland Clinic, Cleveland, OH, United States, 2Pennsylvania State University, University Park, PA, United States

**M530** Framework for Optimized and Precisely-Targeted fMRI Connectivity Neurofeedback

Masaya Misaki1, Aki Tsuchiyagaito1,2, Obada Zoubi1,3, Martin Paulus1, Jerzy Bodurka1,4

1Laureate Institute for Brain Research, Tulsa, OK, United States, 2Japan Society for the Promotion of Science, Tokyo, Japan, 3Department of Electrical and Computer Engineering, University of Oklahoma, Tulsa, OK, United States, 4Stephenson School of Biomedical Engineering, University of Oklahoma, Norman, OK, United States

**M531** Oscillatory brain states govern rsfMRI network dynamics in the mouse brain

Daniel Gutierrez1, Albert Basson2, Stefano Ponzari3, Alessandro Gosini1

1Functional Neuroimaging Laboratory, CNCS, Istituto Italiano di Tecnologia, Rovereto, Italy, 2Centre for Craniofacial and Regenerative Biology, King’s College London, London, United Kingdom, 3Neural Computation Laboratory, CNCS, Istituto Italiano di Tecnologia, Rovereto, Italy
M532 Structural determinants of dynamic fluctuations in brain functional network topology
Makoto Fukushima1, Olat Sporns2,4
1Ctn for Information and Neural Networks, National Inst of Information and Communications Technology, Suita, Osaka, Japan, 2Graduate School of Frontier Biosciences, Osaka University, Suita, Osaka, Japan, 3Dep of Psychological and Brain Sciences, Indiana University, Bloomington, IN, United States, 4Indiana University Network Science Institute, Bloomington, IN, United States

M533 Intrinsic functional connectivity of the BNST and CeA in pathological anxiety
Monique Ernst1, Salvatore Tortora1, Adam Gorka1, Christian Grillon1
1NIH/NIMH, Bethesda, MD, United States

M534 Altered Functional Connectivity in Brain White and Gray Matter by Multiple Sclerosis Lesions
Shicong Li2, Jing Huang3, Muwei Li2, Zhiquan Li2, Xiaoliu Qiu2, Zheng Liu4, Huiqiang Dong4, Jie Lu4, Zhaohua Ding2
1Vanderbilt University Institute of Imaging Science, Nashville, TN, United States, 2School of Optical and Electronic Information, Huazhong University of Science and Technology, Wuhan, China, 3Department of Radiology, Xuanwu Hospital of Capital Medical University, Beijing, China, 4Department of Neurology, Xuanwu Hospital of Capital Medical University, Beijing, China

M535 Phase fMRI informs whole-brain connectivity balance in resting state across the lifespan
Zikuan Chen1, Vince Calhoun2
1The Mind Research Network, Albuquerque, NM, United States, 2The Mind Research Network University of New Mexico, Albuquerque, NM, United States

M536 Phase fMRI connectivity defines the resting-state brain function hub within subcortical region
Zikuan Chen1, Zening Fu2, Vince Calhoun2
1The Mind Research Network, Albuquerque, NM, United States, 2The Mind Research Network University of New Mexico, Albuquerque, NM, United States

M537 A Graph Representation of Functional Diversity of Brain Regions
Dazhi Yin1, Xiaoyu Chen1, Kristina Zeljic1, Yafeng Zhan1, Xiangyu Shen1, Gang Yan2, Zheng Wang4, Zhaohua Ding2
1Center for Cognitive Neuroscience, Duke NUS Medical School, Singapore, Singapore, 2Australian Research Council Centre of Excellence for Integrative Brain Function, Melbourne, Australia

M538 Comparison Study of Bivariate Correlations for Dynamic Brain Functional Connectivity
Jaeho Kim1,2
1Doksung Women’s University, Seoul, Korea, Republic of

M539 Physiological elements in the elderly functional connectome
Philip Ward1,2, Sharna Jamadar1,2, Aurina Anatkevic1, Stuart Oldham1, Gary Egan1,2
1Monash University, Melbourne, Australia, 2Australian Research Council Centre for Excellence for Integrative Brain Function, Melbourne, Australia

M540 Reliability of dynamic functional connectivity using multiplication of temporal derivatives
Francesca Perini1, Kian Wong2, James Teng2, Yng Loke3, Xing Qian3, Eric Ng4, Juan (Helen) Zhou5, Julian Lim6
1Center for Cognitive Neuroscience, Duke NUS Medical School, Singapore, Singapore

M541 Disrupted Functional Connectivity of the Middle Temporal Gyrus Subregions in Children with ASD
Xu Ziyun1, Xu Jinping1, Hu Qingmao2
1Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences, Shenzhen, China, 2University of Chinese Academy of Sciences, Beijing, China

M542 Biotype shows more inter-group differences than DSM categories using dynamic connectivity measures
Yuhui Du1,2, Pearson Godfrey1, Shashwat Meda1, Dongdong Lin2, Zening Fu2, Mustafa Saliman1,4, Vince Calhoun2
1School of Computer & Information Technology, Shenzhen University, Shenzhen, China, 2The Mind Research Network, Albuquerque, NM, United States, 3Olin Neuropsychiatry Research Center, Hartford, CT, United States, 4Department of Electrical and Computer Engineering, University of New Mexico, Albuquerque, NM, United States

M543 Manifold learning on time-varying functional connectivity matrices: A case study on meditation data
Satoru Hiwada, Tomoyuki Hiroyasu
1Department of Biomedical Sciences and Informatics, Doshisha University, Kyoto, Japan

M544 Communication asymmetry in the human connectome: A cortical hierarchy of senders and receivers
Caio Seguin1, Adeel Razvi1, Andrew Zalesky2
1University of Melbourne, Melbourne, Victoria, 2Monash University, Melbourne, Australia

M545 Multiscale decomposition of information transfer in the midcingulate cortex
Nigel Coletbier1, Daniele Marinazzo2,3
1Ghent University, Ghent, Belgium

M546 Reduced Functional Connectivity of posterior Nucleus basalis Meynert in Amyloid Positive SCD
Shumei Li1, Marcel Daamen2, Steffen Wolffgruber1, Angelika Schmitt1, Ingo Frommann1, Michel Grothe1, Niko Freise1, Thomas Klockgether1, Michael Heneka1, Oliver Peters2, Anja Schneider1, Katharina Berger1, Jens Wittfang1, Christoph Laske3, Emrah Dundel4, Tonny Steecker1, Henning Boecker1, Frank Jessen1, Lukas Scheef1
1German Center for Neurodegenerative Diseases (DZNE), Bonn, Germany, 2German Center for Neurodegenerative Diseases (DZNE), Rostock, Germany, 3German Center for Neurodegenerative Diseases (DZNE), Berlin, Germany, 4German Center for Neurodegenerative Diseases (DZNE), Muenchen, Germany, 5German Center for Neurodegenerative Diseases (DZNE), Gottingen, Germany, 6German Center for Neurodegenerative Diseases (DZNE), Magdeburg, Germany, 7German Center for Neurodegenerative Diseases (DZNE), Cologne, Germany

M547 High Resolution Resting State Functional Connectivity of the Extended Amygdala
Carissa Weis1, Ashley Huggins1, Kenneth Bennett1, Elizabeth Pozni1, Christine Larson1
1University of Wisconsin Milwaukee, Milwaukee, WI, United States

M548 Trait and state characteristics of anterior insula time-varying connectivity modes
Lorenzo Pasquin1, Gianina Toller1, Adam Staffaroni1, Jesse Brown1, Jerenger den1, Valentin Ried1, Katarzyna Kurczy1, Suzie Shdo1, Isabel Allen1, Virginia Sturm1, Yann Cobigo1, Valentina Borghesani1, Giovanni Battistella1, Maria-Luisa Gorno-Tempini1, Joel Kramer1, Howard Rosen2, Bruce Miller1, William Seeley1, Katarzyna Kurczy1, Suzie Shdo1, Isabel Allen1, Virginia Sturm1, Yann Cobigo1, Valentina Borghesani1, Giovanni Battistella1, Maria-Luisa Gorno-Tempini1, Joel Kramer1, Howard Rosen2, Bruce Miller1, William Seeley1
1Memory and Aging Center, University of California San Francisco, San Francisco, CA, United States, 2Technische Universitaet Muenchen, Muenchen, Germany

M549 Brain activity gradient traversals generate functional connectivity
Jesse Brown1, Lorenzo Pasquin1, Alex Lee1, Adam Staffaroni1, Bruce Miller1, Joel Kramer1, William Seeley1
1Memory and Aging Center, University of California San Francisco, San Francisco, CA, United States
M550 Amortised inference of stochastic DCMs via temporal convolutional networks
Sam Harrison1, Stefan Frässle1, Yu Yao1, Ender Konukoglu1, Klaus Stephan1
1Translational Neuromodulation Unit, University of Zurich & ETH Zurich, Zurich, Switzerland, 2Computer Vision Laboratory, ETH Zurich, Zurich, Switzerland

M551 Network Localization of Cervical Dystonia Based on Causal Brain Lesions
Daniel Corp1, Juho Jouts2, Ryan Darby2, Catherine Delnooz3, Bart van de Warrenburg5, Danielle Cooke5, Cecilia Prudente4, Amit Batla8, HA Jinnah9, Hesheng Liu10, Michael Fox1
1Deakin University, Burwood, Australia, 2University of Turku, Turku, Finland, 3Vanderbilt University Medical Center, Nashville, TN, United States, 4Maxima Medical Centre, Veldhoven, Netherlands, 5Donders Institute for Brain, Cognition, and Behaviour, Nijmegen, Netherlands, 6Beth Israel Deaconess Medical Center, Boston, MA, United States, 7MicroTransponder, Texas, United States, 8UCL Institute of Neurology, London, United Kingdom, 9Emory University, Atlanta, GA, United States, 10Massachusetts General Hospital, Boston, MA, United States

M552 Prenatal maternal anxiety and amygdala functional connectivity in young children
Claire Donnici1, Xiangyu Long1, Nicole Letourneau1, Deborah Dewey1, Catherine Lebel1
1University of Calgary, Calgary, Alberta, Canada

M553 Connectivity dynamics between the right anterior insula and the anterior cingulate cortex
Yoshimi Ohgami5, Yusuke Itohe5, Akira Kunimatsu5, Shigeru Kiryu6
5Kitasato University, Sagamihara, Kanagawa, 6Tokyo Institute of Technology, Meguroku, Tokyo, Japan, 7Tokyo Institute of Technology, Meguro, Tokyo, 8The University of Tokyo, Minato-ku, Tokyo, 9International University of Health and Welfare, Narita, Chiba, 10Kitsato University, Sagamihara, Kanagawa

M554 Do the performances of EEG temporal ICA and fMRI spatial ICA vary with source network size?
Asad Malik1, Catriona Scrivener1, Ivanos Ras1, Michael Lindner1, Etienne Roesch1
1University of Reading, Reading, United Kingdom

M555 Frequency-dependent brain network and its integration
Shogo Kajimura1, Kenji Matsumoto1, Jonathan Smillie2,3
1Kyoto Institute of Technology, Kyoto, Japan, 2Tomagawa University, Machida, Japan, 3University of York, York, United Kingdom

M556 Prediction of long-term cognitive disorders following stroke using a specific functional network
Clement Boumonville1, Xavier Leclerc1, Thibaut Dondaine1, Regis Bardet1, Renaud Lopes4,5
1Lille University Hospital, Lille, France, 2Lille University Hospital, Lille, France, 3Inserm U1171, Lille, France

M557 Functional brain network detection strategies for arterial spin labeling perfusion MRI
Kalen Petersen1, Daniel Claassen2, Manus Donohue3
1Vanderbilt University, Nashville, TN, United States, 2Vanderbilt University Medical Center, Nashville, TN, United States

M558 Analyzing Network Connectivity in Post-Stroke Aphasic Patients
Sarah El-Gundy1, Yue Pan1, Swathi Kiran1
1Boston University, Boston, MA, United States

M559 Reproducibility of subject-specific graph measures using resting-state fMRI
Qian Ran1, Tarik Jamouille1, Rik Vandenberghe1,2,3, Patrick Dupont1
1Laboratory for Cognitive Neurology, Department of Neurosciences, KU Leuven, Leuven, Belgium, 2Alzheimer Research Centre KU Leuven, Leuven Research Institute for Neuroscience & Disease, KU Leuven, Leuven, Belgium, 3Neurology Department, University Hospitals Leuven, Leuven, Belgium

M560 Influence of cognitive deterioration in MS on global and local network organisation
Johan Bajoit1, Lars Costers1, Jeroen Giezen1, Jorne Lator1, Melissa Cambron2, Miguel D’haeselee1,2, Marie D’Hooghe2,3, Anne-Marie Vanbinst1, Jeroen Van Schependon1, Guy Nagels1,2,3
1Vrije Universiteit Brussel, Brussels, Belgium, 2University of Oxford, Oxford, United Kingdom, 3National MS Center Melsbroek, Melsbroek, Belgium

M561 Intranasal insulin improves functional connectivity with modular structure in a BMI-related manner
Dongxing Zhai1, Ralf Veit1, Martin Henri2, Lore Wagner1, Hubert Preis1, Stephanie Kullmann1
1Institute of diabetes research and metabolic disorders (IDM), Tübingen, Germany, 2Department of Internal Medicine IV, University of Tübingen, Tübingen, Germany

M562 Functional Connectivity Parcellation of the Human Hypothalamus by Independent Component Analysis
Sheng Zhang1, Chiang-shan Li1
1Yale University, New Haven, CT, United States

M563 Family history of alcoholism affects task-switching in human brain networks
Enrico Amico1,2, Mario Dzemidzic3, Claire Carron1, Jaroslav Harezka4, Joaquin Goñi5,6,7, David Kareken6,8
1Purdue Institute for Integrative Neuroscience, Purdue University, West Lafayette, IN, United States, 2School of Industrial Engineering, Purdue University, West Lafayette, IN, United States, 3Department of Neurology, Indiana University School of Medicine; Indiana Alcohol Research Center, Indianapolis, IN, United States, 4Department of Epidemiology and Biostatistics, Indiana University, Bloomington, IN, United States, 5Weldon School of Biomedical Engineering, Purdue University, West Lafayette, IN, United States, 6Both authors equally contributed

M564 Differentiating Implicit and Explicit Theory of Mind and Associated Neural Networks in CHR youth
Teresa Vargas1, Katherine Damm1, Vijay Mittal1
1Northwestern University, Evanston, IL, United States

M565 A study of the link between dynamic functional connectivity and structural rich-club organisation
Marion Saurty1, Andrew Zolesky2, Fernando Colomante1,2,3
1School of Aerospace, Mechanical and Mechatronic Engineering, The University of Sydney, Sydney, Australia, 2Melbourne School of Engineering, The University of Melbourne, Melbourne, Australia, 3Melbourne Neuropsychiatry Centre, The University of Melbourne, Melbourne, Australia

M566 Hunger status, not oral glucose, affects posterior-anterior insula connectivity: A spectral DCM study
Arkhan Al-Zubaidi1, Sandra Iglesias1, Klaas Stephan1, Macio Buades-Rotger1, Marcus Heldmann1, Nolde Nolden1, Henriette Kirchner1, Alfred Mertins1, Kamila Jauch-Chara2, Thomas Münte1
1Department of Neurology, University of Lübeck, Lübeck, Germany, 2Translational Neuromodelling Unit, Institute for Biomedical Engineering, University of Zurich & ETH Z, Zurich, Switzerland, 3Department of Internal Medicine I, University of Lübeck, Lübeck, Germany, 4Institute for Signal Processing, University of Lübeck, Lübeck, Germany, 5Department of Psychiatry and Psychotherapy, Christian-Albrechts-University, Kiel, Germany

M567 Comparing functional connectivity, representational similarity & univariate analyses neural networks
Ineke Pijl1, Hans Op de Breeck1, Haemy Lee Masson1
1KU Leuven, Leuven, Belgium
M585 Individual-Specific Areal-Level Parcellations Improve Functional Connectivity Prediction of Behavior
Ru Kong1, Qin Yang1, Evan Gordon2, Xinian Zuo3,4, Avram Holmes5, Simon B. Eickhoff6, B. T. Thomas Yeo7
1ECN, CIRIC, SINAPSE & MNP, National University of Singapore, Singapore, Singapore, 2VSN 17 Center of Excellence for Research on Returning War Veterans, Waco, TX, United States, 3CAS Key Laboratory of Behavioral Sciences and Center for Lifespan Innovation Development of Brain an, Beijing, China, 4Department of Psychology, University of Chinese Academy of Sciences, Beijing, China, 5Yale University, New Haven, CT, United States, 6Institute for Systems Neuroscience, Medical Faculty, Heinrich-Heine University Düsseldorf, Düsseldorf, Germany, 7Institute of Neuroscience and Medicine, Brain & Behaviour (INM-7), Research Center Jülich, Jülich, Germany, 8Martinos Center for Biomedical Imaging, Massachusetts General Hospital, Charlestown, MA, United States, 9Center for Cognitive Neuroscience, Duke-NUS Medical School, Singapore, Singapore

M586 Investigation of the reproducibility of resting state fMRI acquired using different receiver coils
Sanae Kato1, Haruo Isoda2, Epifanio Bagarinao3, Shuji Koyama2, Shinji Naganawa4
1Nagoya University Graduate School of Medicine, Nagoya City, Japan, 2Brain and Mind Research Center, Nagoya University, Nagoya City, Japan, 3Department of Radiology, Nagoya University Graduate School of Medicine, Nagoya City, Japan

M587 Improving Principal Component Detection in Dynamic Functional Connectivity Analysis
Zhenghao Liu1, Yuan Liu2, Wen Li3, Xiaotong Wen1
1Renmin University of China, Beijing, China

M588 Inversion of A Large-Scale Circuit Model Reveals A Cortical Hierarchy in The Resting Human Brain
Peng Wang1, Xiaolu Kong1, Ru Kong1, Raphaël Liégeois2, Csaba Orbán3, Gustavo Deco4, Martijn van den Heuvel5, B. T. Thomas Yeo7
1ECN, CIRIC, SINAPSE & MNP, National University of Singapore, Singapore, Singapore, 2Max-Planck-Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, 3Department of Electrical and Computer Engineering, ASTAR-NUS Clinical Imaging Research Centre, Singapore, Singapore, 4École Polytechnique Fédérale de Lausanne, Lausanne, Switzerland, 5National University of Singapore, Singapore, Singapore, 6Universitat Pompeu Fabra, Barcelona, Spain, 7Vrije Universiteit Amsterdam, Amsterdam, Netherlands

M589 Controllability Analysis on Functional Brain Networks
Shikuang Deng1, Shi Gu1
1University of Electronic Science and Technology of China, Chengdu, China

M590 Differential effective connectivity modulations related to win and loss outcomes
Frederik Van de Steene1, Ruth Krebs2, Hannes Almgren2, Daniele Marinazzo1
1Ghent University, Ghent, Belgium

M591 Exploring the dynamics of spinal cord functional activity using hemodynamic-informed transients
Nowal Kinany1, Elvira Pirondini2, Silvestro Micera2, Dimitri Van De Ville1
1École Polytechnique Fédérale de Lausanne, Lausanne, Switzerland, 2Université de Genève, Genève, Switzerland

M592 The Janus-like Default Mode Network Integrates External Inputs and Internal Thought
Dian Liu1, David Menon2, Emmanuel Stamatakis3
1University of Cambridge, Cambridge, United Kingdom

M593 Changes in directed functional connectivity related to age and sex
Martina Lund1, Dag Alnaes1, Simon Schwan2, Lars Westlye1, Tobias Kaufmann1
1Norwegian Center for Mental Disorders Research, Oslo, Norway, 2Center for Reproducible Science & Department of Biostatistics, University of Zurich, Zurich, Switzerland, 3Big Data Institute, Li Ka Shing Centre for Health Information and Discovery, Nuffield Department of Population Health, University of Oxford, Oxford, United Kingdom, 4Department of Psychology, University of Oslo, Oslo, Norway

M594 Left dorsolateral prefrontal cortex involvement in context-dependent mind wandering
Adam Turnbull1, Hao-Ting Wang2, Charlotte Murphy2, Nerissa Ho3, Theodoras Karapanagiotidis2, Robert Letch2, Boris Bernhardt3, Daniel Margulies4, Deniz Vatansever5, Elizabeth Jefferies6, Jonathan Smallwood7
1University of York, York, 2University of York, York, North Yorkshire, 3Centre for Neuroimaging Sciences, Institute of Psychiatry, King’s College London, London, United Kingdom, 4MNI, Montreal, Quebec, Canada, 5Institut du Cerveau et delà Moelle Épinière, Paris, France, 6Fudan University, Shanghai, China

M595 Individual heterogeneity in the functional topography of the DMN in medial prefrontal cortex
Claudio Toro-Serey1,2,3,4,5,6,7,8,9
1Boston University, Boston, MA, United States

M596 Dynamic reconfiguration of functional brain network during 6-week working memory training
Karolina Finc1, Kamil Bonna1, Xiaosong He2, David Lydon-Staley2, Simone Kuhn3, Wlodzislaw Duch4, Danielle Bassett5
1Nicolaus Copernicus University in Toruń, Toruń, Poland, 2University of Pennsylvania, Philadelphia, PA, United States, 3Max Planck Institute for Human Development, Berlin, Germany

M597 Space-independent community and hub structure of functional brain networks
Fornaz Zamani Esfahani1, Maxwell Bertolero1, Danielle Bassett2, Richard Betzel3
1Indiana University, Bloomington, IN, United States, 2University of Pennsylvania, Philadelphia, PA, United States

M598 Patterns of Ongoing Thought is Associated within the Architecture of the Medial Temporal Lobe
Nerissa Ho1, Xiuyi Wang1, Deniz Vatansever2, Daniel Margulies4, Boris Bernhardt5, Elizabeth Jefferies6, Jonathan Smallwood7
1University of York, York, United Kingdom, 2Fudan University, Shanghai, China, 3Institut du Cerveau et delà Moelle Épinière, Paris, France, 4MNI, Montreal, Quebec, Canada

M599 Disrupted Functional Connectivity Dynamics in Obsessive-Compulsive Disorder
Pedro Moreira1, Patricio Costa1, Nuno Sousa1, Carles Soriano-Mas1,2, Pedro Morgado1, Joana Cabral1,3
1Life and Health Sciences Research Institute (ICVS) - School of Health Sciences, University of Minho, Braga, Portugal, 2Psychiatry Department, Bellvitge University Hospital-Bellvitge Biomedical Research Institute (IDIBE, Barcelona, Spain, 3University of Oxford, Oxford, United Kingdom

M600 Disambiguating resting-fMRI functional connectivity information in temporal and spatial domains
Janine Bijsterbosch1,2, Christian Beckmann1, Mark Woolrich3,4, Stephen Smith1,5, Samuel Harrison1,5
1Washington University in St. Louis, St. Louis, MO, United States, 2University of Oxford, Oxford, United Kingdom, 3Donders Institute, Nijmegen, Netherlands, 4FMRI, Wellcome Centre for Integrative Neuroimaging, University of Oxford, Oxford, United Kingdom, 5ETH Zurich, Zurich, Switzerland

M601 Brain-songs: Non-trivial Temporal Brain States Dynamics Account for Cognition and Motor Capacities
Juan Ramirez-Mahalal1, Vicente Medel1, João Sato2, Jean-Philippe Lachaux3, Tomas Ossandon3, Nicolas Crossley3
1Pontificia Universidad Católica de Chile, Santiago, Chile, 2Universidade Federal do ABC, Santo André, Brazil, 3Lyon’s Neuroscience Research Center, Lyon, France
M602 Functional connectivity changes following early deafness

Kamil Banna1, Karolín Finc1, Łukasz Bola2, Maria Zimmermann2, Piotr Mostowski3, Katarzyna Jednoroż4, Maciej Szul5, Artur Marchewka6, Paweł Rutkowski7, Włodzisław Duch8, Marcin Szwed9

1Nicolaus Copernicus University in Toruń, Toruń, Poland, 2Jagiellonian University, Krakow, Poland, 3University of Warsaw, Warsaw, Poland, 4Nencki Institute of Experimental Biology, Warsaw, Poland

M603 Increased resting state connectivity associated with upper extremity motor training

Brian Chou1, Cristina Rubino1, Brian Greeley1, Anica Villamayor1, Lara Boyd1

1University of British Columbia, Vancouver, BC, Canada

M604 Cognitive impairment in Parkinson’s disease is captured by personalized Virtual Brain models

Kenny Shen1, Zheng Wang1, Tanya Brown2, Anthony McIntosh2

1Rotman Research Institute, Baycrest, Toronto, Ontario, Canada

M605 Cross-paradigm connectivity: reliability, stability, and individual identifiability

Hengyi Cao1, Sarah C. McEwen2, Jen Forsyth2, Dylan Gee2, Carrie Bearden3, Jean Addington3, Bradley Goodyear1, Kristin Cadenheim1, Heline Mirzakhani4, Barbara Comblat5, Ricardo Carrion6, Daniel H. Mathalon7, Thomas McGlashan8, Diana Perkins8, Aysenil Belger9, Heidi Thermenos9, Ming Tsuang10, Theo G. M. van Erp11, Elaine Walker12, Stephan Hamann12, Alan Anticevic13, Scott Woods13, Tyrone Cannon1

1Yale University, New Haven, CT, United States, 2Department of Psychiatry, University of California, San Diego, CA, United States, 3University of California-Los Angeles, Los Angeles, CA, United States, 4Semel Institute for Neuroscience and Human Behavior, UCLA, Los Angeles, CA, United States, 5Department of Psychiatry, University of Calgary, Calgary, Alberta, Canada, 6Departments of Radiology, Clinical Neuroscience and Psychiatry, University of Calgary, Calgary, Alberta, Canada, 7Department of Psychiatry, University of California San Diego, San Diego, CA, United States, 8Department of Psychiatry, University of California, San Francisco, CA, United States, 9Department of Psychiatry, University of North Carolina, Chapel Hill, NC, United States, 10Department of Psychiatry, University of North Carolina School of Medicine, Chapel Hill, NC, United States, 11Department of Psychiatry, Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA, United States, 12Department of Psychiatry and Human Behavior, University of California Irvine, Irvine, CA, United States, 13Department of Psychology, Emory University, Atlanta, GA, United States

M606 Dysconnectomics of the fourth Order: Network dysfunction at higher spatial scales in OCD

Asadur Chowdry1, Paul Arnold2, Phil Easter3, Gregory Hanna4, David Rosenberg5, Vaibhav Diwadkar6

1Wayne State University School of Medicine, Detroit, MI, United States, 2University of Calgary, Calgary, Alberta, Canada, 3University of Michigan, Ann Arbor, MI, United States, 4Wayne State University School of Medicine, Detroit, MI, United States

M607 Brain Networks identified from node connectivity and node complexity

Kay Jann1, Nooraliha Sadegh1, Brendan Angelo1, Akul Sharma1, Danny Wang1

1University of Southern California, Los Angeles, CA, United States, 2California State University Fullerton, Fullerton, CA, United States, 3University of California, Irvine, Irvine, CA, United States

M608 Spatiotemporal ontology of brain wiring

Alexandros Goulas1, Richard Betzel2, Claus Hilgetag3

1Institute of Computational Neuroscience UKE, Hamburg, Germany, 2Department of Psychological and Brain Sciences, Indiana University, Bloomington, IN, United States, 3Institute of Computational Neuroscience, University Medical Center Hamburg-Eppendorf, Hamburg, Germany

M609 Mapping the Community Structure of the Connectome with Weighted Stochastic Block Modeling

Joshua Faskowitz1, Olaf Sporns1

1Indiana University, Bloomington, IN, United States

M610 Statistical properties of strengths of structural and functional connectivity

Xiao Gao1, Peter Robinson2

1University of Sydney, Sydney, NSW, Australia, 2University of Sydney, Sydney, New South Wales, Australia

M611 Correcting module size bias of participation coefficient

Mangor Pedersen1, Amir Omidvarinia2, James Shine3, Graeme Jackson4, Andrew Zalesky5

1The Florey Institute of Neuroscience and Mental Health, Melbourne, Australia, 2University of Melbourne, Melbourne, Australia, 3The University of Sydney, Bateau Bay, NSW, Australia

M612 Reliability of Frontostriatal Functional Connectivity: Towards Personalization of TMS in Psychiatry

Jinglei Lv1, Luca Cocchi2, Andrew Zalesky3

1University of Melbourne, Carlton, Australia, 2QIMR Berghofer Medical Research Institute, Brisbane, Australia, 3Melbourne University, Melbourne, VIC, Australia

M613 The Connectome Basis of Theory of Mind

Athanasia Metoki1, Yin Wang2, Ingrid Olson3

1Temple University, Philadelphia, PA, United States

M614 Neural correlates of rumination associated with altered brain network dynamics

Olusola Alajile1, Alex Leow2

1University of Illinois at Chicago, Chicago, IL, United States

M615 Connectivity within DMN Mediates the Association between Circadian Rhythms and Sleep Quality

Yun Tian1, Xinyuan Chen2, Dan Xu3, Xu Lei3

1Sleep and Neuromapping Center, Faculty of Psychology, Southwest University, Chongqing, China, 2Key Laboratory of Cognitive and Personality (Ministry of Education), Chongqing, China

M616* Classifying Patients with scDOC using Multislice Modularity of Brain Networks from fMRI Data

Jinglei Lv1, Kenji Leibnitz2, Frank Rattay3, Martin Kronbichler4, Masayuki Murata5, Stefan Goloswski6

1Osaka University, Suita, Japan, 2Center for Information and Neural Networks, Suita, Japan, 3TU Wien, Vienna, Austria, 4Paracelsus Medical University, Salzburg, Austria, 5University of Salzburg, Salzburg, Austria, 6Christian Doppler Medical Centre, Alzberg, Austria, 7Karl Landsteiner Institute for Neurorehabilitation and Space Neurology, Vienna, Austria

M617 Frequency-Dependent Brain Changes that Occur during Natural Sleep

Chao Jiang1, Yinshan Wang1, Wei Luo1, Li-Zhi Cao1, Xinian Zuo2

1Key Laboratory of Behavioral Science, Institute of Psychology, Chinese Academy of Sciences, Beijing, China

M618 A Matched Filter Decomposition of Task fMRI for Extraction of Dynamical Components

Anand Joshi1, Hafez Akram1, Jian Li2, Richard Leahy3

1University of Southern California, Los Angeles, CA, United States

M619 Functional organization of the neonatal brain following prenatal exposure to depression and SSRIs

Naama Rotem-Kohavi1, Lynne Williams2, Angela Martina Muller3, Herve Abdi4, Naznin Virji-Babul5, Bruce Bjornson5, Ursula Brain2, Janet Werker6, Ruth Grunau7, Steven Miller8, Tim Oberlander9

1University of British Columbia, Vancouver, BC, Canada, 2BC Children’s Hospital, Vancouver, BC, Canada, 3University of British Columbia, Department of Physical Therapy, Vancouver, BC, Canada, 4The University of Texas at Dallas, Richardson, Dallas, TX, United States, 5Brain Mapping, Neuroinformatics and Neurotechnology Laboratory, British Columbia Children’s Hospital, Vancouver, BC, Canada, 6University of British Columbia, Department of Psychology, Vancouver, BC, Canada, 7The Hospital for Sick Children and the University of Toronto, Toronto, Ontario, Canada
M620 Contextual interference induces differential modulations in task-related network connectivity
Sima Cholayi1, Lisa Pauwelis1, Jolien Gooijers2, Celine Maes1, Hamed Zivariadab1, Thiago Santos Monteiro1, Genevieve Albouy1, Stefan Sunaert3, Stephen Swinnen1
1KU Leuven, Leuven, Belgium, 2UZ Leuven, Leuven, Belgium

M621 Temporal concatenation group ICA leads to artificial splitting of default mode network?
Yang Hu1, Zhi Yang1
1Shanghai Key Laboratory of Psychotic Disorders, Shanghai Mental Health Center, Shanghai, China

M622 Variability and reproducibility of functional connectivity estimates in the human brain
Allegra Conti1, Andrea Duggento2, Maria Guerrisi1, Iole Indovina1, Nicola Toschi1,2
1IRCCS Foundation Santa Lucia, Laboratory of Neuromotor Physiology, Rome, Italy, 2Department of Biomedicine and prevention, University of ‘Tor Vergata’, Rome, Italy

M623 Modulatory effect of the gut microbiota on neural networks that support anxiety sensitivity
Caitlin Hall1, Anton Lord1, Ben Harrison2, Graham Radford-Smith1, Michael Breakspear1, Luca Cocchi1
1University of Melbourne, Melbourne, Australia

M624 Eigenvector centrality mapping for ultrahigh resolution fMRI data
Gabriele Lohmann1,2, Alexander Loktyushin3,4, Johannes Stei2,2, Klaus Scheffler1,2
1University Hospital, Tuebingen, Germany, 2Max Planck Institute for Biological Cybernetics, Magnetic Resonance Center, Tuebingen, Germany, 3Max Planck Institute for Intelligent Systems, Tuebingen, Germany

M625 Using dynamic causal modelling for real-time feedback of prefrontal connectivity during self-control
Anjali Raja Beharelle1, Moritz Gruber1, Lydia Hellrung2, Yury Koush3, Frank Scharnowski3, Christian Ruff1,2, Todd Hare3
1University of Zurich, Zurich, Switzerland, 2Yale University, New Haven, CT, United States, 3University of Vienna, Vienna, Austria

M626 Directional Brain Connectivity Discrepancy Between Healthy Controls and Patients with Epilepsy
Neerja Mahalingam1,2, Arun Antony1,3,4, Apto Bagic2,4, J Fong-Isaryawongse2,4, Alexandra Urban1,2, Hoby Hetherington3,4, Julie Pont1,3,4, Jing-Huei Lee1,2,3,4
1University of Cincinnati, Cincinnati, OH, United States, 2Department of Biomedical Engineering, Cincinnati, OH, United States, 3University of Pittsburgh, Pittsburgh, PA, United States, 4Department of Neuroscience, Pittsburgh, PA, United States, 5Department of Radiology and Neurology, Pittsburgh, PA, United States

M627 Neurorehabilitation in Parkinson’s disease – is there a role for network connectivity measures?
Evelien Nackaerts1, Nicholas D’cruz1, Bouke Dijkstra2, Moran Gilat3, Thomas Kramer4, Alice Nieuwboer5
1KU Leuven, Leuven, Belgium

M628 The time of day influence on resting-state functional connectivity in DMN and EMN
Vette Hushagen1, Karsten Specht1
1University of Bergen, Bergen, Norway

M629 Alterations in Cortical Correlation Networks associated with Alexithymia
Stefan Frenzel1, Jan Terok1, Katharina Wittfeld2, Johanna König3, Deborah Janowitz4, Robin Bülow5, Norbert Hosten5,6, Henry Volzke7, Harald Freyberger5, Hans Grabe7
1Department of Psychiatry and Psychotherapy, University Medicine Greifswald, Greifswald, Germany, 2German Center for Neurodegenerative Diseases (DZNE), Greifswald, Germany, 3Department of Diagnostic Radiology and Neuroradiology, University Medicine Greifswald, Greifswald, Germany, 4Department of SHIP/Clinical-Epidemiological Research, University Medicine Greifswald, Greifswald, Germany

M630 Default mode network sub-partitioning using deep-learning classification at the individual level
Víctor Noza1,2,3, Philippe Boutin1,2,3, Marie-Fatuye Guey4,2,3, Violaine Verrecchia1,2,3, Pierre-Yves Hervé1,2,3, Christophe Tzourio1,2,3, Bernard Mazoyer4,5,6, Marc Joliot4,5,6
1Ginesislab, Bordeaux, France, 2GIN, UMR5293, CEA, CNRS, Univ. Bordeaux, Bordeaux, France, 3Fealinx, Lyon, France, 4Bordeaux Population Health, U1219, INSERM, Univ. Bordeaux, Bordeaux, France

M631 Frequency Dependent Functional Connectivity Architecture in the Human Brain
Junji Ma1, Jinbo Zhang1, Ying Lin1, Zhengjia Dai1
1Department of Psychology, Sun Yat-sen University, Guangzhou, China

M632 Altered cerebro-cerebellar motor/cognition modules of functional connectivity in MSA-C but not SAOA
Xueyin Jiang1, Jennifer Faber1, Ilaria Giordano1, Christiane Kindler2, Annika Spotte2, Henning Boecker1, Thomas Klockgether3, Lukas Schee1
1DZNE, Bonn, Germany

M633 Impact of small parcellation changes on global and local brain connectivity metrics
Francesco Bottino1, Martina Lucignani1, Camilla Rossi Espagnoli2, Simone Gazzellini3, Daniela Longo4, Antonio Napolitano3
1Medical Physics Department, Bambino Gesù Children’s Hospital, Rome, Italy, 2Imaging Department, Bambino Gesù Children’s Hospital, Naples, Italy, 3Department of Neuroscience and Neurorehabilitation, Pediatric Hospital Bambino Gesù, Rome, Italy, 4Imaging Department, Bambino Gesù Children’s Hospital, Rome, Italy

M634 Spontaneous rs-fMRI activity within the hippocampus respects the classic hippocampal subfields
Laura Ezama Foronda1, Ernesto Pereda De Pablo1,2,4,5, Niels Janssen4,5
1Psychology Department, University of La Laguna, San Cristóbal de La Laguna, Spain, 2Department of Electrical Engineering & IUNE, University of La Laguna, San Cristóbal de La Laguna, Spain, 3Center of Biomedical Technology, UPM-UCM, Madrid, Spain, 4Institute of Biomedical Technologies, University of La Laguna, San Cristóbal de La Laguna, Spain, 5Institute of Neurosciences, University of La Laguna, San Cristóbal de La Laguna, Spain

M635 fMRI connectivity-derived graph metrics as biomarkers: assessing consistency and fingerprinting
Leonardo Tazzi1, Scott Fleming2, Cooper Rateink1, Zachory Taylor1, Leanne Williams1
1Stanford University, Stanford, CA, United States, 2University of Cincinnati, Cincinnati, OH, United States
M636 Rapid Reconfiguration of the Functional Connectome after Chemogenetic Locus Coeruleus Activation
Valerio Zerbì1, Amalia Floriau-Servou2, Marija Markicevic3, Yannick Vermeiren4, Oliver Sturman4, MattiaPrivitera5, Kim Ferrari5, Lukas von Ziegler1, Peter De Deyn4, Nicole Wenderoth1, Johannes Bahskecz4, ETH Zürich, Switzerland, 1ETH Zurich, Zurich, Switzerland, Institute of Neurochemistry and Behavior, University of Antwerp, Antwerp, Belgium, 3Laboratory of Neurochemistry and Behavior, Institute Born-Bunge, University of Antwerp, Antwerp, Belgium, 4ETH Zurich, Zurich, 5University of Zurich, Zurich, Switzerland, 6University of Antwerp, Antwerp, Belgium, 7ETH Zurich, Neural Control of Movement Laboratory, Zurich, Switzerland

M637 Visualization of Human Connectome in Stroke Syndromes
Jae-Sung Lim1, Choong-Wan Woo2, Jae-Joong Lee3, Mi Sun Oh3, Kyung-Ho Yu4, Byung-Chul Lee5
1Hallym University Sacred Heart Hospital, Anyang, Korea, Republic of, 2IBS Center for Neuroscience Imaging Research, Sungkyunkwan University, Suwon, Korea, Republic of, 3Seoul National University Bundang Hospital, Seongnam, Korea, Republic of

M638 Exploring relevant spatial scales for analysing brain network dynamics
Xenia Kabeleva1, Ane Lopez Gonzalez2, Morten Kringlebach3, Gustavo Deco4
1University Hospital Bonn/German Center for Neurodegenerative Diseases, Bonn, Germany, 2Universitat Pompeu Fabra, Barcelona, Spain, 3Department of Psychiatry, University of Oxford, Oxford, United Kingdom

M639 Brain functional network segregation and integration in patients with disorders of consciousness
Rajankant Pandey1, Jitka Annen1, Olivia Gasserie2, Athena Demertzis3, Charlotte Mrat3, Manon Carmire1, Charlene Aubin1, Jean-Flory Tshibanda4, Steven Loureys1
1Coma Science Group, GIGA Consciousness, University of Liège, Liège, Belgium, 2Coma Science Group, GIGA Consciousness, University of Liège, Liège, Belgium, 3GIGA Consciousness, University of Liège, Liège, Belgium, 4Neuroradiology Clinic, University and University Hospital of Liège, Liège, Belgium, 5Neuroradiology Clinic, University and University Hospital of Liège, Liège, Belgium, 6Neuroradiology Clinic, University and University Hospital of Liège, Liège, Belgium, 7Neuroradiology Clinic, University and University Hospital of Liège, Liège, Belgium

M640 Disruption of large-scale brain network dynamics across multiple addiction-related processes
Kathleen Garrison1, Rajita Sinha2, Marc Potenza3, Cheryl Lacadie1, Dustin Scheinost1
1University of Rome Tor Vergata, Rome, Italy, 2Martinos Center for Biomedical Imaging (MGH) and Harvard Medical School, Boston, MA, United States, 3Wayne State University School of Medicine, Detroit, MI, United States

M641 Altered connectomic measures in primary open angle glaucoma: a graph theoretical study
Silvia Minause1, Francesco Garaci2, Simone Altoebeil2, Alessio Martucci1, Simona Lanzaferme1, Francesca Di Giuliano1, Eliseo Picchi1, Massimo Cesareo1, Raffaele Mancino2, Roberto Fioris1, Carlo Nucci1, Nicola Toschi2
1University of Rome Tor Vergata, Rome, Italy, 2Martinos Center for Biomedical Imaging (MGH) and Harvard Medical School, Boston, MA, United States

M642 Can short-term neurobiological embedding of child maltreatment be detected in connectivity patterns?
Giorgia Picci1,2,3, Rachel Bernier4, Christine Heim5, Hannah Schreier6,7, Idan Shalev1,7, Chad Shenk1,7, Jennie Noll1,7,2, Emma Rose2,7,3
1Department of Development and Family Studies, Pennsylvania State University, University Park, PA, United States, 2Center for Healthy Children, University Park, PA, United States, 3Program for Translational Research on Adversity and Neurodevelopment, University Park, PA, United States, 4Department of Psychology, Pennsylvania State University, University Park, PA, United States, 5Department of Psychology, Pennsylvania State University, University Park, PA, United States, 6Center for Maltreatment Solutions Network, University Park, PA, United States

M643 Investigating homeostatic brain function: evidence for recursive property of the thermoregulatory NW
Ottó Múzkó1, Shahira Bajour2, Vaibhav Diwadkar3
1Wayne State University, Detroit, MI, United States, 2Wayne State University School of Medicine, Detroit, MI, United States, 3Wayne State University School of Medicine, Detroit, MI, United States

M644 Large-scale Dynamic Causal Modeling of Major Depressive Disorder based on Resting-state fMRI
Guoshu Li1, Yujie Li1, Yanting Zheng1, Li-Ming Hsu1, Han Zhang1, Dinggang Shen1
1Department of Radiology and BRIC, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States

M645 A Computational Model of the functional connectivity of the rodent brain
Ricardo Magalhães1, David Barrière2, Ashley Nelson1, João Sousa1, João Cerqueira1, Arnaud Cachia3, Thérese Jay4, Fawzi Boumezbeur5, Gustavo Deco1, Morten Kringlebach2, Sébastien Mériaux6, Nuno Sousa1, Joana Cabral1
1Life and Health Sciences Research Institute (ICVS) - School of Health Sciences, University of Minho, Braga, Portugal, 2NeuroSpin-CEA (Commissariat à l’Energie Atomique et aux Energies Alternatives), GIF-sur-Yvette, France, 3Université Paris Descartes, Paris, France, 4Physiopathologie des Maladies Psychiatriques, UMR_S 894 Inserm, Centre de Psychiatrie et Neurosciences, Paris, France, 5Université de Liège, Liège, Belgium, 6Université Libre de Bruxelles (ULB), Bruxelles, Belgium

M646 The localized genetic organization of fMRI functional connectivity
Aaron Alexander-Bloch1, Russel Poldrack2, Avram Holmes1, Ravindranath Duggirala3, Joanne Curran1, John Blangero2, David Glahn3
1Yale University, New Haven, CT, United States, 2Stanford, Palo Alto, CA, United States, 3Wayne State University School of Medicine, Detroit, MI, United States

M647 Dynamic causal modelling of effective connectivity during music perception
Massimo Lucca1, Peter Vuust2, Martin Dietz3
1Center for Music in the Brain, Aarhus University, Aarhus, Denmark, 2Center of Functionally Integrative Neuroscience, Aarhus University, Aarhus, Denmark

M648 Functional connectivity differences between cognitively impaired and non-impaired active fighters
Xiaowei Zhuang1, Virendra Mishra2, Zhengyi Yang3, Korthik Sreenivasar3, Charles Bernick1, Dietmar Cordes4
1Cleveland Clinic Lou Ruvo Center for Brain Health, Las Vegas, NV, United States

M649 Time-Variant Brain Connectivity and Volatility Models: Functional Neuroanatomy of Personality
Luca Passamonti1, Roberta Riccelli2, Iole Indovina3, Andrea Duggento4, Antonio Terracciano5, Nicola Toschi2
1Department of Clinical Neurosciences, University of Cambridge, Cambridge, United Kingdom, 2Department of University of Rome Tor Vergata, Rome, Italy, 3Santa Lucia Foundation, Rome, Italy, 4Department of Biomedicine and prevention, University of Rome “Tor Vergata”, Rome, VT, United States, 5Department of Geriatrics, Florida State University College of Medicine, Tallahassee, FL, United States, 6Martinos Center for Biomedical Imaging (MGH) and Harvard Medical School, Boston, MA, United States

M650 Sleep-dependent changes in resting state functional connectivity after topographical navigation
Michele Deantonio1, Thomas Villemonteix1, Evelyne Boiteau2, Philippe Peigneux2
1Université de Liège, Liege, Belgium, 2Université de Vincennes, Paris, France, 3GIGA Institute, Liège, Belgium, 4Université Libre de Bruxelles (ULB), Bruxelles, Belgium
M651 Molecular Mechanisms of Resting State Functional Networks in Postoperative Delirium Patients
Norman Zachariou1, Ganna Androsova2, Georg Winterer1, Reinhard Schneider2, Roland Krause2
1Charité – Universitätsmedizin Berlin, Berlin, Germany, 2University of Luxembourg - Luxembourg Centre for Systems Biomedicine (LCSB), Luxembourg, Luxembourg

M652 Delineating Brain Region- and Network-Level Factors Underlying the Pain-Cognition Relationship
Steven Anderson1, Joanna Witkin1, Taylor Bolt1, Maria Llabre1, Elizabeth Reynolds Losin1
1University of Miami, Miami, FL, United States, 2Emory University, Atlanta, GA, United States

M653 Performance of multivariate connectivity approaches using simulated fMRI data
Eshwar G. Ghumare1, Antonietta Gabriella Luzzi1, Karen Meersmans1, Rik Vandenberghel1, Patrick Dupont1
1Laboratory for Cognitive Neurology, Department of Neurosciences, KU Leuven, Leuven, Belgium

M654 Striatal connectivity gradients and their association with schizotypy in a non-clinical sample
Marianne Oldehinkel1, Jeggan Tiego1, Andre Marquand1, Koen Haak1, Christian Beckmann2, Alex Formenti1
1Monash University, Clayton, Australia, 2Donards Institute, Nijmegen, Netherlands

M655 The underlying causal neuronal dynamics of obesity and hunger state
Katharina Voigt1, Adeel Razi1, Ian Harding1, Antonio Verdejo-Garcia1
1Monash University, Melbourne, Victoria

M656 Functional Network Topology in Parkinson's Disease Patients with Mild Cognitive Impairment
Karthik Sreenivasarao1, Ece Bayram1, Sarah Banks1, Jason Longhurst1, Zhengshi Yang1, Xiaowei Zhuang1, Dietmar Cordes1, Aaron Ritter1, Jessica Caldwell1, Brent Bluet1, Virendra Mishra1
1Cleveland Clinic Lou Ruvo Center for Brain Health, Las Vegas, NV, 2University of California, San Diego, La Jolla, CA, United States, 3Stanford University, Stanford, CA, United States

M657 Claustroph Functional Connectivity in Parkinson's Disease Patients with Mild Cognitive Impairment
Karthik Sreenivasarao1, Ece Bayram1, Sarah Banks1, Jason Longhurst1, Zhengshi Yang1, Xiaowei Zhuang1, Dietmar Cordes1, Aaron Ritter1, Jessica Caldwell1, Brent Bluet1, Virendra Mishra1
1Cleveland Clinic Lou Ruvo Center for Brain Health, Las Vegas, NV, 2University of California, San Diego, La Jolla, CA, United States, 3Stanford University, Stanford, CA, United States

M658 Multi-Scale Network Regression: A New Low-Rank And Sparse Multivariate Connectivity Analysis Method
Cedric Huchuan Xia1, Zongming Ma2, Danielle Bassett1,2,3,4,5,6, Theodore Satterthwiate1, Russell Shinohara1, Daniela Witten2,9
1Department of Psychiatry, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA, United States, 2Department of Statistics, The Wharton School, University of Pennsylvania, Philadelphia, PA, United States, 3Department of Bioengineering, School of Engineering and Applied Science, University of Pennsylvania, Philadelphia, PA, United States, 4Department of Electrical and Systems Engineering, School of Engineering and Applied Science, University of Pennsylvania, Philadelphia, PA, United States, 5Department of Physics & Astronomy, College of Arts & Sciences, University of Pennsylvania, Philadelphia, PA, United States, 6Department of Biostatistics, Epidemiology, and Informatics, Perelman School of Medicine, University, Philadelphia, PA, United States, 7Department of Biostatistics, College of Arts and Sciences, University of Washington, Seattle, WA, United States, 8Department of Biostatistics, School of Public Health, Seattle, WA, United States

M659 Individual and group-level multivariate resting state fMRI profiles in vascular cognitive impairment
Derek Beaton1, Mojdeh Zamzad1, Stephen Arnott1, Robert Bartha1, Jennifer Mandzia2, Christopher Scott3, Richard Swartz2, Stephen Strather1,3
1Rotman Research Institute, Baycrest Health Sciences, Toronto, ON, Canada, 2Robarts Research Institute, London, ON, Canada, 3Western University, London, ON, Canada, 4Sunnybrook Health Sciences, Toronto, ON, Canada, 5University of Toronto, Toronto, ON, Canada

M660 Evaluation of Effective Connectivity of Driving Performance Using Dynamic Casual Modeling
Ji-Hun Je1, Hyung-Sik Kim1, Mi-Hyun Choi1, Soon-Cheol Chung2
1Konkuk University, Chungju, Chungcheongbuk-do

M661 Dynamic functional connectivity states in the resting-state are correlated with pain thresholds
Yueming Yuan1, Li Zhang1, Fei Tang2, Lining Li2, Gan Huang1, Zhiguo Zhang2
1School of Biomedical Engineering, Health Science Center, Shenzhen University, Shenzhen, China, 2Guangdong Provincial Key Laboratory of Biomedical Measurements and Ultrasound Imaging, Shenzhen, China

M662 Functional gradients of the human subcortex
Ye Tian1, Andrew Zolesky1
1University of Melbourne, Melbourne, Australia

M663 The dynamics of the improving brain: a study of musical creativity
Patricia Alves da Mota1, Henrique Fernandes1,2, Angus Stever1,2, Olie Heggi1, Nuno Sousa1, Joana Cabral1,2, Peter Vuust1, Morten Kringelbach1
1Center for Music in the Brain, Department of Clinical Medicine, Aarhus University, Aarhus, Denmark, 2Department of Psychiatry, University of Oxford, Oxford, United Kingdom, 3Life and Health Sciences Research Institute (ICVS) - School of Health Sciences, University of Minho, Braga, Portugal

M664 Disruptions in functional connectivity of the insular subdivisions in suicidal military veterans
Jadwiga Rogowska1, Margaret Legarreta1, Chandni Seth1,2, Charles Bueler1, Erin McGlade1,2, Deborah Yurgelun-Todd1,2,3
1The Brain Institute, University of Utah, Salt Lake City, UT, United States, 2Department of Psychiatry, University of Utah, Salt Lake City, UT, United States, 3VISN 19 MIRECC, Salt Lake City, UT, United States

M665 Reliability of dynamic network reconfiguration: impact of data length and cognitive state
Zheng Yang1, Qawi Telesford2, Alexandre Franco2, Shi Gu1, Lei AP1, Ting Xu1, Chaogan Yao1, Stan Colcombe1, Michael milham1,2
1Nathan Kline Institute for Psychiatric Research, Orangeburg, NY, United States, 2Child Mind Institute, New York, NY, United States, 3University of University of Electronic Science and Technology of China, Chengdu, China, 4Chinese Academy of Sciences, Beijing, China

M666 Inferring whole-brain effective connectivity from fMRI data
Stefan Frassle1, Ekaterina Lomakina1,2, Cao Do1, Lars Kasper1, Zina Manjaly4, Klaas Pruissen1, Albert Powers1, Joachim Buhmann1, Klaas Stephan1,5
1Translational Neuromodeling Unit, University of Zurich and ETH Zurich, Zurich, Switzerland, 2Department of Computer Science, ETH Zurich, Zurich, Switzerland, 3Institute for Biomedical Engineering, ETH Zurich and University of Zurich, Zurich, Switzerland, 4Department of Neurology, Schulthess Clinic, Zurich, Switzerland, 5Department of Psychiatry, Yale University School of Medicine, New Haven, CT, United States, 6Wellcome Trust Centre for Neuroimaging, University College London, London, United Kingdom
M667 A Whole Brain Approach to Study Altered Functional Connectivity in Gliomas
Erica Silvestri1,2, Manuela Moretto2,3, Marco Castellaro1,2, Silvia Facchin1,2, Elena Monari1,2, Domenico D’Avello2,3, Diego Cecchin1,2, Alessandro Della Puppa4, Maurizio Corbetta2,3,4, Alessandra Bertoldo2
1Department of Information Engineering, University of Padova, Padova, Italy, 2Padova Neuroscience Center, University of Padova, Padova, Italy, 3Department of Information Engineering, University of Padova, Padova, Italy, 4Department of Neuroscience, University of Padova, Padova, Italy, 5Department of Nuclear Medicine, University of Padova, Padova, Italy, 6Neurosurgery Unit, University Hospital, Padova, Italy, 7Department of Neuroscience, University of Padova, Padua, Padua, Italy, 8Departments of Neurology, Radiology, Neuroscience, Washington University School of Medicine, St. Louis, MO, United States

M668 Can resting-state connectivity inform about the induced effects of local brain stimulation?
Leonardo Gallo1, James Roberts2, Luke Hearne1, Jason Mattingley1, Michael Breakspear1, Luca Cocchi1
1QIMR Berghofer, Brisbane, Australia, 2QIMR Berghofer Medical Research Institute, Brisbane, Australia, 3The University of Queensland, Brisbane, Queensland, 4University of Queensland, Brisbane, QLD, 5QIMR Berghofer Medical Research Institute, Brisbane, Australia

M669 Discovering and Characterizing Dynamic Functional Brain Networks
Bao Ge1, Panpan Wang1, Huan Wang1
1Shaanxi Normal University, Xi’an, China

M670 Resting State Analysis in Multiorgan Failure Reveals Default Mode Network hyperconnectivity
Antonio Jimenez-Marín1, Diego Rivero1, Victoria Boado1, Ibai Diez2, Fermin Labayen3, Iraí Garrido4, Daniela Ramos-Usguo5, Javier Rasero2, Alberto Cabrera-Zubizarreta2, Iñigo Gabilondo2, Sebastiano Stramaglia6, Juan Carlos Arango Lasprilla7, Jesús M. Cortes1
1Biocruces - Bzkia Health Research Institute, Barakaldo, Spain, 2Biocruces Bzkia Health Research Institute, Barakaldo, Spain, 3Cruces University Hospital, Barakaldo, Spain, 4Massachusetts General Hospital, Harvard Medical School, Boston, MA, United States, 5Biocruces Health Research Institute, Barakaldo, Spain, 6OSATEK, MR Unit, Hospital of Galdakao, Bilbao, Bizkaia, 7Dipartimento Interateneo di Fisica, Universita di Bari, Bari, Italy

M671 Differential topological property of brain functional networks during pain and touch processing
Silja Wang1, Qiong Su2, Meng Liang1
1Tianjin Medical University, Tianjin, China

M672 Dynamic Frontostriatal Peak Connectivity in Alcohol Use Disorder
Martin Fungisai Gerchen1, Franziska Weiss1, Patrick Hall1, Falk Kieler1, Peter Kirsch1
1Central Institute of Mental Health, Mannheim, Germany, 2University of Heidelberg, Mannheim, Germany

M673 Interaction Information Along Lifespan Reveals a Redundant Role of the Default Mode Network
Bonja Camino-Pontes1, Ibai Diez2, Antonio Jimenez-Marín2, Javier Rasero2, Asier Erramuzpe3, Paolo Bonifazi1, Sebastiano Stramaglia4, Stephan Swinnen4, Jesús M. Cortes1
1Biocruces Bzkia Health Research Institute, Barakaldo, Spain, 2Biocruces Bzkia Health Research Institute, Barakaldo, Spain, 3Massachusetts General Hospital, Harvard Medical School, Boston, MA, United States, 4Biocruces - Bzkia Health Research Institute, Barakaldo, Spain, 5Biocruces Health Research Institute, Barakaldo, Spain, 6The Edmond and Lily Safra Center for Brain Sciences, Hebrew University of Jerusalem, Jerusalem, Israel, 7Dipartimento Interateneo di Fisica, Universita di Bari, Bari, Italy, 8KU Leuven, Leuven, Belgium

M674 Structure-function multi-scale connectomics is an accurate predictor of brain aging
Paolo Bonifazi1, Asier Erramuzpe3, Ibai Diez2, Iñigo Gabilondo2, Matthieu P. Boisgontier3, Lisa Pawełsz2, Sebastiano Stramaglia4, Stephan Swinnen4, Borja Camino-Pontes1, Antonio Jimenez-Marín2, Jesús M. Cortes1
1Biocruces Bzkia Health Research Institute, Barakaldo, Spain, 2The Edmond and Lily Safra Center for Brain Sciences, Hebrew University of Jerusalem, Jerusalem, Israel, 3Massachusetts General Hospital, Harvard Medical School, Boston, MA, United States, 4Group Biomedical Sciences, KU Leuven, Leuven, Belgium, 5KU Leuven, Leuven, Belgium, 6Biocruces HRI, Barakaldo, Spain, 7Biocruces - Bzkia Health Research Institute, Barakaldo, Spain

M675 Structural embedding of human brain activity using harmonic decomposition shows behavioral relevance
Maria Giulia Pretti1, Dimitri Van De Ville1
1EPFL / University of Geneva, Genève, Switzerland

M676 Brain Network Segregation and Integration During an fMRI Pain Experiment
Gránit Kastrat1, William Hedley Thompson2, Björn Schifferli1, Peter Fransson3, Karin Jensen1
1Karolinska Institutet, Stockholm, Sweden, 2Stanford University, Palo Alto, CA, United States

M677 Changes in functional connectivity before and after surgery in patients with postoperative delirium
Jooyoung Oh1, Jung Eun Shin2, Sungyong Kyeong2, Woo Suk Lee2, Kyu Hyun Yang2, Tae-Sub Chung3, Jae-Jin Kim4
1Yonsei University, College of Medicine, Seoul, Korea, Republic of, 2Yonsei University College of Medicine, Seoul, Korea, Republic of

M678 Ketamine-induced alterations in brain functional connectivity and their reversal by risperidone
Giusla Forcellini1, Arnaud Chari1, Adam Schwarz2,3,5, Joaquin Goni1, Angelo Bifone1,2
1Center for Neuroscience and Cognitive Systems, Istituto Italiano di Tecnologia, Rovereto (TN), Italy, 2Center for Mind/Brain Sciences, University of Trento, Trento, Italy, 3El Lilly and Company, Indianapolis, IN, United States, 4Takeda Pharmaceutical Ltd., Cambridge, MA, United States, 5Department of Psychological and Brain Sciences, University of Indiana, Bloomington, IN, United States, 6Department of Radiology and Imaging Sciences, Indiana University School of Medicine, Indiana University – Purdue University Indianapolis, Indianapolis, IN, United States, 7School of Industrial Engineering & Weldon School of Biomedical Engineering, Purdue University, Lafayette, IN, United States, 8Department of Molecular Biotechnology and Health Sciences, University of Torino, Torino, Italy

M679 Impact of brain parcelation on parameter optimization of the whole-brain dynamical models
Thanas Manos1,2, Sandra Diaz-Pier1,4, Felix Hoffstaedter1,4, Jan Schreiber1, Alexander Peyser3,4, Simon B. Eickhoff1,2, Oleksandr Popovyč1,2
1Institute of Neuroscience and Medicine (INM-7), Research Centre Julich, Jülich, Germany, 2Institute for Systems Neuroscience, Medical Faculty, Heinrich-Heine University, Düsseldorf, Germany, 3SimLab Neuroscience, Institute for Advanced Simulation, Research Centre Julich, Jülich, Germany, 4Julich Supercomputing Centre (JSC), Research Centre Julich, JARA, Jülich, Germany, 5Institute of Neuroscience and Medicine (INM-7), Research Centre Julich, Jülich, Germany

M680 Amygdala Functional Connectivity in Depression – Disentangling Pathology, Risk, and Resilience
Carolin Wackerhagen1, Ilya Veer1, Susanne Erk1, Torsten Wüstenberg2, Sebastian Mohlke1, Tristram Lett1, Nina Romanzuk-Seiferth1, Kristina Schwarz2, Janina Schweiger3, Heike Tost1, Andreas Meyer-Lindenberg1, Nina Romanczuk-Seiferth1, Kristina Schwarz2, Janina Schweiger3, Heike Tost1, Andreas Meyer-Lindenberg1, Martin Fungisai Gerchen1, Franziska Weiss1, Patrick Hall1, Falk Kieler1, Peter Kirsch1
1Institute of Neuroscience and Medicine (INM-7), Research Centre Julich, Jülich, Germany, 2Institute of Medical Psychology, University of Bonn, Bonn, Germany, 3Center for Neuroscience and Cognitive Systems, Istituto Italiano di Tecnologia, Rovereto (TN), Italy, 4Biocruces - Bizkaia Health Research Institute, Barakaldo, Spain

To view full abstract text and ePosters, visit ww5.aievolution.com/hbm1901
M681 Brain functional connectivity asymmetry: left hemisphere is more modular
Jaroslav Hlinka1,2, David Tomecek2, Jaroslav Tintere2, Filip Spanielf, Jiri Horacek2
1Institute of Computer Science, The Czech Academy of Sciences, Prague, Czech Republic, 2National Institute of Mental Health, Kiekany, Czech Republic

M682 Morphometric Similarity Network Construction Approaches with Restricted MR Sequences
Daniel King1, Amanda Wood2
1School of Life and Health Sciences & Aston Brain Centre, Aston University, Birmingham, United Kingdom, 2Brain and Mind, Clinical Sciences, Murdoch Children’s Research Institute, Melbourne, Australia

M683 Dynamic functional connectivity states during rest estimated from a surface and window-less approach
Remain Viard1,2, Morgan Gautherat1,2, Gregory Kuchinsky1,2, Jean-Pierre Pruvo1,2, Xavier Leclerc1,2, Renaud Lopes1
1University of Lille, CHU Lille, Department of Neuroradiology, Lille, France, 2Univ. Lille, Inserm, CHU Lille, U1171 - Degenerative & Vascular Cognitive Disorders, Lille, France

M684 Hemispheric Difference in Group, Task and Individual-dependent Variation of Functional Networks
Chenxi Zhao1, Yaya Jiang1, Xinhu Jer1, Gaolang Gong1
1Beijing Normal University, Beijing, China

M685 Resting-state functional connectivity dynamics as biomarkers for post-stroke recovery
Chiara Favaretto1, Maurizio Corbetta1, Gustavo Deco2, Loren Kocillari3
1University of Padua, Padua, Italy, 2Universitat Pompeu Fabra, Barcelona, Spain, 3University of Padua, Ferrara, Italy

M686 A Reliability Analysis of Spectral DCM of the core DMN for Large Homogeneous Groups of Subjects
Alexander Silchenko1, Felix Hoffstaedter1, Oleksandr Popovych1, Simon B. Eickhoff1
1Forschungszentrum Jülich, Jülich, Germany

M687 EEG microstate features predict BOLD-fMRI dynamic functional connectivity states
Rodolfo Abreu1, Jöns Jorde3, Alberto Leal3, Patricia Figueiredo1
1ISR-Lisboa/LARSyS and Dept. Bioengineering, Instituto Superior Técnico – Universidade de Lisboa, Lisboa, Portugal, 2Laboratory for Functional and Metabolic Imaging, École Polytechnique Fédérale de Lausanne, Lausanne, Switzerland, 3Department of Neurophysiology, Centro Hospitalar Psiquiátrico de Lisboa, Lisboa, Portugal

M688 Intrinsinc network interactions explain individual differences in mentalizing ability in adolescents
Mariet van Buuren1, Iris Vegting1, Reubs Walsh2, Hester Sijtsma1, Miriam Hollarek1, Nikki Lee1, Lydia Krabbendam1
1Institute for Brain and Behavior Amsterdam, Vrije Universiteit Amsterdam, Amsterdam, Netherlands, 2Vrije Universiteit Amsterdam, Amsterdam, Netherlands

M689 Classification of epileptic states from fMRI dynamic functional connectivity using machine learning
Joana Carmo1, Rodolfo Abreu1, Carlos Santiago2, Alberto Leal3, Jacinto C. Nascimento2, Patricia Figueiredo1

M690 Elaboration Benefits Source Memory Encoding Through Centrality Changes
Ingem Arnt1, Markus Sneve1, Didac Vidal-Pineiro2, Kristine Walhovd3, Anders Fjell4
1Universitetet i Oslo, Blindern, Norway, 2Centre for Lifespan Changes in Brain and Cognition, Department of Psychology, Oslo, Norway, 3University of Oslo, Norway, 4Centre for Lifespan Changes in Brain and Cognition, Department of Psychology, University of Oslo, Oslo, Norway

M691 Characterization of brain connectivity patterns of MCI patients in comparison to healthy elderly
Laia Farrats-Permanye1, Núria Mancho-Fora1, Marc Montaló-Fiator1, Geisa Beantz Gallardo-Moreno1, Daniel Zarabozo-Hurtado2, Estve Gudayol-Feré1, Maribel Peró-Cebollero1, Joan Guardia-Olmos3
1Universitat de Barcelona, Barcelona, Spain, 2Instituto de Neurociencias, Guadalajara, Jalisco, 3Clínica Grupo Río, Guadalajara, Jalisco, 4Universidad Michoacana of San Nicolás de Hidalgo, Morelia, Mexico

M692 Default mode network dynamics predict sequences of cognitive states during naturalistic stimulation
Tatia Brandman1, Rafael Malach1, Erez Simony2,1
1Weizmann Institute of Science, Rehovot, Israel, 2Holon Institute of Technology, Holon, Israel

M693 The effect of global signal regression on DCM estimates of resting state fMRI connectivity
Hannes Almgren1, Frederik Van de Steen2, Simone Kuhn2, Adeel Razi3, Karl Friston5, Daniele Marinazzo5
1Mediterranean Institute of Mental Health, Klecany, Czech Republic, 2National Institute of Mental Health, Gothenburg, Sweden, 3Department of Cognitive Neuroscience, Radboud University Medical Center, Nijmegen, Netherlands, 4Monash University, Melbourne, Victoria, 5University College London, London, United Kingdom

M694 Time-varying Simultaneous EEG/fMRI Functional Networks of Encoding the Meaning of Novel Words
Isi Poyraz Bilgin1, Douglas James Saddy1, Slawomir Jaroslaw Nasuto1
1University of Reading, Reading, Berkshire

M695 Resting State fMRI: The Stability of Functional Connectivity
Yuxing Hao1, Fengyu Cong1, Huanjie Li2
1Dalian University of Technology, Dalian, China, 2Dalian University of Technology, Dalian, China

M696 Somatosensory Maps to Sensory Profiles in ASD: a Normative Gradient Mapping
Chiara Favaretto1, Maurizio Corbetta1, Gustavo Deco2, Loren Kocillari3
1University of Padua, Padua, Italy, 2Universitat Pompeu Fabra, Barcelona, Spain, 3University of Padua, Ferrara, Italy

M697 Structural and functional brain correlates of disinhibition in young heavy alcohol users
Carl Delfin1, Hanna Clara Gustafsson1, Linnea Huld1, Miriam Hermansson2, Marta Wallinlin1, Peter Andiné1, Malin Björnsdotter1
1Institute of Neuroscience and Physiology, Gothenburg, Sweden, 2Department of Psychology, Gothenburg, Sweden, 3Department of Clinical Psychology Lund, Lund, Sweden
M698 Brain Hierarchical Atlas: Multi-Scale versus Optimal Strategies in the Pathological Brain

Jesús M. Cortés1,2, Paolo Bonifazi1,2, Ilakí Escudero3, Beatriz Mateos3, Miguel Angel Muñoz2, Sebastiano Stramaglia2,3, Jesus M. Cortés1, Borja Camino-Pontes4, Antonio Jimenez-Manzin5, Javier Rasero6, Asier Erramuzpe7,8, Stephan Swinnen9, Iñigo Gabaldón10, Mattheus P. Boisgontier11, Lisa Pauwels12, Laiene Olobatarie-Lendar4, Manuel Fernandez Martinez4, Juan Carlos Arangau Lasprilla13, David Drijkingen14, Daniele Mannazza15, Jolien Goojers16, Ibai Diez17

1Biocruces Bizkaia Health Research Institute, Barakaldo, Spain, 2Institute Carlos I for Theoretical and Computational Physics, Granada, Spain, 3Dipartimento Interateneo di Fisica, Università di Bari, Bari, Italy, 4Biocruces - Bizkaia Health Research Institute, Barakaldo, Spain, 5Biocruces Health Research Institute, Barakaldo, Spain, 6The Edmond and Lily Safra Center for Brain Sciences, Hebrew University of Jerusalem, Jerusalem, Israel, 7KU Leuven, Leuven, Belgium, 8Group Biomedical Sciences, KU Leuven, Leuven, Belgium, 9KU Leuven, Leuven, BELGIE, 10Ghent University, Ghent, Belgium, 11Massachusetts General Hospital, Harvard Medical School, Boston, MA, United States

M702 Default or not default? Resting state network connectivity correlates with learning success

Roberta Passiante1, Linda Antonucci1, Sabine Bierstedt2, Boris Suchan3, Giulio Pergola4

1University of Rome Tor Vergata, Rome, Italy, 2Department of Medical Sciences, Neuroscience and Sense Organs - University of Bari Aldo Moro, Bari, Italy, 3Department of Psychiatry and Psychotherapy Ludwig-Maximilians Universität, Munich, Germany, 4University of Bari Aldo Moro, Bari, Italy, 5Institute of Cognitive Neuroscience, Clinical Neuropsychology, Ruhr University Bochum, Bochum, Germany, 6Lieber Institute for Brain Development, Johns Hopkins Medical Campus, Baltimore, MD, United States

M707 Evidence of whole body networks: Task-related BOLD oscillations in the brain and the periphery

J-Ning Tang1,2, Yun-An Huang3, Jyh-Hong Chen4,5,6,7

1Interdisciplinary MRI/MRS Lab, Department of Electrical Engineering, Taipei, Taiwan, 2Laboratory for Translational Neuropsychiatry, Department of Neuroscience, KU Leuven, Leuven, Belgium, 3Department of Electrical Engineering, National Taiwan University, Taipei, Taiwan, 4Department of Neurology, National Taiwan University Hospital, Taipei, Taiwan, 5Department of Neurology, National Taiwan University Hospital Yunlin Branch, Yunlin, Taiwan

M709 Modularity and Flexibility Quantify Unique Perceptions of Music and Speech in the Human Brain

Molina Bonom1,2, Christof Karmonik1,2, Anthony Brant3, Jefferson Frazer4, Michael Deem5,6,7

1Rice University, Houston, TX, United States, 2Houston Methodist, Houston, TX, United States, 3Weill Cornell Medical College, New York, NY, United States

M710 Causal Relationships between Neuromodulatory Centers and DMN regions

Seflberto De la Cruz1, Andy Schumann2, Stefanie Köhler1, Gerd Wagner1, Karl-Jürgen Bar1

1Jena University Hospital, Jena, Germany

M712 Network Topology of the Mesoscale Marmoset Connectome

Zhen-Qi Liu1, Ying-Qiu Zheng1, Bratislav Misić1

1McConnell Brain Imaging Centre, Montreal Neurological Institute, McGill University, Montreal, Quebec, Canada

M713 The glucose metabolism of central brain network nodes

Alessandro Palomba1,2, Marco Atelea3, Valentín Riedt4, Maurizio Corbetta5,6, Alessandra Bertoldo1,2

1Dept. of Information Engineering, University of Padova, Padova, Italy, 2Padova Neuroscience Center, Padova, Italy, 3NAPLAB - SDN, NeuroAnatomy and image Processing, Laboratory of Computational Neurosciences, Padova, Italy, 4Department of Neurosurgery, Technische Universität München, Munich, Germany, 5Department of Neuroscience, University of Padova, Padova, Italy, 6Departments of Neurology, Radiology, Neuroscience, Washington University School of Medicine, St. Louis, MO, United States
M714 Impact of Autocorrelation in Resting-State Functional Connectivity
Soroosh Afyouni1, Stephen Smith2, Thomas Nichols1
1University of Oxford, Oxford, United Kingdom, 2FMRIB, Wellcome Centre for Integrative Neuroimaging, University of Oxford, Oxford, United Kingdom

M715 Are Functional Connectivity-based Canonical Brain Network Configurations Metric-dependent?
Rosaleena Mohanty1, William Sethares2, Veena Nair3, Vivek Prabhakaran1
1University of Wisconsin-Madison, Madison, WI, United States, 2University of Wisconsin - Madison, Madison, WI, United States

M716 Searching the optimal threshold: comparison of different topological filtering schemes
Li-Zhi Cao1, Hao-Ming Dong2, Chao Jiang3, Quan Zhou1, Xi-Nian Zhu1
1Institute of Psychology, Chinese Academy of Sciences, Beijing, China

M717 Changes in resting state networks in cocaine addicts after rTMS treatment on the left DLPCF
Sofia Fernandez-Lozano1,2, Ruth Alcalá-Lozano1, Sarael Alcater1, Viviana Villicaña-Muñoz2, Jorge Gonzalez-Olvera1, Eduardo Garza-Villarreal3
1Instituto Nacional de Psiquiatria, Mexico city, Mexico, 2Universidad Nacional Autonoma de Mexico, Mexico city, Mexico, 3Universidad Nacional Autonoma de Mexico, Queretaro, Qro, 4University Anahuac Mexico Sur, Mexico city, Mexico, 5Aarhus University, Aarhus, Denmark

M718 Modulating functional connectivity during motor imagery using rt-fMRI connectivity neurofeedback
Yahia Madkhali1, Salim Al-wasty1, Stefan Vogt2, Frank Pollick1
1University of Glasgow, Glasgow, United Kingdom, 2Lancaster University, Lancaster, United Kingdom

M719 Childhood trauma and polygenic risk for schizophrenia risk project on nucleus accumbens connectivity
Christopher Eberle1, Darina Czamara1, Michael Czisch1, Elisabeth Binder1, Philipp Sämann1
1Max Planck Institute for Psychiatry, Munich, Germany

M720 Age-derived Brain Network Destabilization May Reflect Early Warning Signs of Neurometabolic Stress
Anar Amsgalan1, Syed Fahad Sultani1, Steven Skieno1, Lilianne Mujica-Parodi2
1Stony Brook University, Stony Brook, NY, United States

M721 Differential Effects of Trait Empathy on Functional Network Centrality
Changes in resting state networks in cocaine addicts after rTMS treatment on the left DLPFC
Sofia Fernandez-Lozano1,2, Ruth Alcalá-Lozano1, Sarael Alcater1, Viviana Villicaña-Muñoz2, Jorge Gonzalez-Olvera1, Eduardo Garza-Villarreal3
1Instituto Nacional de Psiquiatria, Mexico city, Mexico, 2Universidad Nacional Autonoma de Mexico, Mexico city, Mexico, 3Universidad Nacional Autonoma de Mexico, Queretaro, Qro, 4University Anahuac Mexico Sur, Mexico city, Mexico, 5Aarhus University, Aarhus, Denmark

M722 Connector hub mental illness symptoms are predicted by the functional connectivity of connector hubs
Maxwell Bertolero1, Graham Baum1, Monica Calkins1, Raquel Gur1, Ruben Gur2, Theodore Satterthwaite1, Danielle Bassett2
1University of Pennsylvania, Philadelphia, PA, United States

M723 Aberant functional connectivity profiles of the AIC and PIC as core markers of depression
Vanessa Teckentrup1, Tilo Kircher2, Axel Krug2, Igor Nenadic2, Dominik Grotegerd2, Udo Dannlowski1, Martin Walter2,3, Nils Kroemer2
1University of Tübingen, Tübingen, Germany, 2University of Marburg, Marburg, Germany, 3University of Münster, Münster, Germany, 4University of Magdeburg, Magdeburg, Germany, 5Leibniz Institute for Neurobiology, Magdeburg, Germany, 6Clinical Affective Neuroimaging Laboratory, Tübingen, Germany

M724 Tools and methods for integrative analysis in network neuroscience
Mikail Rubinov
1Vanderbilt University, Nashville, TN, United States

M725 Development of network topology and functional connectivity of the prefrontal cortex
Katherine Lopez1, Scott Marek1, Siddhar Kandakal1, Deanna Barch1
1Washington University in St Louis, St Louis, MO, United States, 2Washington University in St. Louis, Saint Louis, MO, United States

M726 Long term brain functional connectivity changes after neonatal ischemic stroke: a rs-fMRI study
Lucie Hertz-Pannier1,2, Dhaif Bekhar1, David Germainda1,2, Laure Drute1, Cyrille Renaud1, Manoeile Kossorottot1,2, Mickael Dinomais1,2, Stephane Chabrier1, Sylvie NGuyen The Tich1
1CEA, Gif-sur-Yvette, France, 2Neurospin, Gif sur Yvette, France, 3CHU Angers, Angers, France, 4CHU St Etienne, St Etienne, France, 5CHU Necker Enfants malades, Paris, France, 6Laboratoire Angervier de Recherche en Ingénierie des Systèmes (LARIS), Angers, France, Angers, France, 7CHRU Lille, Lille, France

M727 Arousal Level-Dependent Resting State fMRI Connectivity Coupled with Pupil Behavior
Kangjoo Lee1,2, Corey Horien1, Dave O’Connor1, Evelyn Lake1, Dustin Scheinost1, R. Todd Constable1,2,6
1Dept of Radiology and Biomedical Imaging, Yale University School of Medicine, New Haven, CT, United States, 2Interdepartmental Neuroscience Program, Yale University School of Medicine, New Haven, CT, United States, 3Dept of Biomedical Engineering, Yale University, New Haven, CT, United States, 4The Child Study Center, Yale University School of Medicine, New Haven, CT, United States, 5Dept of Neurosurgery, Yale University School of Medicine, New Haven, CT, United States

M728 Integrating Structural and Effective Connectivity
Arseny Sokolov1,2, Peter Zeidman1, Adeel Razi1,4, Michael Erb1, Philippe Ryvlin2, Marina Pavlova2, Karl Friston1
1University College London, London, United Kingdom, 2Centre Hospitalier Universitaire Vaudois, Lausanne, Switzerland, 3Monash University, Melbourne, Victoria, 4NED University of Engineering and Technology, Karachi, Pakistan, 5University of Tuebingen, Tuebingen, Germany

M729 Effective connectivity in a “duration selective” cortical network
Foteini Protopapa1, Masamichi Hayashi2, Ryota Kanai3, Domenica Bueti2
1International School for Advanced Studies (SISSA), Trieste, Italy, 2Global Center for Medical Engineering and Informatics, Osaka University, Suita, Japan, 3School of Psychology, University of Sussex, Brighton, United Kingdom, 4Sackler Centre for Consciousness Science, University of Sussex, Brighton, United Kingdom, 5Araya, Inc., Tokyo, Japan

M730 Investigating Preprocessing Strategy Effects on Hub Disruption Index for Human RS-fMRI Data
Lejian Huang1, Lili Yang2, Bo Wu2, Apkar Akparian1
1Northwestern University, Chicago, IL, United States, 2the Second Affiliated Hospital and Yuying Children’s Hospital of Wenzhou Medical University, Wenzhou, China

M731 Tri-clustering of dynamic functional connectivity
Md Rahman1, Eswar Damaraju2, Vince Calhoun2
1The mind research Network at University of New Mexico, Albuquerque, NM, United States, 2The Mind Research Network, Albuquerque, NM, United States
M732 Large-scale brain networks underlying domain-specific memory, intelligence, and academic traits
Katherine Battenhorn1, Jessica Bartley2, Michael Riede2, Taylor Salo1, Elsa Bravo1, Rosalie Odean1, Alina Nazareth1, Robert Laird1, Shannon Prudent1, Matthew Sutherland1, Eric Brewe1, Angela Laird1, 1Department of Psychology, Florida International University, Miami, FL, United States, 2Department of Psychology, Temple University, Philadelphia, PA, United States, 3Department of Psychology, Drexel University, Philadelphia, PA, United States

M733 Aberrant effective connectivity in first-episode schizophrenia correlates with positive symptoms
Martin Dietz1, Yuan Zhou1, Lotte Veddem1, Christopher Frith1, Vibeke Bliksted2, 1Center of Functionally Integrative Neuroscience, Aarhus University, Aarhus, Denmark, 2Institute of Psychology, Chinese Academy of Sciences; Beijing Anding Hospital, Beijing, China

M734 Temporal community detection via trajectory clustering identifies fluctuating brain networks
William Hedley Thompson1, Russell Poldrack1, 1Stanford, Palo Alto, CA, United States

M735 Reorganization of Functional Hubs during Non-Rapid Eye Movement Sleep after Sleep Deprivation
Kangjoo Lee1,2, Jode Jegou1, Florencia B. Pomares3,5, Nathan Cross3,5,6, Aurore A. Perrault5,6, Alex Nguyen7,8,9, Umit Aydin1,4,5, Christophe Grova1,2,4, 1Multimodal Functional Imaging Lab., Dept of Physics and PERFORM Centre, Concordia University, Montreal, QC, Canada, 2Institute of Physiology, University of Geneva, Geneva, Switzerland, 3Vanderbilt University, Nashville, TN, United States, 4A. A. Martinos Center for Biomedical Imaging, MGH and Harvard Medical School, Charlestown, Boston, MA, United States, 5Geneva Neuroscience Center, Department of Neuroscience, University of Geneva, Geneva, Switzerland, 6Ecole Polytechnique Fédérale de Lausanne (EPFL), Lausanne, Switzerland, 7EPFL, School of Life Sciences, Centre for Neuroinformatics and Cognitive Neuroimaging, Laboratory of Neuroimaging and Informatics, Lausanne, Switzerland, 8Rosalind Franklin University, Chicago, IL, United States, 9University of Chicago, Chicago, IL, United States

M736 Resting-State “Physiological” Networks
Jingyuan Chen1, Laura Lewis2, Catie Chang3, Nina Fultz2, Ned Ohringer2, Bruce Rosen2, Jonathan Polimeni1, 1A. A. Martinos Center for Biomedical Imaging, Harvard Medical School, Massachusetts General Hospital, Charlestown, Boston, MA, United States, 2Boston University, Boston, MA, United States, 3Vanderbilt University, Nashville, TN, United States, 4A. A. Martinos Center for Biomedical Imaging, Massachusetts General Hospital, Boston, MA, United States, 5Department of Radiology, A. A. Martinos Center for Biomedical Imaging, MGH and Harvard Medical School, Charlestown, Boston, MA, United States

M737 Modeling brain dynamics after tumor resection using The Virtual Brain
Honnielore Aerts1, Rik Achter1, Daniele Marinazzo1, 1Ghent University, Ghent, Belgium

M738 Network connectivity explains regional differences in intrinsic activity dynamics
Daniel Lurie1, Mark D’Esposito1, 1University of California, Berkeley, Berkeley, CA, United States

M739 Resting-state fMRI dynamic functional network connectivity and associations with psychopathy traits
Flor Espinoza1, Victor Vergara1, Nathaniel Anderson2, Srivivas Rachakonda3, Eswar Damaraju4, Michael Koenigs5, David Kosson6, Jean Decety7, Carlo Harenski8, Keith Kiehl9, Vincent Calhoun10, 1The Mind Research Network, Albuquerque, NM, United States, 2The Mind Research Network, Albuquerque, NM, United States, 3The Mind Research Network (MRN) & Lovelace Biomedical and Environmental Research Institute (LBERI), Albuquerque, NM, United States, 4The Mind Research Network, Albuquerque, NM, United States, 5University of Wisconsin, Madison, WI, United States, 6Rosalind Franklin University, Chicago, IL, United States, 7University of Chicago, Chicago, IL, United States, 8Department of Psychology, University of New Mexico, Albuquerque, NM, United States

M740 Hierarchical heterogeneity of circuit properties across human cortex shapes multiple temporal scales
Murat Demirtas1,2, Joshua Burt3, Markus Helmer4, Ji Li5, Ji6, Brendan Adkinson7, Matt Glasser8, David Von Essen9, Stamatios Sotirooulos10, Alan Anticevic11, John Murray12, 1Yale University, New Haven, CT, United States, 2Yale, New Haven, CT, United States, 3Washington University St Louis, St Louis, MO, United States, 4Washington University, St. Louis, MO, United States, 5University of Nottingham, Nottingham, United Kingdom

M741 Predicting task activation from resting connectivity in Schizophrenia patients
Niv Tiš1, Abigail Livny2, Mark Weiser2, Kamy Gipi2, Galia Tzarfaty2, Ido Tavor2, 1Tel Aviv University, Tel-Aviv, Israel, 2Sheba Medical Center, Ramat-Gan, Israel

M742 Working Memory Load-dependent Reorganization of Intrinsic Connectivity Networks
Elif Kurt1, Ali Bayram1, Görkem Alipan Toop1, Tamer Demirak1, 1Istanbul University, Azz Sancar Institute of Experimental Medicine, Department of Neuroscience, Istanbul, Turkey, 2Hulusi Behçet Life Sciences Research Laboratory, Istanbul University, Istanbul, Turkey, 3Istanbul University, Istanbul Faculty of Medicine, Department of Physiology, Istanbul, Turkey

M743* A toolbox for fMRI co-activation pattern analysis: description and illustration
Thomas Bojan1, Constantin Tuleasca2, Gwladys Rey3, Diana Wotruba2, Julian Gaviria4, 1Yale University, New Haven, CT, United States, 2Yale, New Haven, CT, United States, 3Yale University, New Haven, CT, United States, 4Yale University, New Haven, CT, United States, 5University of New Mexico, Albuquerque, NM, United States, 6Yale University, New Haven, CT, United States, 7University of Chicago, Chicago, IL, United States

M744 Serial ketamine therapy induced changes in DMN functional connectivity in major depressive disorder
Megha Vasavada1, Joana Loureiro1, Randall Espinoza2, Shantanu Joshi3, Benjamin DeWitt1, Benjamin Ely1, Lushna Mehra1, Qi Liu1, Kailyn Bradley1, Vilma Gabbay1, 1The Mind Research Network, Albuquerque, NM, United States, 2The Mind Research Network, Albuquerque, NM, United States, 3University of California Los Angeles, Los Angeles, CA, United States, 4Northwestern University, Chicago, IL, United States

M745 A Graph Theory Study of Reward Related Networks in Adolescents Across Psychiatric Symptoms
Sam DeWitt1, Benjamin Ely1, Lushna Mehra1, Qi Liu1, Kailyn Bradley1, Vilma Gabbay1, 1Icahn School of Medicine at Mount Sinai, New York, NY, United States
M746 Effects of Temporal Filtering on Spectral Dynamic Causal Modeling
Cohe Cook1, Gyujoon Hwang1, Veena Nair2, Jedidia Mathis3, Andrew Nencka2, Edgar DeYoe3, Vivek Prabhakaran4, Jeffrey Binder5, Elizabeth Meyerand6
1University of Wisconsin-Madison, Madison, WI, United States, 2University of Wisconsin-Madison, Madison, WI, United States, 3Medical College of Wisconsin, Milwaukee, WI, United States, 4Medical College of Wisconsin, Milwaukee, WI, United States

M747 Remapping of functional connections from the subthalamic nucleus in Parkinson’s disease
Joris Poppe1, Liang Li2, Sule Tuz3, Mark Hallett4, Silvina Horovitz5
1INNDS, NIH, Bethesda, MD, United States, 2School of Biomedical Engineering, Fourth Military Medical University, Xi’an, Shaanxi, China, 3Neurology Department, Yale School of Medicine, New Haven, CT, United States, 4NINDS - NIH, Bethesda, MD, United States

M748 Longitudinal Functional Correlativity Evaluation by Graph Analysis in Prodromal Alzheimer’s Disease
Dave Van Der Laarse1, Cecile Bordier2, Angelo Bifone2, Jorge Jovicich3
1University of Trento, Trento (TN), Italy, 2Center for Neuroscience and Cognitive Systems, Istituto Italiano di Tecnologia, Rovereto (TN), Italy, 3CIMeC (Center for Mind/Brain Sciences), University of Trento, Mattarello (TN), Italy

M749 Preclinical Functional Connectivity Predicts Visual Restitution Training Effects in Chronic Hemianopia
Hinke Halbertsma1, Joris Elshout2, Douwe Bergsma2,1, Frans Cornelissen1, Koen Haak1, Albert von dem Berge2
1University Medical Centre Groningen, Department of Ophthalmology, Groningen, Netherlands, 2Donders Institute for Brain Cognition and Behaviour, Radboud University, Nijmegen, Netherlands, 3University of Utrecht, Utrecht, Netherlands

M750 Data Aggregation and its impact on brain network profiles: Applications of graph theoretic analysis
Dimitri Falco1, Asadur Chowdury2, David Rosenberg3, Steven Bressler4, Vaibhav Diwadkar4
1Florida Atlantic University, Boca Raton, FL, United States, 2Wayne State University, Detroit, MI, United States, 3Wayne State University School of Medicine, Detroit, MI, United States, 4Wayne State University School of Medicine, Detroit, MI, United States

M751 Calculating dynamic network reconfiguration using a new, efficient, and intuitive method
Narges Chinichian1, Johan Kruenschutz2, Carolin Wackerhagen1, Nicole Oei1, Henrik Walter1, Ilya Vee2
1Charité - Universitätsmedizin Berlin, Berlin, Germany, 2University of Amsterdam, Institute of Psychology, Department of Developmental Psychology (ADAPT-lab), Amsterdam, Netherlands

M752 Revealing directional cross-regional functional interplays with sparse coupled hidden Markov models
Thomas Bolton1, Mert Imn2, Dmitri Van De Ville3
1University of Oxford, Oxford, United Kingdom, 2Maastricht University, Maastricht, Netherlands, 3King’s College London, London, United Kingdom

M753 Dynamic time warping outperforms correlation in detecting atypical functional connectivity in autism
Annaika Link1, Mikaelo Kinnew1, Jiwandeep Kohli1, Chris Fong1, Ryan Tung2, Ruth Carper3, Ralph-Axel Müller4
1Brain Development Imaging Lab, San Diego State University, San Diego, CA, United States

M754 LSTM Analysis of fMRI Data for Identifying Distinctive Temporal Dynamics in Schizophrenia Patients
Noah Lewns1, Robyn Miller2, Vince Calhoun3
1MRN, Albuquerque, NM, United States, 2The Mind Research Network, Santa Fe, NM, United States, 3The Mind Research Network, Albuquerque, NM, United States

M755 Dynamic interactions of spatiotemporally overlapping functional networks across sleep stages
Anjali Tarun1, Thomas Bolton2, Virginie Sterpenich3, Sophie Schwartz4, Dimitri Van De Ville4
1École polytechnique fédérale de Lausanne (EPFL), Geneva, Switzerland, 2École Polytechnique Fédérale de Lausanne, Genève, Switzerland, 3University of Geneva, Geneva, Switzerland, 4École polytechnique fédérale de Lausanne, Lausanne, Switzerland

M756 A Simulation-Based Comparison of Dynamic Connectivity Methods
Heather Sheppell1, Brian Calfo2, James Pekar2, Martin Lindquist2
1Johns Hopkins University, Baltimore, MD, United States, 2Johns Hopkins University School of Medicine, Baltimore, MD, United States

M757 How Local Perturbations Affect Large-Scale Neural Dynamics: a Simulation Study Using Kuramoto Model
Kaijuan Geng1, Jingsong Wu2, Tatia Lee2
1Chinese University of Hong Kong, New Territories, Hong Kong, 2Rehabilitation Medicine College, Fujian University of Traditional Chinese Medicine, Fuzhou, China, 3Institute of Clinical Neuropsychology, The University of Hong Kong, Hong Kong, Hong Kong, Hong Kong

M758 Extracting and Ranking Features of Functional Connectivity with Deep Learning
Gengyan Zhao1, Gyujoon Hwang1, Cole Cook1, Fang Liu1, Elizabeth Meyerand1, Rasmus Birn1
1University of Wisconsin-Madison, Madison, WI, United States

M759 A New Method to Analyze Laterality: Resting State Laterality Networks
Oktay Aycaoglug1, Yu-Ping Wang2, Tony Wilson3, Julia Stephe1, Vincent Calhoun3
1The Mind Research Network, Albuquerque, NM, United States, 2Tulane University, New Orleans, LA, United States, 3Uni, Omaha, NE, United States

M760 Dynamic Functional Connectivity of Resting fMRI is Less Reliable than Static Functional Connectivity
Chao Zhang1, Bharat Biswal2, Andrew Michael3
1Rochester Institute of Technology, Rochester, NY, United States, 2New Jersey Institute of Technology, Newark, NJ, United States, 3Duke University, Durham, NC, United States

M761 Modulatory effects of dynamic fMRI-based neurofeedback on emotion regulation during adolescence
Catharina Zich1, Simone Haller1, Michael Lührs2, Stephen Lisk3, Jennifer Lau4, Kathrin Cohen Kadosh5
1University of Oxford, Oxford, United Kingdom, 2Maastricht University, Maastricht, Netherlands, 3King’s College London, London, United Kingdom, 4School of Psychology, Faculty of Health and Medical Sciences, Guildford, Surrey

M762 NiBetaSeries: Tasking State Correlations
James Kent1, Michelle Voss1
1University of Iowa, Iowa City, IA, United States

M763 Understanding the impact of parameter choices on the reliability of flexibility in multilayer brain network models
Qawzi Telesford1, Zhen Yang1, Alexandre Franco2, Stanley Colcombe2, Michael Milham3
1North putting Institute for Psychiatric Research, Orangeburg, NY, United States, 2Child Mind Institute, New York, NY, United States, 3Children’s Hospital of Philadelphia, Philadelphia, PA, United States
M791 Multivariate phase slope index as a measure of the directionality of frequency-specific couplings

M792 Integrated radiofrequency coil and animal holder design for awake marmoset fMRI

M787 Exploring a hybrid auditory fMRI protocol combining ISSS and Multiband sequences

M784 Testing for shared information in multivariate patterns by cross-validated representational-matching

M788 Frequency-adaptive broadband (FAB) beamforming for broadband EEG/MEG data

M789 Intrinsic non-stationarity correction for Fixel-Based Analysis

M786 Mapping Large-Scale Directional Networks with Spectral Features of Electrocorticography

M793 Estimating and analysing linear transformations between multivariate patterns in fMRI

M790 Detecting individual voice patches in humans

M792 Integrated radiofrequency coil and animal holder design for awake marmoset fMRI

M797* Rapid Acceleration of the Permutation Test via Slow Random Walks in the Permutation Group

M798 Group-level Confound Removal for Model-based Stratification of Heterogeneous Populations from fMRI

M794 Automated cell density mapping in retrograde neuroanatomical tracer data

M796 A large-scale network computational model of bilaterally coupled neuron-glia masses

M797† Rapid Acceleration of the Permutation Test via Slow Random Walks in the Permutation Group

M799 Joint analysis of the low rank correlation matrices and clustering based on majorization

M800 From low-latency to predictive neurofeedback: methods and feasibility check

M801 Neuronal Signal Recovering from Hemodynamic Response: the Mixture Components Indexing Approach
M802  Mutual Information for Relationship Structure and Trialwise Effect Size of Input, Brain and Behavior
Yecong Duan1, Philippe Schyns2, Robin Ince1
1Institute of Neuroscience and Psychology, University of Glasgow, Glasgow, United Kingdom, 2School of Engineering, College of Science and Engineering, University of Glasgow, Glasgow, United Kingdom

M803  Cluster Independent Component Analysis for analyzing multi-subject resting state fMRI data
Jeffrey Durieux1,2, Tom Wilderjans3,4, Marisa Koin1, Frank de Vos1,2, Tijn Schouten1,2,3,4, Anita Lechner1, Reinhold Schmidt2, Serge Rombouts1,2,3
1Leiden University, Leiden, Netherlands, 2Leiden Institute for Brain and Cognition, Leiden, Netherlands, 3Department of Radiology, Leiden University Medical Center, Leiden, Netherlands, 4Research Group of Quantitative Psychology and Individual Differences, Faculty of Psychology and Educational Sciences, KU Leuven, Leuven, Belgium, 5Department of Neurology, Medical University of Graz, Graz, Austria

M804  Introducing Bioimage Suite Web: A Simple, Modern, & Powerful Neuroimaging Software Suite
Stephanie Noble1, Zachariah Saltzman1, Cheryl Lacadie1, Haley Garbus1, John Onofrey1, Xenophon Papademetris1, Dustin Scheinost1
1Yale University, New Haven, CT, United States

M805  New Approach for Analysis of Resting-state Functional MRI: Convolutional Auto-Encoder
Yuki Hashimoto1, Yousuke Ogata1, Kiyoharu Aizawa1, Yuichi Yamashita1
1The University of Tokyo, Tokyo, Tokyo, 2Tokyo Institute of Technology, Yokohama, Kanagawa, 3National Center of Neurology and Psychiatry, Kodaira, Tokyo

M806  Linked independent component analysis for multimodal data fusion in very large neuroimaging datasets
Weikang Gong1, Christian Beckmann1,2, Stephen Smith1
1FMRIB, Wellcome Centre for Integrative Neuroimaging, University of Oxford, Oxford, United Kingdom, 2Bodabod University Medical Centre, Department of Cognitive Neuroscience, Nijmegen, Netherlands, 3Donders Institute for Brain, Cognition and Behaviour, Radboud University, Nijmegen, Netherlands

M807  On Computing Age Trajectories of Brain Volumes Using Additive Mixed Models
Oystein Særensen1, Anders Fjell1
1Centre for Lifespan Changes in Brain and Cognition, Department of Psychology, University of Oslo, Oslo, Norway

M808  The co-alteration profile of the cingulate cortex
Jordi Manuello1, Lorenzo Mancuso2, Linda Ficco1, Greta Polchi1, Alessia Teneggi1, Donato Liloia1, Andrea Nani1, Tommaso Costa1, Sergio Duca2, Franco Cauda1
1University of Turin, Turin, Italy, 2University of Turin, Department of Psychology, Turin, Italy, 3Department of Psychology - University of Turin, Turin, Italy, 4Koeliker Hospital, Turin, Italy

M809  MMRI: a novel approach to assess the reproducibility of task fMRI data
Zeyu Jiao1, Jianfeng Feng2, Ju-Jiao Kang1
1Shanghai Center for Mathematical Sciences, Fudan University, Shanghai, China, 2Institute of Science and Technology for Brain Inspired Intelligence, Fudan University, Shanghai, China, 3Fudan University, Shanghai, China

M810  A computational approach for individualized energy landscape analysis
Jiyoung Kang1, Seck-Oh Jeong2, Hae-jeong Park1
1Yonsei University, Seoul, Korea, Republic of, 2Hankuk University of Foreign Studies, Yong-In, Korea, Republic of

M811  Correcting for circular inference without data splitting
Sam Davenport1, Thomas Nichols1
1University of Oxford, Oxford, Oxfordshire, United Kingdom

M812  Modelling state switching behaviour in MEG with probabilistic recurrent neural networks
Alexander Skates1, Smith1, Markus van Kienlen2, Mark Woolrich3
1University of Oxford, Oxford, United Kingdom, 2FMRIB, Wellcome Centre for Integrative Neuroimaging, University of Oxford, Oxford, United Kingdom, 3Roche, Basel, Switzerland

M813  A Novel Framework for the Detection of Nonlinear Interactions in the Human Brain
Mina Jamshidi Idaji1, Klaus-Robert Müller2, Burkhard Maess3, Arno Villringer4, Vadim Nikulin5
1Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, 2Machine Learning Group, Technical University of Berlin, Berlin, Germany

M814  Clustering the brain with “CluB”: A new toolbox for quantitative meta-analysis of neuroimaging data
Manuela Berlinger1, Franca Devoto2, Francesca Gasparini1, Saibene Aurora1, Silvia Carchi3, Lucia Clemente1, Laura Danelli1, Isabella Cattinelli1, Marcello Gallucci1, Riccardo Bargoni1, Alberto Borghese1, Eraldo Paulesu1
1University of Urbino Carlo Bo, Urbino, Italy, 2University of Milano-Bicocca, Milan, Italy, 3Department of Informatics, Systems and Communication, University of Milano-Bicocca, Milan, Italy, 4Department of Economics, Management and Statistics, University of Milano-Bicocca, Milan, Italy, 5EuroMI, Milan Centre for Neuroscience, Milan, Italy, 6Department of Computer Science, Università degli Studi di Milano, Milan, Italy, 7Psychology Department, University of Milano-Bicocca, Milan, Italy, Milan, Italy

M815  Empirical performance of the nonparametric rotation test on fMRI time series
Carsten Allerdieck1, Jonathan Rosenblatt2, John-Dylan Haynes1
1 Bernstein Center for Computational Neuroscience Berlin, Berlin, Germany, 2 Ben Gurion University of the Negev, Beer Sheva, International, 3 Bernstein Center for Computational Neuroscience / Charité University Medicine Berlin, Berlin, Berlin

M816  Evaluation of ultrafast simultaneous multislice (SMS) EPI acquisition for resting state fMRI
Hesaam Jahanian1, Samantha Holdsworth1, Thomas Christen3, Michael Moseley2, Greg Zaharchuk4
1University of Washington, Seattle, WA, United States, 2Stanford University, Stanford, CA, United States

M817  Fast Detection of Brains with Abnormalities Using Recursive Agglomerative Clustering
Ahluissam Almarhabi1, Anand Joshi2, Sergul Aydore1
1Stevens Institute of Technology, Hoboken, NJ, United States, 2University of Southern California, Los Angeles, CA, United States

M818  An automated deep neural network for denoising task-based fMRI data
Zhengshi Yang1, Xiaowei Zhuang1, Karthik Sreenivasan1, Virendra Mishra1, Dietmar Cordes1,2
1FMRIB, Wellcome Centre for Integrative Neuroimaging, University of Oxford, Oxford, United Kingdom, 2Roche, Basel, Switzerland

M819  Adaptive filtering with anatomical priors: Integrating structural and effective connectivity
David Pascucci1, Maria Rubez1, Patric Hagmann2, Gys Plomp3
1Perceptual Networks Group, Department of Psychology, University of Fribourg, Fribourg, Switzerland, 2Functional Brain Mapping Lab, Department of Fundamental Neurosciences, University of Geneva, Geneva, Switzerland, 3University Hospital of Lausanne, Lausanne, Vaud
A Novel Approach to Temporally Dynamic Probabilistic MEG Source Reconstruction with RNNs

Multivariate meta-analytic tools to explore associations between cognitive functions & brain regions

Topological gene-expression networks recapitulate brain anatomy and function

Methods Development

MODELING AND ANALYSIS METHODS

A Novel Approach to Temporally Dynamic Probabilistic MEG Source Reconstruction with RNNs

Multivariate meta-analytic tools to explore associations between cognitive functions & brain regions

Topological gene-expression networks recapitulate brain anatomy and function

To view full abstract text and ePosters, visit www.5.aievolution.com/hbm1901

M820

M821

M822

M823

M824

M825

M826

M827

M828

M829

M830

M831

M832

M833

M834

M835

M836

M837

M838

M839

M840

M841

M842

M843

M844

M845

M846

M847

M848

M849

M850

A Novel Approach to Temporally Dynamic Probabilistic MEG Source Reconstruction with RNNs

Multivariate meta-analytic tools to explore associations between cognitive functions & brain regions

Topological gene-expression networks recapitulate brain anatomy and function

To view full abstract text and ePosters, visit www.5.aievolution.com/hbm1901

M820

M821

M822

M823

M824

M825

M826

M827

M828

M829

M830

M831

M832

M833

M834

M835

M836

M837

M838

M839

M840

M841

M842

M843

M844

M845

M846

M847

M848

M849

M850
M838 The ARBrain App: A versatile application for fMRI data analysis based on valid circular inference
Wouter Weedon1, Martha Van Kempen2, Jonathan Rosenblatt3, Livio Finos1, Aldo Solar1, Jelle Goeman3
1Leiden University, Leiden, Netherlands, 2Ben Gurion University of the Negev, Beer Sheva, Israel, 3University of Padova, Padova, Italy, 4University of Milano-Bicocca, Milano, Italy, 5Leiden University Medical Center, Leiden, Netherlands

M839 Gyrification-based Patterns of Structural Covariance
Rachele Santuci1, Anne Ruef1, Aristides Sotiras2, Alessandro Pignat3, Nora Penzel1, Julian Wenzel1, Linda Antonucci4, Dominic Dwyer1, Nikolaos Koutsoulieris1
1Ludwig-Maximilian University of Munich, Munich, Germany, 2Washington University in St. Louis, St. Louis, MO, United States, 3University of Cambridge, Cambridge, United Kingdom

M840 A meta-analysis on homotopic co-activations, interhemispheric functional connectivity revisited
Lorenzo Mancusi1, Tommaso Costa2, Andrea Nan1, Jordi Manuello1, Donato Lilioa1, Gabriele Gelmini1, Giorgio Giuliano1, Sergio Ducra1, Franco Cauda1
1University of Turin, Department of Psychology, Turin, Italy, 2Department of Psychology - University of Turin, Turin, Italy, 3University of Turin, Turin, Italy, 4Koeliker Hospital, Turin, Italy

M841 Tedana: Robust and extensible software for multi-echo denoising
Elizabeth DuPre1, Javier GonzalezCastillo1, Daniel Handwerker2, Ross Markello1, Taylor Salo1, Kirstie Whitaker1,5
1Montreal Neurological Institute, Montreal, Quebec, Canada, 2National Institute of Mental Health, Bethesda, MD, United States, 3Department of Physics, Florida International University, Miami, FL, United States, 4The Alan Turing Institute, London, United Kingdom

M842 An affordable method for electrode localization for standalone EEG or simultaneous EEG-fMRI scanning
Aleksij Kraljčič1, Nina Purg1, Andraž Matkovič1,2, Grega Repovš1
1Mind & Brain Lab, Department of Psychology, Faculty of Arts, University of Ljubljana, Ljubljana, Slovenia, 2Department of Neurology, University Clinical Center, Ljubljana, Slovenia

M843 Connectome sorting by Consensus Clustering increases separability in group neuroimaging studies
Sebastiano Stramaglia1, Javier Jasero1, Jesus M. Cortes1, Daniele Marinazzo2, Ibai Díez3
1Dipartimento Interateneo di Fisica, Universita di Bari, Bari, Italy, 2Biocruces Health Research Institute, Barakaldo, Spain, 3Biocruces Biazza Health Research Institute, Barakaldo, Spain, 4Ghent University, Ghent, Belgium, 5Massachusetts General Hospital, Harvard Medical School, Boston, MA, United States

M844 Assessing small sample bias in coordinate-based meta-analyses: diagnostics for ALE
Beatris Moerkerke1, Freya Acar1, Ruth Seurinck1, Simon B. Eickhoff1, Claudia R. Eickhoff1,2
1Thomas Nichols1,2
1Ghent University, Gent, Belgium, 2Institute of Systems Neuroscience, Heinrich-Heine-University, Dusseldorf, Germany, 3Institute of Clinical Neuroscience and Medical Psychology, Heinrich-Heine-University, Dusseldorf, Germany, 4Nuffield Department of Population Health, University of Oxford, Oxford, United Kingdom

M845 Comparing the cortical thickness between FreeSurfer and a euclidean distance transform approach
Juan José Vélazquez-Reyes1, Julieta Mateos2, Sarael Alcauter3,4, Fernando Barrios4, Jorge Marquez1
1Universidad Nacional Autónoma de México, Instituto of Applied Sciences and Technology (ICAT), Mexico, Mexico, 2Universidad Nacional Autónoma de México, Instituto of Research in Applied Mathematics and Systems, Mexico, Mexico, 3Universidad Nacional Autónoma de Mexico, Queretaro, Mexico, 4Universidad Nacional Autónoma de México, Queretaro, Queretaro

M846* Estimating Directed Functional Connectivity using Echo-State Networks
Andrea Duggento1, Maria Guerrini1, Nicola Toschi1
1University of Rome Tor Vergata, Rome, Italy, 2Martinos Center for Biomedical Imaging (MGH) and Harvard Medical School, Boston, MA, United States

M847 Tract Edge Diffusion Statistics; measuring diffusivity at the boundary of the white matter
Adriana Azor1, Peter Hellyer1,2, David Sharp3
1Imperial College London, London, United Kingdom, 2King’s College London, London, United Kingdom, 3Imperial College London, London, United Kingdom

M848 MAPPING INDIVIDUAL DIFFERENCES IN FAMILIES WITH ADHD: BEYOND CLASSICAL CASE-CONTROL SIBLING ANALYSES
Thomas Wolfers1, Barbara Franke2, Daan van Roij3, Jan Buitelaar1, André Marquand4, Christian Beckmann5
1Radboud University Medical Center, Nijmegen, Germany, 2Radboud University Medical Center, Nijmegen, Netherlands, 3Donders Institute for Brain Cognition and Behavior, Donders Centre for Cognitive Neuroimaging, Nijmegen, Netherlands, 4Department of Cognitive Neuroscience, Radboud University Medical Centre, Nijmegen, the Netherlands, Nijmegen, Netherlands, 5Donders Institute, Radboud University, Nijmegen, Nijmegen, Netherlands, 6Donors Institute, Nijmegen, Netherlands

M849 Vocal peaks: data-driven fMRI region of interest analysis uncovers nonVocal upregulated synchrony
Eyal Soreq1, Adam Hampshire2
1Mr. London, United Kingdom, 2Imperial College London, London, United Kingdom

M850* Inter-species Comparison and Alignment between Human and Non-human Primate Ting Xu1, Karl-Heinz Nenning1, Daniel Margules2, Damien Fair3,4, Charles Schroeder5, Georg Langs6, Michael Milham7
1Child Mind Institute, New York, NY, United States, 2Medical University of Vienna, Vienna, Austria, 3Institut du Cerveau et dela Moelle Epiniere, Pairs, France, 4Oregan Health and Science University, Portland, OR, United States, 5Nathan Kline Institute, New York, NY, United States

M851 MMM: A multilevel model for multimodal learning of brain connectivity using fMRI and diffusion MRI
Ying Guo1, Yingtian Hu2
1Emory University, Atlanta, GA, United States

M852 Automatic seed selection for resting state fMRI data analysis by using machine learning
Minqi Li1, Katherine Koenig1, Jian Lin1, Mark Lowe1
1Cleveland Clinic, Cleveland, OH, United States

M853 Improved reconstruction of white matter tissue close to brain tumors using single-shell 3-tissue CSD
Hannalore Aerts1, Thijs Dhollander2, Daniele Marinazzo1
1Ghent University, Gent, Belgium, 2The Florey Institute of Neuroscience and Mental Health, Melbourne, Australia

M854 Optimal Cutting of the Cortex for Cytoarchitectonic Visualization: a Neuronavigation-Based Approach
Jennifer Nové1,2, Trissana Sprung-Much1,2, Erika Nolan1,2, Stephen Frey3, Michael Petrides1,2
1McGill University, Montreal, Quebec, Canada, 2Montreal Neurological Institute, Montreal, Quebec, Canada, 3Rogue Research, Montreal, Quebec, Canada

To view full abstract text and ePosters, visit www.aievolution.com/hbm1901

To view full abstract text and ePosters, visit www.aievolution.com/hbm1901
M855  QDECr: A flexible, extensible vertex-wise analysis framework in R
Sander Lambalidou1, Henning Tiemeier2, Meike Vernoij2, Mohammad Ikram2, Ryan Muetzel3
1Erasmus MC University Medical Center Rotterdam, Rotterdam, Netherlands, 2Harvard University, Boston, MA, United States

M856  Categorizing cortical dysplasia lesions by surgical outcome using network functional connectivity
Mark DiFrancesco4, Abdullah Badaui5, James Leach6, Francesco Mangano1, Hansel Greiner1
1Cincinnati Children’s Hospital Medical Center, Cincinnati, OH, United States

M857  An Extremely Simple, Valid and Sensitive Statistical Test for High-dimensional Biological Data
Eric Maris1, Linda Geerligs1
1Donders Institute for Brain, Cognition and Behaviour, Nijmegen, Netherlands

M858  MEG based functional microscopy using traveling wave priors: a new technology for exploring epilepsy
Aleksandra Kuznetsova1, Alexei Ossadtchi2
1Center for Bioelectric Interfaces, NIRU Higher School of Economics, Moscow, Russian Federation, 2Center for Bioelectric Interfaces, NIRU Higher School of Economics, Moscow, Russian Federation

M859  A validation of the MACS toolbox for EEG data analysis and second-level fmri
Joram Soch1,2
1Bernstein Institute for Computational Neuroscience, Berlin, Germany, 2Berlin Center for Advanced Neuroimaging, Berlin, Germany

M860  Deep Non-Linear ICA Reveals Site-Invariant Functional MRI Features
Noah Lewis1, Rogers Silver1, Aapo Hyvärinen1, Vince Calhoun2
1MN, Albuquerque, NM, United States, 2The Mind Research Network, Albuquerque, NM, United States, 3University College London, London, United Kingdom

M861  Deep Learning for High-Resolution Image Segmentation
Leonia Henschel1, Sailesh Conjeti1, Kersten Diers1, Martin Reuter1,2
1German Center for Neurodegenerative Diseases (DZNE), Bonn, Germany, 2Martinos Center for Biomedical Imaging, Radiology, MGH / Harvard Medical School, Boston, MA, United States

M862  Real-Time, python-based and amplifier-agnostic EEG-fMRI artifact correction
Johan van der Meer1, Nathan Stevenson1, Michael Breakspear1
1QIMR Berghofer Medical Research Institute, Brisbane, Australia

M863  Network Structural Dependency in the Human Connectome Across the Lifespan
Ai Wern Chung1, Markus Schirmer2,3,4, Natalio Rost1, P. Ellen Grant1
1FNNDSC, Division of Newborn Medicine, Boston Children’s Hospital, Harvard Medical School, Boston, MA, United States, 2Stroke Division & Massachusetts General Hospital, J. Philip Kistler Stroke Research Center, HMS, Boston, MA, United States, 3Computer Science and Artificial Intelligence Lab, Massachusetts Institute of Technology, Cambridge, MA, United States, 4Department of Population Health Sciences, German Centre for Neurodegenerative Diseases, Bonn, Germany

M864  Turn it sideways: a new approach for determining the specificity of functional ROIs
Adina Wagner1, Samuel Nastase1, Michael Hanke1, Yaroslav Halchenko1
1Department of Psychology, OvGU Magdeburg, Braunschweig, Lower Saxony, 2Princeton University, Princeton, NJ, United States, 3Research Centre Jülich, Jülich, Germany, 4Dartmouth College, Dartmouth, NH, United States

M865  Combined signal level and multivoxel pattern analysis for cognitive task activity
Johan Jansma1, Geert-Jan Rutten1
1ETZ, Tilburg, Netherlands, 2Elisabeth-TweeSteden Hospital, Tilburg, Netherlands

M866  A Structural Image Processing Pipeline for the Baby Connectome Project
Zhengwang Wu1, Qian Zhang2, Li Wang3, Wei Li4, Gang Li5, Dinggang Shen5, for UNC/UMN Baby Connectome Project Consortium6
1UNC-Chapel Hill, Raleigh, NC, United States, 2University of North Carolina at Chapel Hill, Chapel Hill, NC, United States, 3UNC-Chapel Hill, Chapel Hill, NC, United States, 4Department of Radiology and BRIC, Chapel hill, NC, United States, 5Department of Radiology and BRIC, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States, 6Department of Radiology and BRIC, Carboro, NC, United States

M867  Submodule Extraction and Network Dissimilarity based on Harmonic Holes
Hyekyoung Lee1, Moo Chung2, Hongyoon Choi1, Hyejin Kang3, Seunggyun Ha4, Yu Kyeong Kim4, Dong Soo Lee1
1Seoul National University Hospital, Seoul, Korea, Republic of, 2University of Wisconsin, Madison, WI, United States, 3Seoul National University Hospital, Seoul, Korea, Republic of, 4Seoul National University, Seoul, Korea, Republic of, 5Department of Nuclear Medicine, Seoul National University Boramae medical center, Seoul, Korea, Republic of

M868  An EM algorithm to optimally estimate BOLD signals from multi-echo fMRI data without ICA
MingBo Cai1, Yei Ni4
1Princeton University, Princeton, NJ, United States

M869  Prospective Neurotyping of Inhibitory Response in the ABCD Study
Nicholas Aligaier1, Bader Chaarani1, Daniela Cornejo1, Donald Hagler2, Anders Dale1, Alexandra Potter1, Hugh Garavan1
1University of Vermont, Burlington, VT, United States, 2University of Vermont, Burlington, VT, United States, 3Center for Molecular and Imaging Genetics, University of California San Diego, San Diego, CA, United States, 4University of California San Diego, San Diego, CA, United States

M870  Machine Learning Approach for Differentiating Voids Dysfunction with Functional Connectivity
Christof Karmonik1, Rose Khavari1
1Houston Methodist Research Institute, Houston, TX, United States, 2Houston Methodist Hospital, Houston, TX, United States

M871  Neural flows: identifying reorganization of brainwave dynamics across neuroimaging modalities
Paula Sanz-Leon1, James Roberts1
1QIMR Berghofer Medical Research Institute, Herston, Brisbane, QLD, Australia

Multivariate modeling

M872  Bi-stability in the critical human brain
Sheng H Wang1, Tuomas Puoliväli1, Gabriele Arruolla2, Felix Siebenhüner3, Lino Nobili4, Satu Palva5, Matias Palva5
1University of Helsinki, Helsinki, Finland, 2University of Genoa, Genoa, Italy, 3University of Helsinki, Helsinki, Uusimaa, 4University of Glasgow, University of Helsinki, Glasgow, UK & Helsinki, Finland, 5University of Helsinki, University of Glasgow, University of Helsinki, Glasgow, UK & Helsinki, Finland

M873  On Early Brain Folding Patterns Using Biomechanical Growth Modeling
Xiaoyu WANG1, Amine Bohi2, Mariam Al Harrach2, Mickael Dinomais3, Julien Lefèvre4, François Rousseau5
1IMT Atlantique, LaTIM U1101 INSERM, UBL, Brest, France, 2Boramae medical center, Seoul, Korea, Republic of, 3Laboratoire Angevin de Recherche en Ingénierie des Systèmes (LARIS), Angers, France, 4Laboratoire Angevin de Recherche en Ingénierie des Systèmes (LARIS), Angers, France, 5IMT Atlantique, LaTIM U1101 INSERM, UBL, Brest, France, Brest, France, 6Aix Marseille Univ, CNRS, INT, Inst Neurosci Timone, Marseille, Marseille, France, 7Laboratoire Angevin de Recherche en Ingénierie des Systèmes (LARIS), Angers, France, Angers, France
MODELING AND ANALYSIS METHODS
Multivariate modeling

M890* Automated Online Code Generation for Training and Testing Machine Learning Models
Using PHOTON
Ramona Leenings1, Nils Winter1, Claas Koehler1, Daniel Emden1, Dominik Grategord1, Nils Ope1, Xiaoyi Jiang1, Udo Dannlowski1, Tim Hahn1
1University of Muenster, Muenster, Germany

M891* Towards universal brain encoding with multivariate regression and large scientific corpora
Jérôme Dockès1, Russell Poldrack2, Fabian Suchanek3, Bertrand Thirion4, Gaël Gaël Varoquaux4
1INRIA, Saclay, France, 2*, 3Télécom ParisTech, Paris, France, 4Parietal Team, INRIA, Gif-sur-Yvette, France

M892 A study on the effect of incorrect estimation of dimension in ICA for fMRI using AMARI index
Rajesh Nandy1, Md Abdullah Mamun2
1UNT Health Science Center, Fort Worth, TX, United States

M893 A “Mega-Localizer” FMRI Task for the Study of Functional Cortical Specialization
Bradley Buchsbaum1, Christa Dang1, Ashley Bondad1
1Rotman Research Institute, Baycrest, Toronto, ON, Canada

M894 Robust fMRI Hyperalignment based on repeated movie stimuli
Hendrik Mandelkow1, Jacco de Zwart1, Jeff Duyn1
1NIH, Bethesda, MD, United States

M895 Interpretable shared response model for fmri data
Hugo Richard1, Bertrand Thirion2, Jonathan Pillow2
1Parietal Team, Inria, Paris-Saclay, France, 2Princeton Neuroscience Institute, Princeton, NJ, United States

M896 Improving the Replicability of Brain Connectivity Analysis Findings Via Latent Network Topology
Shuo Chen1, Peter Kochunov1, L. Elliot Hong1
1University of Maryland, School of Medicine, Catonsville, MD, United States

M897 Can we trust the results of canonical correlation analysis of brain imaging data: a stability test
Qingqing Yang1, Meng Liang1
1Tianjin Medical University, Tianjin, China
T001 Use of a Riemannian-geometry-based classifier to diagnose PTSD with resting-state EEG data
Yong-Wook Kim1, Sungkeun Kim1,2, Miseon Shim1, Min Jin Jin1, Seung-Hwan Lee1,2, Chang-Hwan Im1
1Department of Biomedical Engineering, Hanyang University, Seoul, Korea, Republic of, 2Department of Psychiatry, University of Missouri-Kansas City, Kansas City, MO, United States

T002 Altered functional connectivity with the hippocampus and cingulate in post-traumatic stress disorder
Poolo Nucifora1, Mitchell Kling1,2, Richard Ross1,2, J Scott2,3, Holly Barilla2,3, Janeese Brownlow2,3, Philip Gehman1,2, Seema Bhagatnar1,2
1Loyola University Chicago, Maywood, IL, United States, 2University of Pennsylvania, Philadelphia, PA, United States, 3Children’s Hospital of Philadelphia, Philadelphia, PA, United States

T003 Increased Gray Matter Covariation in a Frontoparietal Network in Pediatric Social Anxiety Disorder
Zhen Liu1, Yang Hu1, Yiwen Zhang2, Wenhong Cheng3, Zhi Yang3
1Shanghai Mental Health Center, Shanghai, China, 2Shanghai Key Laboratory of Psychotic Disorders, Shanghai Mental Health Center, Shanghai, China

T004 Accelerated epigenetic aging as a predictor of vulnerability to depression
Klaara Mareckova1, Anna Pačínková2, Anja Klasnja3, Katelina Stano Kozubík4, Milan Brazdil2, Tomáš Paus1
1Central European Institute of Technology (CEITEC), Masaryk University (MU), Brno, Czech Republic, 2Department of Biomedical Sciences, University of Marburg, Marburg, Germany, 3Research Centre for Toxic Compounds in the Environment (RECTOX), MU, Brno, Czech Republic, 4Institute for Clinical Evaluative Sciences, North York, Canada

T005 Neural correlates of NOS1-ex1f-VNTR allelic variation in panic disorder and agoraphobia
Isabell Bidderbusch1, Yunbo Yang1, Heike Weber2, Alfonn Hoffmann3, Alexander Gerlach4, Andreas Stroehle5, Bettina Pfeiderer6, Volker Arolt7, Hans-Ulrich Wittchen8, Benjamin Meyer1
1Computational Psychiatry Research, Department of Psychiatry, University of Zurich, Zurich, Switzerland, 2Neuroscience Center Zurich, University of Zurich, Zurich, Switzerland, 3Wellcome Centre for Human Neuroimaging and Max Planck UCL Centre for Computational Psychiatry and Ageing Research, University College London, London, United Kingdom, 4RECETOX, MU, Brno, Czech Republic, 5CEITEC, MU, Brno, Czech Republic, 6CEITEC MU, Brno, Czech Republic, 7Department of Psychology and Psychiatry, University of Toronto, Toronto, Ontario, Canada

T006 Neural predictors for maladaptive stress coping
Marcus Grueschow1, Katharina Schultebraucks1, Banano George2, Christian Ruff, Birgit Kleim1
1University of Zurich, Zurich, Switzerland, 2University of New South Wales, Sydney, NSW, Australia

T007 Adolescent brain development modulates corpus callosum aberrance in social anxiety disorder
Zhi Yang1,2, Zhen Liu1, Yiwen Zhang1, Ningning Li, Yang Hu1, Wenhong Cheng3
1Shanghai Mental Health Center, Shanghai, China, 2School of Medicine, Shanghai Jiaotong University, Shanghai, China

T008 Trait Anxiety Associated with Differences in BOLD Activation during Fear Generalization Task
Ashley Huggins1, Carissa Weis1, Elizabeth Parisi1, Kenneth Bennett1, Christie Larson1
1University of Wisconsin Milwaukee, Milwaukee, WI, United States

T009 The predictive value of neural reward processing in exposure therapy outcome
Silvia Popaln1,2, Iris Lange1,2, Jindra Bakker2, Stijn Michielse1, Machtelt Marcellis1, Marieke Wichers1, Bram Vervliet3, Jim van Os4, Therese Van Amelsvoort1, Liesbet Goossens1, Koen Schruers5
1KU Leuven, Leuven, Belgium, 2Maastricht University, Maastricht, Netherlands, 3Maastricht University, Maastricht, Netherlands, 4University of Groningen, Groningen, Netherlands, 5KU Leuven, Leuven, Belgium, 6University Medical Center Utrecht, Utrecht, Netherlands

T010 The emotion regulatory network associates differently with different PTSD symptom clusters
Toshinori Chiba2, Kentaro Ide1,2, Al Koizumi1, Vincent Taschereau-Dumouche2, Masafumi Funatsu2, Shuken Boku2, Sumie Kato2, Satoshi Umeda3, Akira Fujikawa2, Akihito Hishimoto1, Yuko Horii1, Takahiro Shirakawa1, Toru Maruyama1, Low Hokwan1, Ichiro Sora1, Mitsuwa Kato1
1Advanced Telecommunications Research Institute International, Seika-cho, Japan, 2Department of Psychiatry, Kobe University Graduate School of Medicine, Kobe, Japan, 3Rikunarihono clinic, Tokyo, Japan, 4Sony Computer Science Laboratories, Inc., Tokyo, Japan, 5Department of Psychology, University of California, Los Angeles, CA, United States, 6Chiyoda-siryo clinic, Tokyo, Japan, 7Self defense forces central hospitals, Tokyo, Japan, 8Japan ground self-force, Test and evaluation command, Military Medicine Research Unit, Tokyo, Japan

T011 Cortico-subcortical functional connectivity in states of sustained anxiety in humans
Benjamin Meyer1, Rafaela Kalisch1, Helena Metzker1,2
1Neuroimaging Center, Mainz, Germany

T012 Anxiolytic effects of a probiotic in healthy females is associated with elevated brain GABA levels
Nicola Johnstone1, Chiara Milesi2, Olivia Burn2, Tom van den Borger1, Kathryn Hart1, Paul Sowden1, Phil Burnett1, Kathrin Cohen Kadosh1
1School of Psychology, Faculty of Health and Medical Sciences, University of Surrey, Guildford, Surrey, United Kingdom, 2School of Psychology, Faculty of Health and Medical Sciences, University of Surrey, Guildford, United Kingdom, 3MyMicrzoom, Leiden, Netherlands, 4Department of Nutritional Sciences, School of Biosciences and Medicine, Faculty of Health and Med, Guildford, United Kingdom, 5Department of Psychology, University of Winchester, Winchester, United Kingdom, 6Department of Psychiatry, University of Oxford, Warneford Hospital, Oxford, United Kingdom, 7School of Psychology, Faculty of Health and Medical Sciences, Guildford, United Kingdom

T013 Amygdala-targeted Neurofeedback Intervention for Post-Traumatic Stress Disorder
Tom Fruchtman-Steinbok1,2
1Tel Aviv University, Tel Aviv, Israel

T014 Representation of Threat Anticipation and Behavior in a Human Approach/Avoidance Conflict Task
Aslan Abivardi1,2, Saurabh Khemka1,2, Dominik Baç̄1,2
1Computational Psychiatry Research, Department of Psychiatry, University of Zurich, Zurich, Switzerland, 2Neuroscience Center Zurich, University of Zurich, Zurich, Switzerland, 3Wellcome Centre for Human Neuroimaging and Max Planck UCL Centre for Computational Psychiatry and Ageing Research, University College London, London, United Kingdom
T015 Trait anxiety in glaucoma predicts greater gray matter volume in the parahippocampal gyrus
TUEODORI MATSUDAIRA, Yasuko Tatwaki, Kazuko Omodaka, Ryuta Kawashima, Toru Nakazawa, Yasuyuki Takii
1Graduate School of Medicine, Tohoku University, Sendai, Japan, 2Department of Nuclear Medicine and Radiology, Institute of Development, Aging and Cancer, Tohoku University, Sendai, Japan, 3Department of Ophthalmology, Tohoku University Graduate School of Medicine, Sendai, Japan, 4Department of Advanced Brain Science, Institute of Development, Aging, and Cancer, Tohoku University, Sendai, Japan, 5Smart-Aging Research Center, Institute of Development, Aging, and Cancer, Tohoku University, Sendai, Japan

Eating Disorders

T016 Bariatric surgery induces sustained neuroplasticity of abnormal brain structures in obese patients
Yuanyu Wang, Yueyin Ding, Lei Liu, Chunxin Hu, Wenchao Zhang, Jingyuan Li, Karen M van Deneen, Gang Ji, Gene-Jack Wang, Yi Zhang
1Center for Brain Imaging, School of Life Science and Technology, Xidian University, Xi’an, Shaanxi, China, 2Xijing Hospital of Digestive Diseases, Fourth Military Medical University, Xi’an, Shaanxi, China, 3Laboratory of Neuroimaging, National Institute on Alcohol Abuse and Alcoholism, Bethesda, MD, United States

T017 Altered functional network connectivity of resting-state networks in obese subjects
Yueyin Ding, Yuanyu Wang, Chunxin Hu, Lei Liu, Wenchao Zhang, Jingyuan Li, Gang Ji, Yongzhao Nie, Gene-Jack Wang, Yi Zhang
1Center for Brain Imaging, School of Life Science and Technology, Xidian University, Xi’an, Shaanxi, China, 2Xijing Hospital of Digestive Diseases, Fourth Military Medical University, Xi’an, Shaanxi, China, 3Laboratory of Neuroimaging, National Institute on Alcohol Abuse and Alcoholism, Bethesda, MD, United States

T018 Reward and Anxiety Network Activity Predicts Psychometrics in Anorexia Nervosa and Anxious Controls
Elizabeth Burnett, Teena Moody, Monica S Wu, Courtney Sheen, Jessica Goldbeck, Michael Strober, Jamie Feusner
1UCLA, Los Angeles, CA, United States, 2UCLA, Los Angeles, CA, United States

T019 Hungry brains: A meta-analytical review of brain activation imaging studies on food perception
Franca Masiero Devento, Laura Zapparoli, Rolando Bonandolini, Manuela Berlinger, Anna Ferrulli, Livio Luzi, Giuseppe Barilli, Eraldo Paulesu
1University of Milano-Bicocca, Milan, Italy, 2IRCCS Istituto Ortopedico Galeazzi, Milan, Italy, 3University of Urbino Carlo Bo, Urbino, Italy, 4IRCCS Policlinico San Donato, Milan, Italy, 5IRCCS Orthopedic Institute Galeazzi, Milan, Italy

T020 Neural correlates of probabilistic reversal learning in anorexia nervosa
Fabio Bernardoni, Daniel Geisler, Josep King, Franziska Ritschel, Ilka Boehm, Stefan Ehrlich, Michael Smolka
1Universitätsklinikum Dresden, Dresden, Germany, 2Universitätsklinikum Dresden, Dresden, AK, 3Technische Universität Dresden, Dresden, Germany

T021 Decoding satiation: machine learning on fasted and fed resting state data
Grace Shearer, Jennifer Sadler, Nicollette Acosta, Kylie Burger
1University of North Carolina Chapel Hill, Chapel Hill, NC, United States, 2University of North Carolina at Chapel Hill, Chapel Hill, NC, United States

T022 Altered global brain network topology as a trait marker in patients with anorexia nervosa
Daniel Geisler, Viola Borchardt, Ilka Boehm, Joseph King, Tam Friederike, Michael Marxen, Ronald Biemann, Veit Roessner, Martin Walter, Stefan Ehrlich
1Psychological and Social Medicine and Developmental Neuroscience, Technische Universität Dresden, Dresden, Germany, 2Clinical Affective Neuroimaging Laboratory, Magdeburg, Germany, 3Department of Behavioral Neurology, Leibniz Institute for Neurobiology, Magdeburg, Germany, 4Eating Disorder Treatment and Research Center, Department of Child and Adolescent Psychiatry, UKD, Dresden, Germany, 5Department of Psychiatry and Neuroimaging Center, Technische Universität Dresden, Dresden, Germany, 6Otto-von-Guericke University, Institute of Clinical Chemistry and Pathobiocchemistry, Magdeburg, Germany, 7University of Tuebingen, Tuebingen, Germany

T023 Behavioural and neural evidence that High ADHD symptoms are linked to enhanced food reward
Elizabeth Martin, Panagiota Kaisani, Colin Dowish, Pia Rotzsche, Suzanne Higgs, Maartje Spetter
1School of Psychology, University of Birmingham, Birmingham, United Kingdom, 2Pivital, Wallingford, Oxfordshire

T024 A longitudinal fMRI study of delay discounting during weight restoration therapy in anorexia nervosa
Arne Doose, Joseph King, Fabio Bernardoni, Daniel Geisler, Franziska Ritschel, Sophie Pauligk, Konrad Páštor, Kerstin Weidner, Veit Roessner, Michael Smolka, Stefan Ehrlich
1Division of Psychological and Social Medicine and Developmental Neuroscience, Faculty of Medicine, Dresden, Germany, 2Department of Psychotherapy and Psychosomatic Medicine, Faculty of Medicine, Technische Universität, Dresden, Germany, 3Eating Disorder Research and Treatment Center, Department of Child and Adolescent Psychiatry, Dresden, Germany, 4Department of Psychiatry and Neuroimaging Center, Technische Universität, Dresden, Germany

T025 Increased prefrontal activity and sustained effects of emotion regulation in anorexia nervosa
Sophie Pauligk, Maria Seidel, Sophie Fürtjes, Ilka Boehm, Joseph King, Daniel Geisler, Fabio Bernardoni, Alexander Strobel, Thomas Gaschke, Stefan Ehrlich
1Universitätsklinikum Dresden, Dresden, Germany, 2Universitätsklinikum Dresden, Dresden, Sachsen, 3Technische Universität Dresden, Dresden, Germany

T026 Age influences structural brain restoration during weight gain therapy in anorexia nervosa
Lisa-Katrin Kaufmann, Jürgen Hänggi, Lutz Jäncke, Volker Baur, Marco Piccirelli, Spyros Kollias, Ulrich Schnyder, Chantal Martin-Söelchi, Gabriella Milos
1Department of Consultation-Liaison Psychiatry and Psychosomatics, University Hospital Zurich, Zurich, Switzerland, 2Division of Neuropsychology, Department of Psychology, University of Zurich, Zurich, Switzerland, 3Division of Neuropsychology, Department of Psychology, University of Zurich, Zurich, Switzerland, 4University Hospital Zurich, Zurich, Switzerland, 5University Hospital of Zurich, Zurich, Switzerland, 6University of Zurich, Zurich, Switzerland, 7Unit of Clinical and Health Psychology, Department of Psychology, University of Fribourg, Fribourg, Switzerland

T027 Oxytocin effects on resting brain perfusion in females with/without bulimia-binge eating disorder
Oxymarin, Monica Leslie, Sara Rodan, Fernando Zelaya, Janet Treasurer, Yannis Paloyelis
1Department of Neuroimaging, IoPNN, King’s College London, London, United Kingdom, 2Section of Eating Disorders, IoPNN, King’s College London, London, United Kingdom

T028 Longterm impact of prenatal exposure to chemotherapy on attentional neurodevelopment: an ERP study
Jeroen Blommaert, Rob Zink, Sabine Deprez, Ivan Myatchin, Patrick Dupont, Tineke Vandenbrucke, Charlotte Sleers, Kristel Van Calsteren, Frédéric Amant, Lieven Lagae
1KU Leuven, Leuven, Belgium, 2KU Leuven, Belgium

Medical illness with CNS impact (e.g. chemotherapy, diabetes, hypertension)
T029 Racial diversity in studies included in imaging meta-analyses of type 2 diabetes, obesity and stroke
Eunice Chen1, Ronald Taylor2, Mike McCloskey1
1Temple University, Philadelphia, PA, United States

T030 White matter integrity contributes to cognitive heterogeneity in type 2 diabetes patients
Shudan Gao1, Yoojing Chen1, Yiru Yang1, Zhanjun Zhang1
1Beijing Normal University, Beijing, China

T031 Predicting cognitive deficits after surgical resection of diffuse low-grade gliomas
Rafael Romero-Garcia1, Mallory Owen1, Moataz Assem2, Pedro Coelho3, Jessica Ingham1, Alexa McDaniel1, Emma Woodberry4, Luca Vill1, Rohit Sinho3, Thomas Santar1us1, Yaara Erez2, John Suckling1, Michael Hart4
4Department of Psychiatry, University of Cambridge, Cambridge, United Kingdom, 2MRC Cognition and Brain Sciences Unit, Cambridge, United Kingdom, 3Neurophys Ltd, Cambridge, United Kingdom, 1Department of Neurosurgery, Addenbrooke's hospital, Cambridge, United Kingdom, 6Department of Neurosurgery, University of Cambridge, Cambridge, United Kingdom

T032 Task load dependent hyperdeactivation of the default mode network after treatment for breast cancer
Michel de Ruiter1, Naomi Smulders1, Sanne Schagen1
1Netherlands Cancer Institute, Amsterdam, Noord-Holland, 2Netherlands Cancer Institute, Amsterdam, Netherlands

T033 CBF and BOLD Responses in Pediatric Patients with Sickle Cell Anemia
Ping Zou1, Matthew Scoggins1, Jane Hankins1, Kathleen Helton1, Robert Oggy3
1St. Jude Children's Research Hospital, Memphis, TN, United States

T034 Hippocampal Volume, Cognitive Reserve and Memory Problems in Breast Cancer Survivors
Emmie Koevoets1, Annemarie Meijer1,2, Sanne Schagen1,2, Evelyn Monninckhof1, Anne Muy1, Lenja Witbro1, Mirjam Geerlings1, Petra Peeters1, Michel de Ruiter1
1Netherlands Cancer Institute, Amsterdam, Noord-Holland, 2University Medical Center Utrecht, Utrecht, Netherlands, 3University of Amsterdam, Amsterdam, Netherlands, 4Netherlands Cancer Institute, Amsterdam, Netherlands

T035 Alterations of brain connectivity in anemic subjects using fMRI under hypoxic and hyperoxic states
Soyoung Choi1, Anand Joshi1, Chau Vu1, Jian Li1, Sharon O'Neill1, John Wood1, Richard Leahy1
1University of Southern California, Los Angeles, CA, United States, 2Children's Hospital Los Angeles, Los Angeles, CA, United States

T036 Brain Plasticity in Lung Cancer Patients Undergoing a Physical Activity Program: A VBM Study
Luisa Vaquer1, Marta Simo1, Maria Angeles Pera-Jombrina1, Jordi Brunet1, Antoni Rodriguez-Fornells2
1Concordia University, Montreal, Quebec, 2Bellvitge Biomedical Research Institute-IDIBELL, L'Hospital de llobrugat, Spain, 2Institut Catala d'Oncologia Hospital Duran i Reynals, L'Hospital de Llobrugat, Spain, 3Hospital Universitat de Bellvitge – Institut Catala d'Oncologia (ICO) L'Hospitala, L'Hospital de Llobrugat, Spain

T037 Longitudinal analysis of manually segmented volumes in a HIV-infected and uninfected children cohort
Steven Randall1, Christopher Warton1, Mark Cotton2, Barbara Laughton2, Andre van der Kouwe3,4,5, Erneste Meirjies1,2, Martha Holmes6
1Department of Human Biology, University of Cape Town, Cape Town, South Africa, 2Family clinical Research unit, Department of Paediatrics & Child Health, Stellenbosch University, Cape Town, South Africa, 3Department of Radiology, Massachusetts General Hospital, Boston, MA, United States, 4A.A. Martins Research Centre for Biomedical Imaging, Massachusetts General Hospital, Boston, MA, United States, 5UCT Medical Imaging Research Unit, Division of Biomedical Engineering, Department of Human Biology, University of Cape Town, Cape Town, South Africa, 6UCT Medical Imaging Research Unit, Division of Biomedical Engineering, Department of Human Biology, Cape Town, South Africa

T038 Alterations in Resting-State Regional Homogeneity in Patients with Crohn's Disease in Remission
Jiancheng Hou1, Veena Nair1, Poornam Benwal-Patel2, Vivek Prabakaran3, Sumona Saha4
4Department of Radiology, School of Medicine and Public Health, University of Wisconsin-Madison, Madison, WI, United States, 2Department of Medicine, Medical College of Wisconsin, Milwaukee, WI, United States, 3Department of Medicine, School of Medicine and Public Health, University of Wisconsin-Madison, Madison, WI, United States

T039 Detrimental Effects of Negative Messages on Social Cognitive Processing in Breast Cancer Patients
Alexander Sokolov1, Elisabeth Simoes2, Sara Brucker2, Diethelm Wallw1ner2, Marina Pavlova2
1University of Tuebingen, Tuebingen, Germany, 2University of Tuebingen, Tuebingen, Germany

T040 Interactive effects of cannabis and HIV infection on striatal-cortical functional connectivity
Jessica Flannery1, Michael Tobia1, Michael Riedel1, RaniJta Poudel1, Lauren Hill-Brown2, Angela Laird3, Paul Gonzalez4, Matthew Sutherland5
5Department of Psychology, Florida International University, Miami, FL, United States, 3Department of Physics, Florida International University, Miami, FL, United States

T041 Longitudinal Evaluation of White Matter Integrity to Predict Glioblastoma Recurrence
Youngkyoo Jung1, Megan Lipford2, Jeongchul Kim1, Christopher Whitlow1, Timothy Hughes1, Laura Baker1, Suzanne Craft1
1Wake Forest School of Medicine, Winston-Salem, NC, United States, 2University of Wisconsin-Madison, Madison, WI, United States

T042 Effects of Vascular Risk Factors on White and Gray Matter Perfusion in Cognitively Normal and MCI
Xiufeng Li1, Evan Olawsky1, Lynn Eberly7, Fabrizio Espósito6, Elizabeth Seaquist6, Silvia Mangia1
1Institute of Neuroscience and Technology, University of Tuebingen, Tuebingen, Germany, 2University of Tuebingen, Tuebingen, Germany

T043 Brain responses to hypoglycemia: do patients with type 1 diabetes differ from healthy controls?
Antonietta Canna1,2, Heidi Ghra1,2, Daniele Mascalli1,2, Pavel Filip3,4, Amir Mohedet1, Anjali Kumar1,2, Xiufeng Li1, Evan Olawsky1, Lynn Eberly7, Fabrizio Espósito6, Elizabeth Seaquist6, Silvia Mangia1
1Department of Radiology, Center for Magnetic Resonance Research, University of Minnesota, Minneapolis, MN, United States, 2Department of Medicine, Surgery and dentistry, Baroniess, Salerno, Italy, 3Department of University of Minnesota, Minneapolis, MN, United States, 4Department of Medicine, University of Minnesota, Minneapolis, MN, United States, 5Division of Biostatistics, University of Minnesota, Minneapolis, MN, United States
T044  Intentional inhibition in Tourette syndrome
  Charlotte Roes1, Sophie Betka2, Jim Parkinson3, Cassandra Gould van Praag4, Somira Bouyagoub5, 
  Liliana Polyanska6, Dennis Larsson7, Neil Harrison7, Sarah Garfinke1, Hugo Critchley1
  1University of Sussex, Falmer, United Kingdom, 2Brighton & Sussex Medical School, Brighton, East 
  Sussex, 3University of Sussex, Brighton, East Sussex, 4University of Oxford, Oxford, United Kingdom 

T045  Effects of Bergen 4-Day Treatment on Resting-State Graph Features in Obsessive-
  Compulsive Disorder
  Andrea Thorsen1,2,3, Chris Friend4, Stefano de Wolf4, Olga Ousdal5, Kristen Hagen6,2, Bjarne Hansen7,2, 
  Gerd Kvale1,2. Odile von den Heuvel2,2. Department of Clinical Psychology, University of Bergen, Bergen, Norway, 3OCD-team, Haukeland University Hospital, Bergen, Norway, 4OCD-team, Haukeland University Hospital, Bergen, Norway, 5Amsterdam UMC, location VUMc, Amsterdam, Netherlands, 6GGZ inGeest, Amsterdam, Netherlands, 7Department of Radiology, Haukeland University Hospital, Bergen, Norway, 8Psychiatric Department, Hospital of Molde, Molde, Norway

T046  Mapping Cortical and Subcortical Asymmetry in OCD: Findings from the ENIGMA Consortium
  Xiang-Zhen Kong1, Premika Boedhoe2,3, ENIGMA-OCD Working Group4, Paul Thompson5, Dan Stein6, 
  David Rosenberg1, Vaibhav Diwadkar5, Gerd Wagner1, Stefanie Köhler1, Gregor Peikert1, Feliberto De la Cruz1, Tim Jonas Reess2, Oana Anders Thorsen1,2,3, Odile von den Heuvel2,2. ENIGMA-OCD Working Group, 1Department of Clinical Psychology, University of Bergen, Bergen, Norway, 2Amsterdam UMC, Amsterdam Neuroscience, Amsterdam, Netherlands, 3Amsterdam Neuroscience, Amsterdam, Netherlands, 4ENIGMA-OCD Working Group, Nijmegen, Netherlands, 5Department of Psychiatry, University of Southern California, California, 6Keck School of Medicine of the University of California, Florida, 7United States, 8Department of Psychiatry and Mental Health, University of Cape Town, Cape Town, South Africa, 9Language and Genetics Department, Max Planck Institute for Psycholinguistics, Nijmegen, Netherlands, 10Donders Institute for Brain, Cognition and Behavior, Radboud University, Nijmegen, Netherlands

T047  Motor over Memory: dACC hyper-modulation in OCD is more pronounced during basic motor tasks
  Thomas Meram1, Tyler Attisha1, Asadur Chowdury1, Ellanya Kallabat1, Paul Arnold2, Gregory Hanna3, 
  David Rosenberg4, Voibhav Diwadkar5, Wayne State University School of Medicine, Detroit, MI, United States, 2University of Calgary, Calgary, Alberta, Canada, 3University of Michigan, Ann Arbor, MI, United States, 4Wayne State University School of Medicine, Detroit, MI, United States, 5Wayne State University School of Medicine, Detroit, MI, United States

T048  Checking and washing rituals are reflected in altered cortical thickness in OCD
  Gerd Wagner1, Stefanie Köhler1, Gregor Peikert1, Feliberto De la Cruz1, Tim Jonas Reess2, Oana Georgiana Rus1, Christoph Schultz1, Kathrin Koch1, Karl-Jürgen Bär1,1. Jena University Hospital, Jena, Germany, 2Technische Universität München, München, Germany, 3Universitätsspital Zürich, Zürich, Switzerland, 4Universitätsmedizin Marburg, Fulda, Germany

T049  Functional Connectivity of Putamen and Thalamus in Subclinical Obsessive-Compulsive Symptoms
  Maria Suñol1,2, Cristina Saiz-Masvidal1, Oren Contreras-Rodríguez1, Didac Macià4, Gerard Martinez-Vilajosana1, Ignacio Martinez-Zalacain1, Marta Subirà5, Jesús Pujoñ6, Jordi Sunyer7,2,10. Department of Psychiatry, Bellvitge University Hospital-Bellvitge Biomedical Research Institute, Barcelona, Spain, 2Carlos III Health Institute, Centro de Investigación Biomédica en Red de Salud Mental, CIBERSAM G17, Barcelona, Spain, 3Department of Clinical Sciences, School of Medicine, University of Barcelona, Barcelona, Spain, 4MRI Research Unit, CRC Mar, Hospital del Mar, Barcelona, Spain, 5Adult Mental Health Department, Parc Taulí University Hospital, Sabadell, Spain, 6Carlos III Health Institute, Centro de Investigación Biomédica en Red de Salud Mental, CIBERSAM G21, Barcelona, Spain, 7Barcelona Institute for Global Health (ISGLOBAL), Center for Research in Environmental Epidemiology, Barcelona, Spain, 8Department of Experimental and Health Sciences, Pompeu Fabra University, Barcelona, Spain, 9Carlos III Health Institute Centro de Investigación Biomédica en Red de Epidemiología y Salud Pública CIBERESP, Barcelona, Spain, 10Hospital del Mar Medical Research Institute (MIM), Barcelona, Spain, 11Department of Psychology and Methodology in Health Sciences, Autonomous University of Barcelona, Barcelona, Spain

T050  Working memory and dysfunctional connectomics in youth with OCD
  Jane Harness1, Asadur Chowdury1, Paul Arnold2, Gregory Hanna3, David Rosenberg4, Voibhav Diwadkar5, Wayne State University, Detroit, MI, United States, 2University of Calgary, Calgary, Alberta, Canada, 3Wayne State University School of Medicine, Detroit, MI, United States, 4Wayne State University School of Medicine, Detroit, MI, United States

T051  Static and Dynamic Functional Network Connectivity in Adolescent onset and Adult onset OCD Patients
  Hailong Li1, Xinyu Hu1, Xuan Bu2, Yingxue Gao1, Lianqing Zhang1, Lu Lu1, Xiaoxiao Hu1, Shi Tang1, Yanchun Yang2, Qiyong Gong1, Xiaoqi Huang1, Huaxi MR Research Center (HMRRC), West China Hospital of Sichuan University, Chengdu, China, 2Department of psychiatry, West China Hospital of Sichuan University, Chengdu, China

T052  Sustained Attention Induces Dysfunctional Cortical-Thalamic Effective Connectivity in OCD
  Maria Yarou1, Asadur Chowdury1, Phil Easter1, Paul Arnold2, Gregory Hanna3, David Rosenberg4, Voibhav Diwadkar5, Wayne State University School of Medicine, Detroit, MI, United States, 2University of Calgary, Calgary, Alberta, Canada, 3University of Michigan, Ann Arbor, MI, United States

T053  aberrant Causal Reasoning in Obsessive-Compulsive Disorder (OCD)
  Patricia Gruner1, Alan Anticevic1, Christopher Pittenger1, Yale University, New Haven, CT, United States

T054  Disorder-Specific Hyper-Connectivity in Pediatric OCD Relative to Pediatric Anxiety
  Luke Norman1, Huan Yang2, Kristin Mannella1, Yanni Liu1, Christopher Monk4, K. Luan Phan5, Stephan Taylor4, Kate Fitzgerald4,5. University of Michigan, Ann Arbor, MI, United States, 2University of Illinois at Chicago, Chicago, IL, United States

T055  Subtype relevant alterations of regional neural activity in obsessive-compulsive disorder
  Xinyu Hu1, Yanchun Yang2, Xiaoxiao Hu1, Qiyong G1, Miaojing Zhang1, Huaxi MR Research Center (HMRRC), Department of Radiology, West China Hospital of Sichuan University, Chengdu, China, 2Department of Psychiatry, West China Hospital of Sichuan University, Chengdu, China
Odd numbers: 12:45 – 13:45; Even numbers: 13:45 – 14:45; Poster Reception: 17:00 – 18:00

T056 Cortical morphometry alterations in patients with functional constipation
Chunxin Hu1, Li Liu1, Yueyao Ding2, Yuan yuan Wang1, Lei Liu1, Zhida Zhang3, Long Qian2, Fan Wang3, Junwang Zhang4, Yongzhan Nie5, Yi Zhang1
1Center for Brain Imaging, School of Life Science and Technology, Xidian University, Xi’an, Shaanxi, China, 2Center for MRI Research, Academy for Advanced Interdisciplinary Studies, Peking University, Beijing, China, 3Maylong Anorectal Hospital, Xi’an, Shaanxi, China, 4Xijing Gastrointestinal Hospital, The Fourth Military Medical University, Xi’an, Shaanxi, China

T057 White matter microstructural alterations in patients with functional constipation
Yanga Hu1, Wenxiao Zhang2, Guanya Li1, Zhida Zhang3, Karen M von Deneen1, Junwang Zhang4, Yongzhan Nie5, Yi Zhang1
1Center for Brain Imaging, School of Life Science and Technology, Xidian University, Xi’an, Shaanxi, China, 2Xijing Gastrointestinal Hospital, The Fourth Military Medical University, Xi’an, Shaanxi, China

T058 An fMRI Investigation of Hot and Cool Executive Functions in Adults with ADHD
Hoki Fung1, Su Ren Gan2, Bhanu Gupta2, Roger Chun Man Ho2, SH Annabel Chen3,4,5
1Psychology, School of Social Sciences, Nanyang Technological University, Singapore, 2Department of Mood and Anxiety, Institute of Mental Health, Singapore, 3Department of Psychological Medicine, Yong Loo Lin School of Medicine, National University of Singapore, Singapore, 4Centre for Research and Development in Learning, Nanyang Technological University, Singapore, 5Lee Kong Chian School of Medicine, Nanyang Technological University, Singapore

T059 Objective Neurobehavioral Indices Guides Novel Classification of Recent Trauma Survivors
Ziv Ben-Zion1, Yoav Zeevi2, Jackob Nimrod Keynan3, Roei Admon4, Israel Liberman1, Arieh Shalev1, Yoav Benjaminey1, Talma Hendler2
1Sagol Brain Institute Tel-Aviv, Tel-Aviv Sourasky Medical Center, Tel-Aviv, Israel, 2Sagol School of Neuroscience, Tel-Aviv University, Tel-Aviv, Israel, 3Department of Psychology, Tel-Aviv University, Tel-Aviv, Israel, 4Department of Psychology, University of Haifa, Haifa, Israel, 5Department of Psychiatry, Texas A&M College of Medicine, College Station, TX, United States, 6Department of Psychiatry, NYU Langone Medical Center, New-York, NY, United States, 7Department of Statistics and Operations Research, Tel-Aviv University, Tel-Aviv, Israel

T060 Regional Brain Structural Differences between ADHD Individuals with and without Treatment Response
Jung-Chi Chang1, Hsiang-Yuan Lin2, Susan Shur-Fen Gau2
1National Taiwan University Hospital Yunlin Branch, Yunlin County, Taiwan, 2National Taiwan University Hospital, Taipei, Taiwan

T061 Dyscalculia Disease Signature Obtained Using Effective Connectivity Modeled by DBN
Salih Gedik1, Ilkay Ulusoy2, Sertaç Üstün1, Nazife Ayyıldız3, Pınar Uran1, Özgür Oner2, Sinan Oktun2, Metehan Cicek3
1Department of Electrical and Electronic Eng., Middle East Technical University, Ankara, Turkey, 2Department of Electrical and Electronic Eng., Middle East Technical University, Ankara, Turkey, 3Department of Psychology, Ankara University, Ankara, Turkey, 4Brain Research Center, Ankara University, Ankara, Turkey, 5Department of Child Psychiatry, Ankara University School of Medicine, Ankara, Turkey, 6Department of Child Psychiatry, Babesçehir University School of Medicine, Istanbul, Turkey, 7Department of Mathematics Education, Final International University, Kyrenia via Mersin, Turkey, 8Department of Physiology, Brain Research Center, Ankara University, Ankara, Turkey

T062 A critical review of imaging-genetics studies in ADHD – a heterogeneous neurodevelopmental disorder
Agnieszka Reif1
1Independent Researcher, Cambridge, United Kingdom

T063 Neurofunctional Effects of Methylphenidate and Atomoxetine in ADHD during Sustained Attention
Olivia Kowalczyk1, Ana Cubíllol1, Anna Smith1, Nadia Barrett2, Vincent Giampietro1, Michael Brammer1, Andrew Simmons3,4, Katya Rubia1
1Institute of Psychiatry, Psychology & Neuroscience, King’s College London, London, United Kingdom, 2National Institute for Health Research (NIHR) Mental Health Biomedical Research Centre at South London and Maudsley NHS Foundation Trust and King’s College London, London, United Kingdom

T064 Numerical Processing in Post-Traumatic Stress Disorder
Venera Gasper1, Christoph Müller-Pfeiffer2,3, Thomas Zeffiro4,5
1Universität Pompeu Fabra, Barcelona, Spain, 2University Hospital, Zürich, Switzerland, 3University of Zürich, Zürich, Switzerland, 4University of Maryland, Baltimore, MD, United States, 5University of Zurich, Zurich, Switzerland

T065 Association of Lower fractional anisotropy and higher inattention symptoms in older adults with ADHD
Renata Cupertino1, Emma Sprotten2,3, Cibele Bandeira1, Felipe Picon1, Eduardo Vito1, Maria Tavares1, Stefania Teche1, Vitor Breda1, Junior Pacer2, Barbara Franke1,2, Eugenio Grevel3, Clainto Bau1
1Federal University of Rio Grande do Sul, Porto Alegre, Rio Grande do Sul, 2Donders Institute for Brain, Cognition and Behaviour, Nijmegen, Netherlands, 3Radboud University Medical Center, Nijmegen, Netherlands, 4Federal University of Rio Grande do Sul, Porto Alegre, Brazil, 5Federal University of Rio Grande do Sul, Porto Alegre, Brazil, 6Radboud University, Nijmegen, Netherlands, 7Hospital de Clínicas de Porto Alegre, Porto Alegre, Brazil

T066 Cerebellar cortical thinning in developmental prosopagnosia links with face recognition symptoms
Jan Van den Stock1, Daphne Stam1, François-Laurent De Winter1, Filip Baucken1, Lies Van Assche1, Maarten Van Den Bossche1, Louise Emsel2, Mathieu Vandenbulcke1
1KU Leuven, Leuven, Belgium

T067 Baseline Functional MRI Results from the Canadian Psychiatric Risk and Outcome (PROCAN) Study
Paul Metz1, Signe Bray1, Stefanie Hassel1, Catherine Lebell1, Benjamin Goldstein2, Sidney Kennedy3, Glenda MacQueen1, Jean Addison4
1University of Calgary, Calgary, Alberta, Canada, 2University of Calgary, Calgary, AB, Canada, 3Sunnybrook Health Services Centre, Toronto, Ontario, Canada, 4St. Michael’s Hospital, Toronto, ON, Canada, 5Department of Psychiatry, University of Calgary, Calgary, Alberta, Canada

T068 Children with Dyscalculia Show Hippocampal Hyperactivity During Symbolic Number Perception
Sertac Ustun1, Nazife Ayyildiz2, Emre Kale3, Öykü Manço Çaşmaz4, Pınar Uran Şenol2, Özgür Oner2, Sinan Oktun2, Metehan Cicek3
1Department of Psychology, School of Medicine, Ankara University, Ankara, Turkey, 2Brain Research Center, Ankara University, Ankara, Turkey, 3Department of Educational Sciences, Program of Counseling and Guidance, Faculty of Education, Ankara, Turkey, 4Department of Child and Adolescence Psychiatry, School of Medicine, Ankara University, Ankara, Turkey, 5Department of Child and Adolescence Psychiatry School of Medicine, Babesçehir University, Istanbul, Turkey, 6Department of Mathematics Education, Final International University, Kyrenia via Mersin, Turkey

T069 Implicit markers of suicidality within borderline personality disorder: Leveraging neuronal priming
Morgan Szczepaniak1, Asadur Chowdury2, Paul Soloff3, Vaibhav Diwadkar4
1Wayne State University School of Medicine, Detroit, MI, United States, 2University of Pittsburgh School of Medicine, Pittsburgh, PA, United States
T070 Early diagnostic intervention of Survey-based Deep Neural Network and Multivariate Bayesian SVM
Si-Boek Seoeng1, Sung Min Park2, Hae-Jeong Park2
1Brain Korea 21 PLUS Project for Medical Science, Yonsei University, Seoul, Korea, Republic of, 2Yonsei University, Seoul, Korea, Republic of

T071 Children with dyscalculia show left hemisphere connectivity deficiency
Metehan Çiçek1,2, Nazife Ayyıldız1, Sertaç Ustün3, Emre Kole1, Öykü Mușçe Çalışır1,2, Pinar Uran Şenol4, Özgür Öner1, Sinan Oikun1
1Department of Physiology, School of Medicine, Ankara University, Ankara, Turkey, 2Brain Research Center, Ankara University, Ankara, Turkey, 3Department of Educational Sciences, Program of Counseling and Guidance, Faculty of Education, Ankara, Turkey, 4Department of Child and Adolescence Psychiatry, School of Medicine, Ankara University, Ankara, Turkey

T072 Gray matter volume in antisocial personality disorder and psychopathy: An image-based meta-analysis
Stephane De Brito1, Daniel McDonald1, Jack Rogers2
1University of Birmingham, Birmingham, United Kingdom, 2Birmingham City University, Birmingham, United Kingdom

T073 Voxel-Based Morphometry and Machine Learning Classification of Grey Matter in Conduct Disorder
Ruth Pauli1, Peter Tino2, Jack Rogers2, Nora Raschle1, Gregor Kohls1, Christina Stadel1, Beate Herpertz-Dahlmann2, Kerstin Konrad3, Christine Freitag3, Graeme Fairchild4, Pia Rotshtein5, Stephane De Brito6
1University of Birmingham, Birmingham, United Kingdom, 2School of Computer Science, University of Birmingham, Birmingham, United Kingdom, 3Birmingham City University, Birmingham, United Kingdom, 4Department of Child and Adolescent Psychiatry, Psychiatric University Hospital, University of Basel, Basel, Switzerland, 5University Hospital RWTH Aachen, Aachen, Germany, 6Department of Child and Adolescent Psychiatry, Psychosomatics and Psychotherapy, Goethe-University, Frankfurt/M, Germany, 7University of Bath, Bath, United Kingdom

T074 Dimensions of Psychopathology are Dissociably Linked to Brain Structure in Youth
Antonia Koczurkin1, Sophia Seonyeong Park2, Aristidis Sotiras3, Tyler Moore4, Monica Calkins5, Matthew Cieslak6, Abdon Rosen7, Rostko Cinc8, Cedric Huchuan Xiu9, Zaixu Cui10, Anup Sharma11, Daniel Wolf12, Kosha Ruparel12, Daniel Pine13, Russell Shinohara14, David Roff15, Ruben Gur16, Christos Davatzikos17, Raquel Gur18, Theodore Satterthwaite19
1University of Pennsylvania, Philadelphia, PA, United States, 2Temple University, Philadelphia, PA, United States, 3Washington University in St. Louis, St. Louis, MO, United States, 4National Institute of Mental Health, Bethesda, MD, United States

T075 Exploring White Matter Functional Networks in Subtypes of ADHD Using Clustering Analysis
Xuan Bu1, Yingxue Gao1, Lu Lu1, Qingxia Lin1, Chuang Yang2, Xiaoqi Huang1
1Huaxi MR Research Center, Radiology Department, West China Hospital of Sichuan University, Chengdu, China, 2Department of Psychiatry, The First Affiliated Hospital of Wenzhou Medical University, Wenzhou, China

T076 Reduced structure-function coupling converge to brain hubs and correlates with chronic ADHD
Hsiang-Yuan Lin1, Luke Hearne1, James Roberts1, Wen-Yih Isaac Tseng1, Susan Shur-Fen Gau1, Luca Cogzi1
1National Taiwan University College of Medicine and Hospital, Taipei, Taiwan, 2Rutgers University, Newark, United States, 3QIMR Berghofer Medical Research Institute, Brisbane, Australia, 4National Taiwan University College of Medicine, Taipei, Taiwan, 5QIMR Berghofer Medical Research Institute, Brisbane, Australia

T077 Resting State Functional Connectivity of Children with and without Dyscalculia*
Nazife Ayyıldız1,2,3, Sertaç Ustün3, Emre Kole1, Öykü Mușçe Çalışır1,2, Pinar Uran Şenol4, Özgür Öner1, Sinan Oikun5
1Brain Research Center, Ankara University, Ankara, Turkey, 2Department of Interdisciplinary Neuroscience, Ankara University Health Sciences Institute, Ankara, Turkey, 3Department of Mathematics and Science Education, Ankara University Educational Sciences Institute, Ankara, Turkey, 4Department of Physiology, Ankara University School of Medicine, Ankara, Turkey, 5Department of Educational Sciences Program of Counseling and Guidance, Ankara University, Ankara, Turkey, 6Department of Child Psychiatry, Ankara University School of Medicine, Ankara, Turkey, 7Department of Child Psychiatry, Bahçeşehir University School of Medicine, İstanbul, Turkey, 8Department of Mathematics Education, Final International University, Kyrenia via Mersin, Turkey

T078 Spatiotemporal dynamics underlying successful cognitive therapy for posttraumatic stress disorder
Marina Charguero-Ballester1, Birgit Kleim2, Christian Ruff2, Steven Williams3, Mark Woolrich4, Diego Vidartre5, Morten Kringlebaech6, Anke Ehlers6
1Department of Psychiatry, University of Oxford, Oxford, United Kingdom, 2Department of Psychiatry, Psychotherapy and Psychosomatics, University of Zurich, Zurich, Switzerland, 3Department of Economics, University of Zurich, Zurich, Switzerland, 4Department of Neuroimaging, King’s College London, London, United Kingdom, 5University of Oxford, Oxford, United Kingdom, 6Oxford Centre for Anxiety Disorders and Trauma, Department of Experimental Psychology, University of Oxford, United Kingdom

T079 Brain response to negative facial expressions in conduct disorder in the multisite FemNAT-CD study
Stephane De Brito1, Jack Rogers2, Areti Smaragdi3, Karen Gonzalez4, Ruth Pauli5, Rosalind Baker6, Roberta Clanton4, Phillipa Birch4, Lisandra Ferreira4, Abigail Brown4, Gregor Kohls5, Kerstin Konrad6, Beate Herpertz-Dahlmann5, Anne Martinelli7, Christine Freitag3, Graeme Fairchild8
1University of Birmingham, Birmingham, United Kingdom, 2Birmingham City University, Birmingham, United Kingdom, 3University of Southampton, Southampton, United Kingdom, 4University of Birmingham, Birmingham, United Kingdom, 5Department of Child and Adolescent Psychiatry, Psychiatric University Hospital, University of Basel, Basel, Switzerland, 6University Hospital RWTH Aachen, Aachen, Germany, 7Goethe University Frankfurt, Frankfurt, Germany, 8Department of Mathematics Education, Final International University, Kyrenia via Mersin, Turkey

T080 Impact of Smoothing Weights on Voxel-Based Quantification (VBQ) analysis
Geoffrey Salvato1, Siawoosh Mohammadi2, Nadège Corbin3, John Ashburner4, Martina Callaghan4, Christophe Phillips5
1University of Liège, Liège, Belgium, 2University Medical Center Hamburg-Eppendorf, Hamburg, Germany, 3University College London, London, United Kingdom

IMAGING METHODS
Anatomical MRI

T080 Impact of Smoothing Weights on Voxel-Based Quantification (VBQ) analysis
Geoffrey Salvato1, Siawoosh Mohammadi2, Nadège Corbin3, John Ashburner4, Martina Callaghan4, Christophe Phillips5
1University of Liège, Liège, Belgium, 2University Medical Center Hamburg-Eppendorf, Hamburg, Germany, 3University College London, London, United Kingdom
T081 The effect of sample size on brain variability
Guoyuan Yang1, Meizhen Han1, Sizhong Zhou1, Weimei Men1, Jianqiao Ge1, Jia-Hong Gao1
1Center for MRI Research, 2Department of Advanced Interdisciplinary Studies, Peking University, Beijing, China

T082 An fMRI amygdala neurofeedback training normalize amygdala and hippocampal volumes
Beni Mulyanto12, Masayo Misaki1, Kymberly Young2, Vadim Zotev2, Jennifer Stewart3, Samuel Cheng2, Jerzy Bodurka4
1Laureate Institute for Brain Research, Tulsa, OK, United States, 2Electrical and Computer Engineering, University of Oklahoma, Tulsa, OK, United States, 3Department of Psychiatry, University of Pittsburgh, Pittsburgh, PA, United States, 4Stephenson School of Biomedical Engineering, University of Oklahoma, Norman, OK, United States

T083 MR Contrast in Human Locus Coeruleus: A Cautionary Tale of Misleading Post Mortem MRI Results
Eugeniya Kirilina1, Charlotte Lange2, Carsten Jäger3, Tilo Reinert1, Thomas Lohmiller2, Siawoosh Mohammadi5, Tobias Streubel5, Malte Brammerloh1,3, Anneke Alkemade6, Birte Forstmann4, Andreas Herrier6, Alexander Schnegg6, Markus Morawski5, Nikolaos Weiskopf2,3
1Department of Neurophysiology, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, 2Neurocomputation and Neuroimaging Unit, Department of Education and Psychology, Free University Berlin, Berlin, Germany, 3Felix Bloch Institute for Solid State Physics, Leipzig University, Leipzig, Germany, 4Department of Systems Neurosciences, University Medical Center Hamburg-Eppendorf, Hamburg, Germany, 5Integrative Model-based Cognitive Neuroscience Research Unit, University of Amsterdam, Amsterdam, Netherlands, 6Department of Anatomy and Embryology, Maastricht University, Maastricht, Netherlands, 7EPR Research Group, Max Planck Institute for Chemical Energy Conversion, Mülheim, Germany, 8Paul Fleischig Institute of Brain Research, University of Leipzig, Leipzig, Germany

T084 Cortical thickness and volume over time in young people at high genetic risk for bipolar disorder
Gloria Roberts1, Rhoswell Lenroot2, Bronwyn Overs3, Janice Fullerton3, Vivian Leung4, Angela Stuart1, Andrew Frankland1, Florence Levy5, Dusan Hadzi-Pavlovic4, Michael Breakspear2, Philip Mitchell3
1UNSW, Sydney, Australia, 2University of New Mexico, New Mexico, United States, 3Neuroscience Research Australia, Sydney, Australia, 4QIMR Berghofer Medical Research Institute, Brisbane, Australia

T085 The effect of face-masking structural MR images on the reliability of brain measures
Elizabeth Buimer1, Hugo Schnack1, Neejit van Haren2,3, Pascal Pas1, Hilleke Hulshoff Poel1, Rachel Brouwer2
1Brain Center Rudolf Magnus, University Medical Center Utrecht, Utrecht, Netherlands, 2Erasmus MC, Rotterdam, Netherlands

T086 Volume of Motor Area Predicts Motor Impulsivity
Hui Ai1, Yanguan Xin2, Yuejia Luo1, Yuejia Luo1, Ruolei Gu1
1Laureate Institute for Brain Research, Tulsa, OK, United States, 2Electrical and Computer Engineering, University of Oklahoma, Tulsa, OK, United States

T087 Revisiting anatomical abnormalities in congenital amusia – A multisite study
Megha Sharda1, Philippe Albouy2, Isabelle Peretz3
1Department of Psychology, Georgia State University, Atlanta, GA, United States, 2The Mind Research Network, Albuquerque, NM, United States, 3Neuroscience and Evolutionary Anthropology, Leipzig, Germany

T088 Predicting molecular composition with MRI
Shi Filo1, Oshrat Shangle1, Aviv Mezer1
1The Edmond and Lily Safra Center for Brain Sciences, The Hebrew University of Jerusalem, Jerusalem, Israel

T089 Association of MRI-detected brain volume change with prenatal exposure to heavy metal in teenage
Jun-Cheng Weng1,2, Jeng-Dau Tasi3, Chao-Yu Shen1, Yu-Chien Wu4, Shu-Li Wang5,6
1Department of Medical Imaging and Radiological Sciences, Chang Gung University, Taoyuan, Taiwan, 2Department of Psychiatry, Chang Gung Memorial Hospital, Chiayi, Taiwan, 3School of Medicine and Department of Pediatrics, Chung Shan Medical University and Hospital, Taichung, Taiwan, 4Institute of Medicine and Department of Medical Imaging, Chung Shan Medical University and Hospital, Taiwan, Taiwan, 5Department of Medical Imaging and Radiological Sciences, Chung Shan Medical University, Taichung, Taiwan, 6National Institute of Environmental Health Sciences, National Health Research Institutes, Taomi, Taiwan

T090 Evolution of White Matter Connectivity and Cortical Myelination in Hominoids: Wild Chimpanzee Pilot
Cornelius Eichner1, Eugeniya Kirilina1,2, Michael Paquette1, Toralf Mildner1, Torsten Schlumm1, Kerin Pine1, Christa Müller-Axt2, Ilona Lipp1, Horand Möller1, Guillermo Gallardo2, Roman Wittig1, Catherine Brockdorff1, Nikolaos Weiskopf2, Angela Friederici1, Alfred Amrander1
1Department of Neuropsychology, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, 2Department of Neuropsychology, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, 3Neurocomputation and Neuroimaging Unit, Department of Education and Psychology, Free University Berlin, Berlin, Germany, 4Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, 5Department of Primateology, Max Planck Institute for Evolutionary Anthropology, Leipzig, Germany

T091 Non-invasive detection of age-related molecular profiles in the human brain
Shi Filo1, Oshrat Shangle1, Aviv Mezer1
1The Edmond and Lily Safra Center for Brain Sciences, The Hebrew University of Jerusalem, Jerusalem, Israel

T092 Screen media utilization and brain structure in children
Jingnan Du1, Wei Cheng1, Jianfeng Feng2
1Institute of Science and Technology for Brain Inspired Intelligence, Fudan University, Shanghai, China, 2Department of Psychology, Beijing Normal University, Beijing, China

T093 Anatomical changes in the remaining occipital cortex of hemispherectomy subjects with blindsight
Loraine Gagnon1, John Lewis1, Gibe Bezgin2, Alan Evans2, Alain Prigot2
1Montreal Neurological Institute, McGill University, Montreal, Quebec, Canada, 2McGill University Health Centre, McGill University, Montreal, Quebec, Canada

T094 Effect of scanner version on brain morphometric measures derived from T1-weighted MRI
Evelyn Medawar1,2, Arno Villringer1,2, Erik Villringer1,2, Frauke Beyer1,2
1Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, 2Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany

T095 Quantifying Gray Matter Differences in Schizophrenia
Kelly Rootes-Murphy1,2, Etahen Zendeleh1,3, Vince Calhoun1, Jessica A. Turner2
1Department of Psychology, Georgia State University, Atlanta, GA, United States, 2The Mind Research Network, Albuquerque, NM, United States, 3The Edmond and Lily Safra Center for Brain Sciences, The Hebrew University of Jerusalem, Jerusalem, Israel
T096 Identifying Subjects with Cerebral Microbleeds in Big Datasets: a Pipeline for Candidate Selection
Varghese Sundaresan1, Christoph Arthofer2, Giovanni Zamboni3, Stamatis Sotiropoulos4, 5, Peter Rothwell6, Robert Dineen7, Dorothee Auer7, Mark Jenkinson7, Ludovica Grifanti7
1University of Oxford, Oxford, United Kingdom, 2NIHR Nottingham Biomedical Research Centre, Nottingham, United Kingdom, 3University of Nottingham, Nottingham, United Kingdom, 4Centre for Prevention of Stroke and Dementia, NDRC, University of Oxford, United Kingdom, 5Centre for Prevention of Stroke and Dementia, NDRC, University of Oxford, United Kingdom

T097 T1 gradient-echo and T1 spin-echo sequences detection of hypointense lesions in Multiple Sclerosis
Caterina Lapucci8, Simona Schiavi2, Nicola Romano9, Laura Sozza1, Matteo Pardini1, Matilde Inglese10, Luca Roccatagliata11
8DINOGMI, University of Genoa, Genoa, Italy, 9Department of Computer Science, University of Verona, Verona, Italy, 10DISASS, Ospedale Policlinico San Martino IRCSS, Genoa, Italy, 11Department of Neuroradiology, Ospedale Policlinico San Martino IRCSS, Genoa, Italy

T098 The Brain Structures Associated with Performance in the Block Design Cognitive Test
Minoo Sisakhti7, Seyed Amir Hossein Batouli7
7Institute for Cognitive Science Studies, Tehran, Iran, Islamic Republic of

T099 In Vivo Reproducible Human Amygdala Nuclei Segmentation by MR Imaging at High (7T) Field
Siyuan Fan1, Daniel Coman1, Maolin Qi1, Harry Pantazopoulos1, Sabrina Berretta2, Julie Fudge3, Anjali Sankar3, Linda Spencer4, Graeme Mason4, Douglas Rothman4, Hilary Blumberg5
1Yale School of Medicine, New Haven, CT, United States, 2Harvard Medical School, Boston, MA, United States, 3University of Rochester Medical Center, Rochester, NY, United States

T100 Human Brain Structural Change Related to Chronic Methyldopa Poisoning
Toshinori Hirai6, Osamu Abe7, Masaaki Nakamura7, Minako Azuma8, Yoshihito Kadota9, Yohei Hattori10
6University of Miyazaki, Miyazaki, Japan, 7University of Tokyo, Tokyo, Japan, 8National Institute for Minamata Disease, Minamata, Japan

T101 MOTION-RESOLVED 3D MAGNETIC RESONANCE IMAGING OF THE HUMAN EYE
Benedetta Franceschielli1, Lorenzo Di Sopra2, Ionta Silvio3, David Zeugin4, Michael Natter5, Jessica Bastiaansen6, João Jorge7, Jérôme Yerly8, Matthias Stuber8, Micchay Murray9
1Fondation Asile des aveugles et pour la Conservation de l’Oeil and Laboratory for Investigative Neurophysiology (Department of Radiology), Lausanne, Switzerland, 2Department of Radiology, Lausanne University Hospital (CHUV) and University of Lausanne (UNIL), Lausanne, Switzerland, 3Sensory-Motor Lab (SeMoLa), Department of Ophthalmology-University of Lausanne, Lausanne, Switzerland, 4Sensory-Motor Lab (SeMoLa), Department of Ophthalmology-University of Lausanne, Lausanne, Switzerland, 5The Laboratory for Investigative Neurophysiology (The LINE), Department of Radiology, CHUV, Lausanne, Switzerland, 6Ecole Polytechnique Fédérale de Lausanne (EPFL), Lausanne, Switzerland, 7Department of Radiology, CHUV and UNIL, Center for Biomedical Imaging (CIBIM), Lausanne, Switzerland, 8The Laboratory for Investigative Neurophysiology (The LINE), CHUV and Fondation Asile des Aveugles, Lausanne, Switzerland

T102 Middle Cerebral Artery distinctness improvement in MR imaging using High-Resolution SE- WB technique
Po-Wei Cheng1, Ezder Wu2, Tun Jao3, Tr-Dar Chieu4, Jyh-Horng Chen4
1Graduate Institute of Biomedical Electronic and Bioinformatics, National Taiwan University, Taipei, Taiwan, 2Interdisciplinary MRI/MRS Lab, Department of Electrical Engineering, Taipei, Taiwan, 3Department of Neurology, National Taiwan University Hospital, Taipei, Taiwan, 4Department of Electrical Engineering, National Taiwan University, Taipei, Taiwan

T103 7 Tesla MRI followed by histological 3D reconstructions in whole-brain specimens
Anneke Alkemade1, Kerrin Pine2, Evgeniya Kiriлина2, Pierre-Louis Bazin3, Max Keukens4, Martin Mulder5, Rawien Balesares6, Josephine Groot7, Robert Trampe1, Nikolaus Weiskopf8, Andreas Herrera9, Harald Moller1, Birte Forstmann10
1University of Amsterdam, Amsterdam, Netherlands, 2Department of Neurophysics, Max Plank Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, 3Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, 4Universiteit van Amsterdam, Amsterdam, Netherlands, 5Integrative Model-Based Neuroscience Research Unit, University of Amsterdam, Amsterdam, Netherlands, 6UL - The Arctic University of Tromsø & University of Tromsø, University of Tromsø, University of Tromsø, 7University of Neurophysics Max Plank Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, 8Department of Anatomy and Embryology, Maastricht University, Maastricht, Netherlands, 9NMR Methods & Development Group, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany

T104 Individual differences in TPH2 genetics determine the impact of early life stress on the brain
Congcong Liu1, Lei Xu1, Jialin Li1, Xiaoxiao Zheng2, Meina Fu3, Keshuang Li4, Keith Kendrick1, Benjamin Becker5
1University of Electronic Science and Technology of China, Chengdu, China

T105 The development of a valid, reliable, harmonized segmentation protocol for the hippocampal subfields
Rosanna Olsen6, Ana Daughtery7, Renaud La Joie8, Laura Wisse9, Katrin Amunts10, Jean Augustinack11, Arnold Bakker12, Andrew Bender12, David Berron12, Marina Boccardi13, Martina Bocchetta13, M. Malker Chakravarty13, Gael Chetelat14, Robin de Florès15, Jordan DeKrakel16, Song-Lin Ding17, Ricarda Insauti18, Olga kedo18, Susanne Mueller1, Noa Ofen19, Danila Palombo1, Natasha Raz20, Craig Stark20, Lei Wang21, Paul Yushkevich22, Qijing Yu22, Valerie Carr22
1Rotman Research Institute, Toronto, Ontario, Canada, 2Wayne State University, Detroit, MI, United States, 3UCSF, San Francisco, CA, United States, 4University of Pennsylvania, Philadelphia, PA, United States, 5Research Centre Jülich, Jülich, Germany, 6INM-1, Jülich, Germany, 7Massachusetts General Hospital, Cambridge, MA, United States, 8Johs Hopkins University, Baltimore, MD, United States, 9Michigan State University, East Lansing, MI, United States, 10Clinical Memory Research Unit, Lund University, Lund, Sweden, 11University of Geneva, Geneva, Switzerland, 12University College London, London, United Kingdom, 13Douglas Mental Health University Institute, McGill University, Montreal, Quebec, Canada, 14University of Caen, Caen, France, 15Inserm U1237, Caen, France, 16University of Western Ontario, London, Ontario, Canada, 17Allen Institute, Seattle, WA, United States, 18University of Castilla-La Mancha, Albacete, Spain, 19University of British Columbia, Vancouver, BC, Canada, 20UC Irvine, Irvine, CA, United States, 21Northwestern University, Chicago, IL, United States, 22San Jose State University, San Jose, CA, United States

T106 Cortical parcellation using Surface-based Melbourne Children's Regional Infant Brain atlases
Christopher Adams1, Bonnie Alexander2, Gareth Ball3, Richard Bear1, Jeanie Chong4, Alicia Spittle5, Lex Doyle6, Marc Seal7, Deanne Thompson8
1Murdoch Childrens Research Institute, Parkville, Australia, 2Murdoch Children’s Research Institute, Parkville, Australia, 3Melbourne Children’s, Parkville, VIC, 4Murdoch Children Research Institute, Parkville, VIC

T107 Cortical and subcortical alterations in migraine without aura
Qina Huang1, Jie Song1, Yue Zhang1, Lixiang Chen1, Bo Liu1, Bolin Cao1, Lu Zhang1, Yichen Zhang1, Ruwong Huang1
1Center for the Study of Applied Psychology, School of Psychology, South China Normal University, Guangzhou, China, 2Department of Radiology, Guangdong Provincial Hospital of Chinese Medicine, Guangzhou, China
T108 Morphometric Co-Alteration Networking in Schizophrenia: A Voxel-Based and Meta-Analytical Analysis
Donato Lillo1, Andrea Nani2, Jordi Manuelli2, Tommaso Casta3, Paola Rocca1, Claudio Brasso2, Lorenzo Marucio2, Greta Palchi2, Sergio Duc2, Franco Cauda2
1Department of Psychology - University of Turin, Turin, Italy, 2University of Turin, Turin, Italy, 3Department of Neurosciences "Rita Levi Montalcini", University of Turin, Turin, Italy, 4University of Turin, Department of Psychology, Turin, Italy, 5Koeliker Hospital, Turin, Italy

T109 Association of cardiorespiratory fitness and gray matter volume in the general population (N=2,103)
Katharina Wittfeld1, Carmen Jochem2, Marcus Dorr3, Ulf Schminke3, Sven Gläser4, Martin Bals3, Marcello Markus5, Stephan Felix6, Michael Leitzmann6, Ralf Ewert7, Robin Bulow8, Henry Volzke8, Martin Lotz8, Deborah Janowitz9, Sebastian Baumeister9, Hans Grabe9
1German Center for Neurodegenerative Diseases (DZNE), Greifswald, Germany, 2Department of Epidemiology and Preventive Medicine, University of Regensburg, Regensburg, Germany, 3Department of Internal Medicine B, University Medicine Greifswald, Greifswald, Germany, 4Institute of Diagnostic Radiology and Neuroradiology, University Medicine Greifswald, Greifswald, Germany, 5Department of SHIP/Clinical-Epidemiological Research, Institute for Community Medicine, University M, Greifswald, Germany, 6Functional Imaging Unit, Department of Diagnostic Radiology and Neuroradiology, University Medicine Greifswald, Greifswald, Germany, 7Department of Psychiatry and Psychotherapy, University Medicine Greifswald, Greifswald, Germany, 8Chair of Epidemiology, Ludwig-Maximilians-Universität München, UNIKA-T-Augsburg, Augsburg, Germany

T110 Multi-shot inversion recovery EPI with SMS excitation for high spatial resolution T1-mapping
Robert Turner1,2,3, Rosa Sanchez Panchuelo1, Olivier Mougin1, Susan Francis4
1University of Nottingham, Nottingham, United Kingdom, 2University of Amsterdam, Amsterdam, Netherlands, 3MIRI for Human Cognitive and Brain Sciences, Leipzig, Germany, 4University of Nottingham, Nottingham, United Kingdom

T111 Rapid protocol for brain T1 and T2 mapping: STRategically Acquired Gradient Echo at 1.5 T MRI
Maria Marcello Lagano1, Yongsheng Chen2, Laura Pelizzari3, Pietro Cecconi3, Francesca Baglio1, E. Mark Haacke2,3
1IRCCS Fondazione Don Carlo Gnocchi, Milan, Italy, 2Department of Radiology, Wayne State University, Detroit, MI, United States, 3The MRI Institute for Biomedical Research, Bingham Farms, MI, United States

T112 Cortical thickness changes in teenagers exposed to Manganese
Daniele Corbo1, Lorella Mascaro2, Claudia Ambrosi2, Roberto Lucchini2, Roberto Gasparotti2
1University of Brescia Medical School, Brescia, Italy, 2ASST Spedali Civili Brescia, Brescia, Italy, 3The School of Medicine at Mount Sinai, New York, NY, United States

T113 Vitamin D concentration and cortical thickness in healthy human adults
Keiko Kunitoki1, Hikaru Takeuchi1, Yasuyuki Takii1, Ryuta Kawashima1
1Tohoku University, Sendai, Japan, 2IDAC, Tohoku University, Sendai, Miyagi, 3Department of Radiology and Nuclear Medicine, IDAC, Tohoku University, Sendai, Japan

T114 In vivo hippocampal subfield volumes in bipolar disorder – a multisite ENIGMA mega-approach
Unn Kristin Haukvik2, Tiiri Pedersen Guhrolt3, Stener Nerland2, Paul Thompson4, Christopher Ching5, Ole Andreassen6, Ingrid Agartz2, for the ENIGMA Bipolar Disorder Working Group
1University of Oslo, Oslo, Norway, 2Norwegian Centre for Mental Disorders Research, Oslo University Hospital, Oslo, Norway, 3Diakonhjemmet Hospital, Oslo, Norway, 4Imaging Genetics Center, Stevens Neuroimaging & Informatics Institute, Keck, USC, Marina del Rey, CA, United States, 5Imaging Genetics Center, Keck School of Medicine, University of Southern California, Los Angeles, CA, United States, 6Norwegian Centre for Mental Disorders Research, Oslo, Norway, 7Norwegian Centre for Mental Disorders Research, Oslo, Norway, 8University of Southern California, Los Angeles, CA, United States

T115 Changes in sub-cortical brain volumes are associated with photoperiod
Naif Majraji1, Gordon Walter2
1University of Aberdeen, Aberdeen, Aberdeen, 2University of Aberdeen, Aberdeen, United Kingdom

T116 A combined univariate and multivariate game theory - based analysis of motor deficits in stroke
Monica Toba1, Melissa Zavaglia1, Melanie Barbay2, Audrey Arnox1, Olivier Goddefroy1, Clause Hilgetag4
1Laboratory of Functional Neurosciences (EA 4559), University of Picarde Jules Verne, Amiens, France, 2Department of Computational Neuroscience, University Medical Center Hamburg-Eppendorf, Hamburg, Germany, 3Laboratory of Functional Neurosciences (EA 4559), University Hospital of Amiens, Amiens, France, 4Institute of Computational Neuroscience, University Medical Center Hamburg-Eppendorf, Hamburg, Germany

T117 Assessment of brain abnormality of patients in smoking cessation with retrieval-extinction procedure
Yu-Chen Chuang1, Ming-Chou Ho2,3, Jun-Cheng Weng4
1Department of Medical Imaging and Radiological Sciences, Chang Gung University, Taoyuan, Taiwan, 2Department of Psychology, Chang Shan Medical University, Taichung, Taiwan, 3Clinical Psychological Room, Chang Shan Medical University Hospital, Taichung, Taiwan, 4Department of Psychiatry, Chang Gung Memorial Hospital, Chiayi, Taiwan

T118 Enhancing the specificity of MRI measurements to biophysical components with ex-vivo gene expression
Noga Salamon1, Shir Filo1, Aviv Mezer1, Sagiv Shifman2
1The edmond and Lily Safra Center for Brain Sciences, The Hebrew University of Jerusalem, Israel, 2Department of Genetics, The Institute of Life Sciences, The Hebrew University of Jerusalem, Israel

T119 Is VLSM a valid tool for determining the functional anatomy of the brain?
Audrey Arnox1, Monica Toba1, Marco Duering1, Momar Diouf4, Joel Daouk5, Jean-Marc Constans5, Laurent Puy1, Melanie Barbay1, Olivier Goddefroy1
1Laboratory of Functional Neurosciences (EA 4559), University Hospital of Amiens, Amiens, France, 2Laboratory of Functional Neurosciences EA 4559, Amiens, France, 3Institute for Stroke and Dementia Research, Munich, Germany, 4Department of Biostatistics, Amiens University Hospital, Amiens, France, 5Department of Imaging, Amiens University Hospital, Amiens, France

T120 The effect of membrane lipids on quantitative Magnetization Transfer exchange constants
Oshrat Sntanger6, Aviv Mezer6
1The Edmond and Lily Safra Center for Brain Sciences, The Hebrew University, Jerusalem, Israel
T121 Brain morphology in pure and comorbid ADHD with conduct disorder and oppositional defiant disorder
Nora Vetter1,2, Lea Backhausen1, Judith Buse1, Veit Roessner1, Michael Smolka4
1TU Dresden, Dresden, Germany, 2Department of Psychiatry and Neuroimaging Center, Technische Universität Dresden, Dresden, Germany, 3Department of Child and Adolescent Psychiatry, Faculty of Medicine of the TU Dresden, Dresden, Germany, 4Technische Universität Dresden, Dresden, Germany

T122 Structural deficits of frontostriatal white-matter in attention-deficit/hyperactivity disorder
Saourea Soheili-Nezhad1, Marcel Zwiers1,2, Sophie Akkerman1, Jilly Noaeyer1,2, Daan von Rooij1,2, Marianne Oldehinkel1,2,3, Jaap Oosterlaan1, Dirk Heslenfeld1, Catharina Hartman1, Pieter Hoekstra1, Barbara Franke1,2,6, Jan Buitema1,2, Christian Beckmann1,2,6, Emma Sprooten1,2
1Department of Cognitive Neuroscience, Radboud University Medical Centre, Nijmegen, Netherlands, 2Donders Institute for Brain, Cognition and Behaviour, Radboud University, Nijmegen, Netherlands, 3Brain & Mental Health Laboratory, Monash Institute of Cognitive and Clinical Neurosciences and School of Psychological Sciences, Monash University, Victoria, Australia, 4Department of Clinical Neuropsychology, VU University Amsterdam, Amsterdam, Netherlands, 5Department of Psychiatry, University Medical Centre Groningen, Groningen, Netherlands, 6Departments of Human Genetics and Psychiatry, Radboud University Medical Centre, Nijmegen, Netherlands, 7Karatek Child and Adolescent Psychiatry University Centre, Nijmegen, Netherlands, 8Centre for Functional MRI of the Brain (FMRIB), University of Oxford, Oxford, United Kingdom

T123 9.4T MRI reveals mesoscopic cortical gray matter vasculature in vivo
Omer Faruk Gulbani1, Valentijn Kemper1, Dimo Ivanov1, Benedikt Poser1, Federico De Martino1
1Maastricht University, Maastricht, Netherlands

T124 Social-cognition cortical development covaries with amygdala size in children with Williams syndrome
Jonathan Kippenthal1, Franchesca Kuhrney1, Philip Kohn1, Tiffany Nash1, Michael Gregory1, Carolyn Mervis2, Daniel Eisenberg1, Leah Sorcher1, Madeline Hamborg1, Shannon Grogans1, Karen Berman1
1National Institutes of Health, Bethesda, MD, United States, 2University of Louisville, Louisville, KY, United States

T125 Degree Centrality of Co-alteration Networks: The Meta-analytic Hubs of Pathological Spread
Lorenzo Mancuso1, Andrea Nan1, Jordi Manuella1, Donato Lilio1, Gabriele Gelmini2, Sergio Duc1, Tommaso Costa2, Franco Cauda1
1University of Turin, Department of Psychology, Turin, Italy, 2Department of Psychology - University of Turin, Turin, Italy, 3University of Turin, Turin, Italy, 4Koelikker Hospital, Turin, Italy

T126 The tissue intensity ratio as an index of atypical cortical development in autism spectrum disorder
Emily Olafson1, Saashi Bedford1, Raiaha Patel1, Gabriel Devenyi1, Stephanie Tullo1, Evdokia Anagnostoul1, Jason Lerch2, Margaret Taylor3, Meng-Chuan Lai4, Ed Bullmore5, Amber Ruigrok5, John Suckling6, Simon Baran-Cohen7, Lindsay Chur4, Dorothee Fiori8, Rosamund Holt9, Michael Spencer9, Michael Craig9, Christine Eckert10, Declan Murphy10, Michael Lombardo11, Armin Razzaghian12, Elizabeth Smith13, Audrey Thurm13, Rhosel Lenroot13, M. Mollan Chakravorty13
1McGill University, Montréal, Québec, Canada, 2Cerebral Imaging Centre, Douglas Mental Health University Institute, Montréal, Québec, Canada, 3Douglas Mental Health University Institute, McGill University, Montréal, Québec, Canada, 4Holland Blosoview Kids Rehabilitation Hospital, Toronto, Ontario, Canada, 5Program in Neurosciences and Mental Health, Douglastfor Sick Children, Toronto, Ontario, Canada, 6Hospital for Sick Children, Toronto, Ontario, Canada, 7University of Cambridge, Cambridge, United Kingdom, 8Autism Research Centre, Department of Psychiatry, University of Cambridge, Cambridge, United Kingdom, 9National Autism Unit, Bethlem Royal Hospital, London, United Kingdom, 10Institute of Psychiatry, Psychology and Neuroscience, King’s College London, London, United Kingdom, 11King’s College London, London, United Kingdom, 12Laboratory for Autism and Neurodevelopmental Disorders, University of Cyprus, Cyprus, Cyprus, 13NIMH, Bethesda, MD, United States, 14Section on Behavioral Pediatrics, National Institute of Mental Health, Bethesda, MD, United States, 15Department of Psychiatry, University of New South Wales, Sydney, Australia

T127 Morphometry features in different types of epilepsy
Catarina Saiote1, Thomas Henry1, Michael Park2
1University of Minnesota, Minneapolis, MN, United States

T128 Quantifying myelin: validating MR biomarkers with classical histology and mass spectrometry
Evgeniya Kirilin1, Ilona Lipp1, Carsten Jäger1, Markus Marowski2, Merve Terzic3, Hans-Jürgen Bidmon1, Markus Aker4, Pitter Huesgen5, Nikolaus Weiskopf6
1Department of Neurophysics, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, 2Neurocomputation and Neuroimaging Unit, Department of Education and Psychology, Free University Berlin, Berlin, Germany, 3Pouf Flechsig Institute of Brain Research, University of Leipzig, Leipzig, Germany, 4Institute of Neuroscience and Medicine (INM-1), Forschungszentrum Jülich, Jülich, Germany, 5Central Institute of Engineering, Electronics and Analytics (ZEA), Forschungszentrum Jülich, Jülich, Germany, 6Cécile and Oskar Vogt Institute of Brain Research, Heinrich-Heine-Universität Düsseldorf, Düsseldorf, Germany, 7Felix Bloch Institute for Solid State Physics, Faculty of Physics and Earth Sciences, Leipzig University, Leipzig, Germany

T129 Evaluation of Multi-Site Reliability in Regional Brain Volumes Without Harmonized Protocols
Emily Stolz1, Prajayash Katarinavala1, Richard Frayne2, Catherine Lebel1, Christian Beaulieu2
1Department of Biomedical Engineering, University of Alberta, Edmonton, Alberta, Canada, 2Seaman Family MR Research Centre, Radiology, University of Calgary, Calgary, Alberta, Canada, 3Child and Adolescent Imaging Research Program, University of Calgary, Calgary, Alberta, Canada

T130 Persistent Brain Structural Anomalies in ADHD Across Childhood and Adulthood
Jingyu Liu1, KuiKuai Duan2, Wenhao Jiang3, Barbara Franke1, Jan Buittelaar1, Martine Hoogman3, Alejandra Arias-Vasquez4, Jessica A. Turner5
1The Mind Research Network, Albuquerque, NM, United States, 2Department of Electrical and Computer Engineering, The University of New Mexico, Albuquerque, NM, United States, 3Department of Psychology, Georgia State University, Atlanta, GA, United States, 4Radboud University Medical Center, Nijmegen, Netherlands, 5Donders Institute for Brain Cognition and Behaviour, Donders Centre for Cognitive Neuroimaging, Nijmegen, Netherlands, 6Department of Human Genetics, Donders Institute for Brain, Nijmegen, Netherlands, 7Department of Psychology, Georgia State University, Atlanta, GA, United States
T131 Construction of 4D Cortical Surface Atlases for the Baby Connectome Project
Zengyi Chen1,2, Zhengwang Wu1, Fan Wang1, Jing Xia1, Dingna Duan1, Qian Zhang1, Li Wang2, Weili Lin1, Gang Li1, Dinggang Shen2, for UNC/UMN Baby Connectome Project Consortium10
1College of Science, China Jiliang University, Hangzhou, China, 2UNC-Chapel Hill, Chapel Hill, NC, United States, 3UNC-Chapel Hill, Raleigh, NC, United States, 4Shandong University, Chapel Hill, NC, United States, 5UNC at Chapel Hill, Chapel Hill, NC, United States, 6University of North Carolina at Chapel Hill, Chapel Hill, NC, United States, 7Department of Radiology and BRIC, Chapel Hill, NC, United States, 8UNC at Chapel Hill, Chapel Hill, NC, United States, 9University of North Carolina at Chapel Hill, Chapel Hill, NC, United States, 10Department of Radiology and BRIC, Carrboro, NC, United States

T132 Quantifying spatial variability of white matter hyperintensity using information theory
Jin-Ju Yang1, Gilsson Park1, Hee Jin Kim2, Sang Won Seo1, Jong-Min Lee1
1Hanyang University, Seoul, Korea, Republic of, 2Samsung Medical Center, Seoul, Korea, Republic of

T133 Neuroanatomical basis for the cognitive and motivational pathways of ADHD in adolescents
Chun Sheng1, Qi Zhao2, Linqil Zhang3, Qiang Lu4, Jianfeng Feng1
1Institute of Science and Technology for Brain-Inspired Intelligence, Fudan University, Shanghai, China, 2School of Mathematical Sciences, Fudan University, Shanghai, China, 3PR China, Fudan University, Shanghai, China, 4Xinhua Hospital, Shanghai Jiaotong University, Shanghai, China

T134 That's what counts - larger amygdala-hippocampus formation associates with higher income
Eugenio Conti1,2, Alessandra Retico3, Paolo Bosco1, Letizia Palumbo1, Giovanni Spera1, Laura Biagi2, Simona Fiori3, Michele Tosetti1, Giovanni Cioni1,2, Filippo Muratori1,2, Anna Chilosi3, Sara Calderoni1,2
1IRCCS Stella Maris Foundation, Pisa, Italy, 2University of Pisa, Pisa, Italy, 3INFN, Pisa Division, Pisa, Italy

T135 A unified multi-scale probabilistic atlas of the human gray matter
Yasser Alemán-Gómez1,2,3, Alberto Fernández-Pena4, Emeline Mullier1, Sebastien Tourbier4, Alessandra Griffa5, Philipp Baumann6, Meriteix Bach Cuadra7,8,9, Patric Hagmann6
1Department of Psychiatry, Centre Hospitalier Universitaire Vaudois, Lausanne, Switzerland, 2Department of Radiology, Centre Hospitalier Universitaire Vaudois, Lausanne, Switzerland, 3Medical Image Analysis Laboratory (MIAL), Centre d’Imagerie BioMédicale (CIBM), Lausanne, Switzerland, 4Instituto de Investigación Sanitaria Gregorio Marañón, Madrid, Spain, 5Lausanne University Hospital, Lausanne, Switzerland, 6University Hospital of Lausanne, Lausanne, Vaud, 7Vrije Universiteit Amsterdam, Utrecht, Netherlands, 8Service of General Psychiatry, Department of Psychiatry, Centre Hospitalier Universitaire Vaudois, Lausanne, Switzerland, 9Department of Radiology, Centre Hospitalier Universitaire Vaudois (CHUV), Lausanne, Switzerland, 10Signal Processing Laboratory (LTS5), École Polytechnique Fédérale de Lausanne (EPFL), Lausanne, Switzerland

T136 Personality Traits and its Association with Hippocampus Volume in Psychologically Healthy Individual
Arun Garimella1, Vinoo Alluri1, Katja Schlegel2, Sascha Frühholz2
1International Institute of Information Technology, Hyderabad, Telangana, 2Social Interaction Lab, Northeastern University, Boston, MA, United States

T137 Resilience mediates the relationship between depressive symptoms and caudal ACC morphology
Katharina Brosch1, Tina Meller1, Frederike Stein1, Simon Schmitt2, Dominik Groteneder3, Janik Goltermann1, Udo Dannlowski1, Igor Nenadic1, Tilo Kircher1, Axel Krug1
1University of Marburg, Marburg, Germany, 2University of Münster, Münster, Germany

T138 Neuroanatomy of elementary school late talking children
Agnieszka Kocpzuk1,2, Katarzyna Chyl1, Agnieszka Debeka1, Gabriela Dziewie1, Bartosz Kossowski3, Magdalena Luniewska1, Joanna Plewko1, Anna Grabowski1, Ewa Haman1, Katarzyna Jednorog1
1The Nencki Institute of Experimental Biology, Warsaw, Poland, 2Faculty of Psychology, University of Warsaw, Warsaw, Poland, 3The Nencki Institute of Experimental Biology, Polish Academy of Sciences, Warszawa, Poland

T139 The correlation of symptom dimensions and gray matter volume in a transdiagnostic cohort
Frederike Stein1, Gunnar Lemmer1, Simon Schmitt1, Katharina Brosch1, Elena Fischer1, Tina Meller1, Dominik Groteneder2, Anne Nagels1, Igor Nenadic1, Udo Dannlowski1, Tilo Kircher1, Axel Krug1
1University of Marburg, Marburg, Germany, 2University of Münster, Münster, Germany, 3University of Moinz, Mainz, Germany

T140 Autism Spectrum Disorder and Childhood Apraxia of Speech:early common and distinct cortical features
Eugenia Conti1,2, Alessandra Retico3, Paolo Bosco1, Letizia Palumbo1, Giovanni Spera1, Laura Biagi2, Simona Fiori3, Michele Tosetti1, Giovanni Cioni1,2, Filippo Muratori1,2, Anna Chilosi3, Sara Calderoni1,2
1IRCCS Stella Maris Foundation, Pisa, Italy, 2University of Pisa, Pisa, Italy, 3INFN, Pisa Division, Pisa, Italy

T141 Stability of MRI radiomic features of the hippocampus: An analysis of test-retest variability
Zhuoran Li1, Huichuan Duan1, Kun Zhao1, Yanhui Ding1, Yuanjie Zheng1
1School of Information Science and Engineering, Shandong Normal University, Jinan, China

T142 A series of population-specific Indian brain templates and atlases for ages 6 to 60 years
Bharath Holla1, Paul Taylor1, Daniel Glen2, John Lee3, Chirag Ahuja4, Urvakshit Mehta5, Ganesan Venkatasubramaniam6, Pranad Pat7, Jiten Saini7, Rebecca Kuriyan7, Kumaran Kalyanaraman7, Debasish Basu1, Dimitri Orfanos1, Gareth Barker2, Robert Cox2, Gunter Schumann2, Rose Bharath1, Vivek Benegal8
1National Institute of Mental Health and Neuro Sciences, Bengaluru, India, 2NIMH, Bethesda, MD, United States, 3Post Graduate Institute of Medical Education and Research, Chandigarh, India, 4St. John’s Medical College and St. John’s Research Institute, Bengaluru, India, 5CSI Holdsworth Memorial Hospital, Mysore, India, 6NeuroSpin, CEA, Université Paris-Saclay, Paris, France, 7Institute of Psychiatry, Psychology & Neuroscience, King’s College London, London, United Kingdom

T143 TI/FLAIR as a surrogate for TI/T2 in the assessment of myelination
Mira Bajaj1, Daniel Pine2, Anderson Winkler2
1National Institutes of Health, Bethesda, MD, United States, 2National Institute of Mental Health, Bethesda, MD, United States

T144 Hippocampal subfields alterations in terrorist attack survivors with post-traumatic stress disorder
Charlotte Postel1, Alison Mary1, Jacques Doyon1, Florence Frassinet1, Berengère Guilleuy-Girard1, Fausto Viader1, Vincent de la Souteyrand1, Denis Peschanski2, Francis Eustache3, Pierre Gagnepain1
1U1077, Normandie Univ, UNICAEN, PSL Université Paris, EPHE, INSERM, CHU de Caen, Caen, Normandie, France, 2CNRS, UMR8209, Université Paris I Panthéon Sorbonne, EHESS, Université de PSL, Paris, France
T144 Long-term brain changes associated to human pregnancy
Magdalena Martinez-Garcia1, Maria Paternina1, Erika Barba-Müller2, Lara Wiernenga3, Yasser Aleman-Gomez4, Clara Purus2, Luis Marcos-Vidal4, Laura Beumala5, Cristina Pozzobon5, Marisol Picado5, Florencio Lucco5, Juan Soliva6, Adolf Tobera7, Jiska Peper7, Eveline Crane8, Agustín Ballesteros9, Daniel Martin de Bías9, Laura Carretero-Gómez9, Oscar Vilarroy9, Manuel Desco4, Eliseline Hoekzema11, Susanna Carmona11
1Instituto de Investigacion Sanitaria del Hospital Gregorio Marañón, Madrid, Spain, 2Centro de Investigación Biomédica en Red de Salud Mental, Madrid, Spain, 3Hospital General Gregorio Marañón, Madrid, Spain, 4University Institute of Mental Health Vidal i Barraquer, Ramon Lluís University, Barcelona, Spain, 5Barcelona, Spain, 6Brain and Development lab, Psychology Department Leiden University, Leiden, Netherlands, 7CHUV, Lausanne, Switzerland, 8Unitat de Recerca en Neurociència Cognitiva, Department of Psychiatry and Forensic Medicine, Univers, Madrid, Spain, 9Departamento de Bioingeniería e Ingeniería Aeroespacial, Universidad Carlos III de Madrid, Leganés, Madrid, Spain, 10Unitat de Recerca en Neurociència Cognitiva, Department of Psychiatry and Forensic Medicine, Univers, Barcelona, Spain, 11WIB, Barcelo, Assisted Medicine Reproduction, Barcella, Spain, 12Brain and Development Laboratory, Leiden University, Leiden, the Netherlands, Leiden, Netherlands, 13Instituto de Investigación Sanitaria Gregorio Marañón, Madrid, Spain, 14Departamento de Bioingeniería e Ingeniería Aeroespacial, Universidad Carlos III de Madrid, Leganés, Spain, 15Fundación Centro Nacional de Investigaciones Cardiovasculares Carlos III, Madrid, Spain, Madrid, Spain

T145 Hemispheric Difference in Brain Plasticity: Evidence from Unilateral Brain Damage Patients
Yijun Chen1, Chenxi Zhao1, GaoLong Gong3
1Beijing Normal University, Beijing, China

T146 Structural Imaging Predictors of Mild Traumatic Brain Injury in a Paediatric Population
Ayushi Shukla1, Ashley Ware1, Naomi Goodrich-Hunsaker1, Elisabeth Wildey1, Tracy Abdilskov1, Erin Bigler1, Daniel Cohen2, Leslie Mihalov2, Ann Bacevice3, Barbara Bangerter1, H. Gerry Taylor4, Keith Yeates1, Catherine Lebel1
1University of Calgary, Calgary, Alberta, Canada, 2Brigham Young University, Provo, UT, United States, 3University of Utah, Salt Lake City, UT, United States, 4Ohio State University, Columbus, OH, United States, 5Case Western Reserve University, Cleveland, OH, United States, 6Case Western Reserve University, Cleveland, OH, United States

T147 Sex differences in structural variability of brain regions in development and young adulthood
Natalie Forde1, Grace Jacobs1, Erin Dickie1, Stephanie Ames1,2, Aristotelis Vainos1,2
1CAMH, Toronto, Ontario, Canada, 2University of Toronto, Toronto, Ontario, Canada

T148 Changes in hippocampal regional morphology after treatment with ECT and ketamine in major depression
Antoni Kubicki1, Van Ngo1, Joana Louriero1, Megha Vasavada1, Benjamin Wade1, Stephanie Njou1, Shantanu Joshi1, Eliza Congdon1, Randall Espinosa1, Katherine Nair1
1UCLA, Department of Neurology, Los Angeles, CA, United States, 2UCLA, Department of Psychiatry and Biobehavioral Sciences, Los Angeles, CA, United States, 3UCLA, Departments of Neurology, Psychiatry and Biobehavioral Sciences, Los Angeles, CA, United States

T149 White matter bottleneck in small vessel disease: lesion symptom mapping study of language-executive
Ileana Camerin1, Nathalie Meyer1, Joanna Sierwowska1, Anil Taludhar1, Andrew Reid1, Roy Kessels1, Frank Erik de Leeuw2, Vitalea Pati3
1Radboud University, Nijmegen, Netherlands, 2Radboud University, Nijmegen, NE, United States, 3Donders Institute for Brain, Cognition and Behaviour, Radboud University, Nijmegen, Netherlands, 4Radboudumc, Nijmegen, Netherlands

T150 Genetic Contributions to Multivariate Structural Brain Networks
Amanda Rodriguez1, Aaron Alexander-Bloch2, Emily Knowles3, Samuel Mathias3, Josephine Mollon3, Marinka Roesin3, Jessica A. Turner3, Vince Calhoun3, David Glahn3
1Boston Children’s Hospital/Harvard Medical School, Boston, MA, United States, 2Yale University, New Haven, CT, United States, 3Boston Children’s Hospital, Boston, MA, United States, 4Yale University School of Medicine, Hartford, CT, United States, 5Department of Psychology, Georgia State University, Atlanta, GA, United States, 6The Mind Research Network, Albuquerque, NM, United States, 7Department of Psychiatry, Yale University, School of Medicine, New Haven, CT, United States

T151 Predicting clinically isolated syndrome conversion to multiple sclerosis. A study using PROTo
Deborah Pareto1, Aran Garcia-Vidal2, Jaume Sastre-Garriga2, Manel Alberch2, Cristina Auger2, Marian Tintore3, Xavier Montalban3, Alex Rovira4
1Vall Hebron Research Institute, Barcelona, Spain, 2Section of Neuroradiology, Vall Hebron University Hospital, Barcelona, Spain, 3Department of Neuroimmunology (Cemcat), Vall d’Hebron University Hospital, Barcelona, Spain, 4Vall Hebron Research Institute, Barcelona, Barcelona, 5Department of Neuroradiology (Cemcat), Vall d’Hebron University Hospital, Barcelona, Barcelona, 6Section of Neuroradiology, Vall Hebron University Hospital, Barcelona, Barcelona

T152 Sex Differences in Limbic Network and Risk-taking Propensity in Healthy Individuals
Sahil Bajaj1, William Killgore2
1University of Arizona, Tucson, AZ, United States

T153 Sexual dimorphism in the human hypothalamus revealed by 3T-MRI
Cognitive and Brain Sciences, Leipzig, Germany, Leipzig, Germany, 3Donders Institute for Brain, Cognition and Behaviour, Radboud University, Nijmegen, Netherlands, 4Leipzig University clinic, Leipzig, Germany

T154 FKBP5 promoter methylation is associated with structural changes in stress processing brain circuits
Ileana Camerio1, Juntong Chen1, Anaís Harneit1, Urs Braun1, Ren Ma2, Markus Reichert1, Zhenxiang Zang1, Gabriela Gan1, Carolin Moßnang1, Kristina Schwarz1, Janina Schweiger1, T. Ecabi1, Lena Geiger1, Oksana Berhe1, Torsten Wustenberg1, Xiaolong Zhang1, Fabian Streit1, Stephanie Witt1, Marcella Rietschel1, Emanuel Schwarz1, Andreas Meyer-Lindenberg1, Heike Tost1
1Central Institute of Mental Health, Mannheim, Germany

T155 Changes in hippocampal regional morphology after treatment with ECT and ketamine in major depression
Antoni Kubicki1, Van Ngo1, Joana Louriero1, Megha Vasavada1, Benjamin Wade1, Stephanie Njou1, Shantanu Joshi1, Eliza Congdon1, Randall Espinosa1, Katherine Nair1
1UCLA, Department of Neurology, Los Angeles, CA, United States, 2UCLA, Department of Psychiatry and Biobehavioral Sciences, Los Angeles, CA, United States, 3UCLA, Departments of Neurology, Psychiatry and Biobehavioral Sciences, Los Angeles, CA, United States

T156 Accelerated T1 brain imaging utilizing Compressed sense
Scott Hipo1, Jay Gonyea1, Trevor Andrews1, Julie Dumas1, Hugh Garavan2, Alexandra Potter2, Scott McKay1
1University of Vermont Larner College of Medicine and University of Vermont Medical Center, Burlington, VT, United States, 2University of Vermont, Burlington, VT, United States, 3University of Vermont, Burlington, VT, United States

T157 How brain volume predicts skill acquisition in a real-time strategy game
Natalia Kowalczyk1, Pawel Dobrowski2, Maciej Skorka2, Maciej Gaca2, Monika Myśliwiec2, Bartosz Kossowski2, Nikodem Hryniewicz2, Weronika Dębowska2, Aneta Brzezicka2
1Faculty of Psychology, University of Social Science and Humanities, Warsaw, Poland, 2Institute of Psychology, Polish Academy of Sciences, Warsaw, Poland, 3CNS Lab of the Nalecz Institute of Biocybernetics and Biomedical Engineering, PAS, Warsaw, Poland, 4Faculty of Electronics and Information Technology, Warsaw University of Technology, Warsaw, Poland, 5Department of Neururosurgery, Cedars-Sinai Medical Center, Los Angeles, CA, United States
T158 Coritical Morphometry in Mild Pediatric Head and Orthopedic Injury Using Two Automated Approaches
Ashley Ware1, Naomi Goodrich-Hunsaker1, Ayushi Shukla2, Elisabeth Wilde3, Tracy Abildskov3, Erin Bigler4, Daniel Cohen5, Leslie Mihalov6, Ann Bacevice1, Barbara Banter7, H. Gerry Taylor7, Keith Yeates7, Catherine Lebel8
1University of Calgary, Calgary, Alberta, Canada, 2Department of Psychology, Brigham Young University, Provo, UT, United States, 3University of Calgary, Calgary, Alberta, Canada, 4University of Utah, Salt Lake City, UT, United States, 5The Ohio State University, Columbus, OH, United States, 6Ohio State University, Columbus, OH, United States, 7Case Western Reserve University, Cleveland, OH, United States, 8Case Western University, cleveland, OH, United States

T159 The association between Body Mass Index and gyirification in developing children
Elisabet Blok1, Catheline Steegers1, Ryan Muetzel2, Gwen Dieleman1, Pauline Jansen1, Manon Hilleger1, Stefan Ehrlich2, Jan van der Ende3, Tanya White1
1Erasmus MC, Rotterdam, Netherlands, 2Technische Universitat Dresden, Dresden, Germany, 3Erasmus MC University Medical Center, Rotterdam, Netherlands

T160 Surface-Based Detection of Cortical Dysplasia Type IIb
Leonie Henschel1, Bastian David2, Fabiane Schuch1, Christian Egler1, Elke Hattingen1, Theodor Rübel2,3, Martin Reuter1,4
1German Center for Neurodegenerative Diseases (DZNE), Bonn, Germany, 2Department of Epileptology, University of Bonn Medical Center, Bonn, Germany, 3Department of Neuroradiology, University Hospital Frankfurt, Frankfurt, Germany, 4Epilepsy Center Frankfurt Rhine-Main, Department of Neurology, Goethe University Frankfurt, Frankfurt am Main, Germany, 5Center for Personalized Translational Epilepsy Research (CePTER), Goethe-University Frankfurt, Frankfurt am Main, Germany, 6Martinos Center for Biomedical Imaging, Radiology, MGH / Harvard Medical School, Boston, MA, United States

T161 Structural Neural Similarity in Human Brain Anatomy among Mother-teen Dyads
Tengfei Li1, Weiyan Yin2, Eva Tetzler2, Nancy McElwain3, Hongtu Zhu4, Weili Lin5
1UNC at Chapel Hill, Chapel Hill, NC, United States, 2UNC Chapel Hill, Chapel Hill, NC, United States, 3University of Illinois at Urbana-Champaign, Urbana-Champaign, IL, United States, 4UNC at Chapel Hill, Chapel Hill, NC, United States, 5Department of Radiology and BIRC, Chapel Hill, NC, United States

T162 Brain aging assessed with longitudinal magnetic resonance imaging (MRI): effects of scanner vendor
Christina Boyle1, Christopher Ching2, Sophia Thomopoulos2, Artemis Zavaliangos-Potropoulu3, Adam Mezher1, Matt Bernstein1, Bret Borowski4, Clifford Jack4, Michael Weiner5, Paul Thompson6
1USC, Marina Del Rey, CA, United States, 2Imaging Genetics Center, Keck School of Medicine, University of Southern California, Los Angeles, CA, United States, 3Imaging Genetics Center, INI, Keck School of Medicine, Marina del Rey, CA, United States, 4Imaging Genetics Center, Stevens Neuroimaging & Informatics Institute, Keck, USC, Marina Del Rey, CA, United States, 5Imaging Genetics Center, Stevens Neuroimaging & Informatics Institute, Keck, USC, Marina Del Rey, CA, United States, 6Department of Radiology, Mayo Clinic and Foundation, Rochester, NY, United States, 7Department of Radiology, Mayo Clinic and Foundation, Rochester, MN, United States, 8Department of Radiology, University of Southern California, Los Angeles, CA, United States, 9Department of Radiology, Mayo Clinic, Rochester, MN, United States, 10Department of Radiology, University of California San Francisco School of Medicine, San Francisco, CA, United States, 11Imaging Genetics Center, Stevens Neuroimaging & Informatics Institute, Keck, USC, Marina del Rey, CA, United States

T163 Age Trajectory and Gender Effects of Volume and R1 in Deep White Matter and Subcortical Structures
Lagashan Yogananthan1, Manpreet Sehmbi3, Kim Desmond6, Benicio Frey7, Luciano Minuzzi2, Nick Bock3
1McMaster University, Hamilton, Ontario, Canada, 2CAMH, Toronto, Ontario, Canada

T164 Gender difference in asymmetry of small world hemispheric network: A cortical thickness study
Yang-Ho Choi1, Bo-Hyun Kim2, Jong-Min Lee1
1Hanyang university, Seoul, Korea, Republic of

T165 Precon_all: A Preclinical Cortical Surface Generation Pipeline for Animal Brains
Robert Austin Bens1, Ting Xu1, Jose Pedro Manzano1, Paula Montesinos2, Javier Sanchez-Gonzalez3, Michael milham4, Eugene Duff5, Borja Ibanez6
1Centro Nacional de Investigaciones Cardiovasculares Carlos III (CNIC), Madrid, Spain, 2Child Mind Institute, New York, NY, United States, 3Philips Healthcare Iberia, Madrid, Spain, 4University of Oxford, Oxford, United Kingdom

T166 A ‘Simple’ Re-Executable Publication: IQ in Typically Developing Children
Satrjit Ghosh1, Goncalves Mathias2, David Keator3, Jeffrey Grethe4, Steven Hodge5, Yaroslav Halchenko6, Jean-Baptiste Poline7, David Kennedy8
1MIT/HMS, Cambridge, MA, United States, 2MIT, Cambridge, MA, United States, 3University of California Irvine, Irvine, CA, United States, 4UCSD, San Diego, CA, United States, 5University of California San Diego, San Diego, CA, United States, 6University of Massachusetts Medical School, Worcester, MA, United States, 7Dartmouth College, Dartmouth, NH, United States, 8McGill University, Montreal, Quebec, 9University of Massachusetts Medical School, Worcester, MA, United States

T167 Automated quantification and scoring of the perivascular space using multi-modal structural MRI
Farshid Sepehrband1, Giuseppe Barisano2, Nasim Sheikh-Bahaei1, Ryan Cabeen3, Meng Law4, Arthur Toga5
1Laboratory of Neuro Imaging, Keck School of Medicine of USC, University of Southern California, Los Angeles, CA, United States, 2Keck School of Medicine of USC, University of Southern California, Los Angeles, CA, United States, 3Alfred Health, Melbourne, Australia

T168 Age associated changes in cortical structure and complexity
Daniel Cox1, Aleksandra Kudra2, Martyn McFarquhar1
1University of Manchester, Manchester, United Kingdom

Diffusion MRI
T169 MEDUSA: a GPU-based tool to create realistic phantoms of the brain white matter microstructure
Kevin Ginsburger1, Felix Matuschke2, Fabrice Poupon3, Jean-Francois Mangin4, Markus Auer5, Cyril Poupon1
1NeuroSpin-CEA (Commissariat à l’Energie Atomique et aux Energies Alternatives), Gif-sur-Yvette, France, 2Research Center Juelich, Institute of Neuroscience and Medicine, Juelich, Germany

T170 Inter-subject Variability in Anatomical Connectivity and its Dependence on Spatial variation of ROI
Meizhen Han1, Guoyuan Yang1, Sizhong Zhou2, Boyan Xu2, Hai Li1, Weiwei Men1, Jianqiao Ge1, Jiahong Gao1
1Center for MRI research, Peking University, Beijing, China

T171 A Comparison of Free Water Mapping Techniques in Diffusion MRI
Jordan Chad1, Ofer Pasternak1, Jean Chen2
1Rotman Research Institute, Baycrest Health Sciences, Toronto, Ontario, Canada, 2Department of Medical Biophysics, University of Toronto, Toronto, Ontario, Canada, 3Brigham & Women’s Hospital, Harvard Medical School, Boston, MA, United States
T172 A Longitudinal Study: Odd numbers: 12:45 – 13:45; Even numbers: 13:45 – 14:45; Poster Reception: 17:00 – 18:00

Bing Yao1, Hannah Ovadia1, Zhiguo Jiang1, Sarah Wood2, Gail Forrest3, Steven Kirshblum4

1Kessler Foundation, West Orange, NJ, United States, 2Kessler Institute for Rehabilitation, West Orange, NJ, United States

T173 “Musical training Induces Plasticity in Human Brain White Matter”

Manal Aloami1,2, Georg Meyer1,2

1University of Liverpool, Liverpool, United Kingdom, 2University of Liverpool, United Kingdom

T176 Prenatal exposure to perfluorochemicals and later brain structure change revealed by GQI

Jun-Cheng Weng1,2, Chao-Yu Shen3,4, Jeng-Dau Tasi5,6, Yen-Ning Hsu5, Shu-Li Wang6

1Department of Medical Imaging and Radiological Sciences, Chang Gung University, Taoyuan, Taiwan, 2Department of Psychiatry, Chang Gung Memorial Hospital, Chiayi, Taiwan, 3Institute of Medicine and Department of Medical Imaging, Chung Shan Medical University and Hospital, Taiwan, 4College of Medicine, National Taiwan University, Taipei, Taiwan, 5School of Medicine and Department of Pediatrics, Chang Shan Medical University and Hospital, Taichung, Taiwan, 6National Institute of Environmental Health Sciences, National Health Research Institutes, Miaoli, Taiwan

T177 A head motion correction algorithm for arbitrary q space sampling schemes with high b values

Matthew Cieslak1, Philip Cook1, Scott Grafton1, Mark Elliott1, David Roalf1, Danielle Bassett1, Desmond Oathes1, Theodore Satterthwaite1

1University of Pennsylvania, Philadelphia, PA, United States, 2University of California, Santa Barbara, Santa Barbara, CA, United States

T178 Genetic properties of hub connectivity in the human brain

Aurina Amatkevičiūtė1, Ben Fulcher2, Stuart Oldham2, Jęggan Tiego3, Mark Bellgrove3, Alex Forne4

1Manash University, Melbourne, Australia, 2School of Physics, Sydney University, Sydney, Australia
T187 DMRI detects structural abnormalities in optic chiasm
Robert Puźniak1, Khazar Ahmadi1, Joen Kaufmann1, Andre Gouws1, Antony Morland3, Franco Pestilli4, Michael Hoffman3
1Department of Ophthalmology, Otto-von-Guericke University, Magdeburg, Germany, 2Department of Neurology, Otto-von-Guericke-University, Magdeburg, Germany, 3Department of Psychology, York Neuroimaging Centre, University of York, York, United Kingdom, 4Department of Psychological and Brain Sciences, Indiana University, Bloomington, IN, United States, 5Department of Ophthalmology, Otto-von-Guericke University, Magdeburg, Germany

T188 Nonlinear Alignment of Whole Tractograms with the Linear Assignment Problem
Emanuele Olivetti1, Pietro Gorì2, Pietro Astolfi6, Giulia Bertò6, Paolo Avesani1
1Bruno Kessler Foundation, Trento, Trento, Italy, 2Telecom ParisTech, Paris, France, 3 Fondazione Bruno Kessler, Trento, Italy, 4University of Trento, Trento, Italy

T189 Infant White Matter Microstructure is Affected by Maternal Experiences of Childhood Maltreatment
Balu Antran1, Jennifer Khoury1, Ai Wern Chung1, Yangming Ou1, Michelle Bosquet Enlow2,3, Karlen Lyons-Ruth1, P. Ellen Grant1
1FNNDS, Boston Children’s Hospital, Harvard Medical School, Boston, MA, United States, 2Family Studies Lab, Cambridge Hospital, Harvard Medical School, Cambridge, MA, United States, 3Department of Psychiatry, Boston Children’s Hospital, Harvard Medical School, Boston, MA, United States

T190 Analysis of the Corticospinal Pathway by Magnetic Resonance Tractography in Patients with Stroke
Rodrigo Martín1, Oscar Marrufo2, Adriana Cruz1, Jorge Hernández-Fraco3, Lorena Palafoux4, Chavel Palenciar5, Cecilia Camberos-Angulo1, María de los Remedios Quijada-Cruz6, Alfredo Rodríguez6, 1Universidad Nacional Autónoma de México, Facultad de Ciencias, Departamento de Física, Ciudad de México, Mexico, 2Instituto Nacional de Neurología y Neurocirugía, Mexico City, Mexico, 3National Institute of Neurology and Neurosurgery, Mexico, Mexico, 4Universidad Autónoma Metropolitana, Mexico, Mexico

T191 Same brain, different look? – A scanner and preprocessing pipeline comparison for diffusion imaging
Ronja Thieleking1, Rui Zhang2, Alfred Anwander3, Arna Villringer1, A. Veronica Witte4
1Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany

T192 Microstructural Diffusion MRI Changes In Patients With Mild Cognitive Impairment Of Various Origin
Albena Minsterova1, Patricia Klobusiakova1, Irena Rektorova1
1CEITEC, Masaryk University, Brno, Czech Republic

T193 5D relaxation-diffusion MRI characterization of nerve fibers in heterogeneous tissue environments
João P. de Almeida Martins1,2, Chantal Tax1, Filip Szczepankiewicz3,4, Carl-Fredrik Westin4,5, Maxime Chamberland4, Derek Jones1, Daniel Topgaard1
1Lund University, Lund, Sweden, 2Random Walk Imaging AB, Lund, Sweden, 3Cardiff University, Cardiff, United Kingdom, 4Harvard Medical School, Boston, MA, United States, 5Brigham and Women’s Hospital, MA, Boston, MA, United States

T194 Tract-specific statistics based on diffusion-weighted probabilistic tractography
Andrew Reid1, Soad Jbod1, Felix Hoffstaedter1, Simon B. Eickhoff3
1University of Nottingham, Nottingham, United Kingdom, 2University of Oxford, Oxford, United Kingdom, 3Forschungszentrum Jülich, Jülich, Germany

T195 Automatic Stem-based Segmentation of Inferior Fronto-Occipital Fasciculus
Pietro Astolfi1, Alessandro De Benedictis2, Silvio Sarubbo3, Emanuele Olivetti2, Diego Sona2, Paolo Avesani1
1Fondazione Bruno Kessler, Trento, None (International), 2Bambino Gesù Children’s Hospital, Rome, Italy, 3Santa Chiara Hospital, Trento, Trento, Italy, 4Bruno Kessler Foundation, Trento, Trento, Italy, 5Istituto Italiano di Tecnologia, Genova, Italy

T196 Temporal Diffusion Ratio (TDR): A Diffusion MRI method to map large axons in the living human brain
Flavio Dell’Acqua1, Robert Dallyn1, Andrea Chiappiniello2, Ahmad Beyh1, Chantal Tax3, Derek Jones4, Marco Catanaro5
1NotBrainLab, King’s College London, London, United Kingdom, 2Department of Physics and Geology, University of Perugia, Perugia, Italy, 3CUBRIC, Cardiff University, Cardiff, United Kingdom

T197 Motor network topology in MS: structural connectivity changes accounting for density reduction
Maria Petracca1, Simona Sciarra2,3, Matteo Battocchio1, Mohamed Mourin El Mendi1, Switha Padur1, Lazar Fleysher1, Alessandro Duducca1, Matilde Inglese2
1Department of Neurology, Icahn School of Medicine at Mount Sinai, New York, NY, United States, 2Department of Computer Science, University of Verona, Verona, Italy, 3DINOFGM, University of Genoa, Genoa, Italy, 4Department of Radiology, Icahn School of Medicine at Mount Sinai, New York, NY, United States

T198 Focused ultrasound lesioning of peripheral nerves - diffusion imaging visualization and assessment
Matthew Walker1,2, Jidan Zhong3, Adam Waspe3, Karolina Piorowska3, James Drake3,4, Mojgan Hodate5,6
1University of Toronto, Toronto, Ontario, Canada, 2Krembil Research Institute, Toronto, Ontario, Canada, 3Hospital for Sick Children, Toronto, Ontario, Canada

T199 Tracking the time course of structural plasticity in motor learning: motor sequence vs adaptation
Florencia Jacobacci2,3, Gonzalo Lerner1, Arnaud Bore1,3, Marcia Hidalgo-Marques4, Edson Amaro5, Jorge Armony3, Jorge Jovicich6, Valeria Della-Maggiore4,5, Jordon Zhong2, Matthew Walker1,2, Jidan Zhong2, Adam Waspe3, Karolina Piorowska3, James Drake3,4, Mojgan Hodate5,6
1Department of Ophthalmology, Otto-von-Guericke-University, Magdeburg, Germany, 2Department of Psychology, York University, Toronto, Ontario, Canada, 3Centre de Recherche de l’Institut Universitaire de Gériatrie de Montréal (CRIUGM), Montréal, Canada, 4Universidade de São Paulo, Sao Paulo, Brazil, 5McGill University, Montreal, Quebec, Canada, 6CIMeC (Center for Mind/Brain Sciences), University of Trento, Mattarello (TN), Italy

T200 High Resolution FLAIR-DTI Protocol to Image the Trigeminal Nerve
Hayden Danylik1,2, Peter Seres1, Christian Beaulieu1, Tejas Sankar1,2
1Division of Surgical Research, Department of Surgery, University of Alberta, Edmonton, Alberta, Canada, 2Division of Neurosurgery, Department of Surgery, University of Alberta, Edmonton, Alberta, Canada, 3Department of Biomedical Engineering, University of Alberta, Edmonton, Alberta, Canada

T201 Heritability of Tissue Microstructure in Gray Matter using Advanced Diffusion MRI
Madhura Bax1,2, Maria Di Bose1, Amanda Lyall1,2, Nikos Makris3,2, Marek Kubicki2,3, Yogesh Rathi2,3,4,5,6
1Boston University, Boston, MA, United States, 2Psychiatry Neuroimaging Laboratory, BWH, HMS, Boston, MA, United States, 3Department of Psychiatry, MGH, HMS, Boston, MA, United States, 4Imaging Genetics Center, USC, Marina Del Rey, CA, United States, 5Imaging Genetics Center, Stevens Neuroimaging & Informatics Institute, Keck, USC, Marina del Rey, CA, United States
T203 Harmonization of retrospective diffusion MRI data: an essential tool for multi-site studies
Suheyla Cetin Karayumak1, Natalia Chunga2, Benjamin Reid1, Nathaniel Sames1, Aristo Voinovskos2, Philip Szeszko1, Anil Malhotra1, Martha Shenton2, Marek Kubicki2, Yogesh Rath2
1Psychiatry Neuroimaging Laboratory, BWH, HMS, Boston, MA, United States, 2Centre for Addiction and Mental Health, Department of Psychiatry, University of Toronto, Toronto, Ontario, Canada, 3VA Medical Center, Department of Psychiatry, Icahn School of Medicine at Mount Sinai, Bronx, NY, United States, 4The Feinstein Institute for Medical Research and Zucker Hillside Hospital, NYC, United States, 5Psychiatry Neuroimaging Laboratory, BWH, VA Boston Healthcare System, HMS, Boston, MA, United States

T204 Declarative memory improvement with perforant path integrity and proximity of deep brain stimulation
Tyler Wishard1, Zahra M. Aghajan2, Emily Mankin1, Diane Villaroman1, Taylor Kuhn1, Itzhak Fried1, Nathalia Suthana1
1UCLA, Los Angeles, CA, United States

T205 Investigating white matter hyperintensities in ischemic stroke using advanced diffusion MRI
Will Kharr1, Natalia Egorova1, Mohamed Salah Khiff1, Remika Mitra1, Thijs Dhollander2, Amy Broidtman2
1Florey Institute for Neuroscience and Mental Health, Melbourne, VIC, 2University of Melbourne, Melbourne, Australia, 3The Florey Institute of Neuroscience and Mental Health, Heidelberg, VIC, 4Florey Institute of Neuroscience & Mental Health, Melbourne, VIC, 5The Florey Institute of Neuroscience and Mental Health, Melbourne, Australia, 6Florey Institute for Neuroscience and Mental Health, Melbourne, Victoria

T206 DTI showed abnormality of cerebellar afferent and efferent white matter
Kiangkui Li1, Yanan Zhang1, Youwei Ren1, Sisi Jiang1, Cheng Lu1, Dezhong Yao1
1University of Electronic Science and Technology of China, Chengdu, China

T207 Cervical Myelopathy Shows Impaired White Matter Tracts Involving Cognitive Functions
Pung Zeng-Xian1, Yung-Chin Hsu2, Shwu-Fen Wang3, Wen-Yih Isaac Tseng3
1Institute of Medical Device and Imaging, National Taiwan University College of Medicine, Taipei, Taiwan, 2AcroViz Technology Inc., Taipei, Taiwan, 3Institute of Physical Therapy, College of Medicine, National Taiwan University, Taipei, Taiwan

T208 Effect of fTMS on ascending reticular activating system in a patient with disorder of consciousness
Sung Ho Jang1, Jeong Pyo Seo1
1College of Medicine, Yeditepe University, Istanbul, Turkey

T209 Myelin Mapping by multi-shell q-space diffusion MRI: A cross-sectional study in adolescence
Kousaku Saotome1, Junichi Hata2, Naohiro Okada2, Yuko Nakamura2, Akiko Uematsu3, Hideyuki Okano1, Kiyo Kasa1, Shin SUke Koke2
1Center for Evolutionary Cognitive Sciences, The University of Tokyo, Tokyo, Japan, 2Department of Physiology, Keio University School of Medicine, Tokyo, Japan, 3Department of Neurophysiology, Graduate School of Medicine, The University of Tokyo, Tokyo, Japan, Center for Integrative Science of Human Behavior, The University of Tokyo, Tokyo, Japan, 4University of Tokyo Institute of Diversity & Adaptation of Human Mind, Tokyo, Japan

T210 Mapping Visual Field Specific Short V1–V2 Connections using High Resolution dMRI and fMRI
Fakherh Reza Mehrvahan Attar1,2, Evgeniya Kirlina1,3, Daniel Häne1,2, Robert Trampel1, Luke Edwards1, Kerin Pinner1, Nikolaus Wersdorf1
1Department of Neurophysics, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, 2International Max Planck Research School on Neuroscience of Communication: Function, Structure, and Plasticity, Leipzig, Germany, 3Neurocomputation and NeuroImaging Unit, Department of Education and Psychology, Free University Berlin, Berlin, Germany, 4Felix Bloch Institute for Solid State Physics, Faculty of Physics and Earth Sciences, Leipzig, Germany

T211 The influence of circadian rhythm and sleep on brain microstructure
Svenja Brodt1, Monika Schönauer2, Michael Erb3, Klaus Scheffler4, Steffen Gois1
1University of Tubingen, Tubingen, Germany, 2Princeton University, Princeton, NJ, United States, 3MaxPlanck Institute for Biological Cybernetics, Tubingen, Germany

T212* QFib: Fast and Accurate Compression of White Matter Tractograms
Sylvain Rousseau1,2, Corentin Mercier1,2, Pietro Gori1, Isabelle Bloch1, Tamy Boubekeur1
1Telecom ParisTech, Paris, France, 2Contributed equally to this work, 3Ecole Polytechnique, Paris, France

T213 Within Animal Comparison of Tract-tracing and High Resolution Tractography Yields High Correlations
Achille Teille1,2, Yujie Hou1, Loic Magrou1, Camille Lamy1, Pierre Misyre1, Nathalie Richard1, Maxime Descoteaux1, Chuyang Ye1, Zhiming Shui1, Kenneth Knoblauch1, Henry Kennedy1,2, Bassem Hiba1
1ISCI/CNRS, Bron, France, 2INRIA/CNRS, Bordeaux, France, 3Université de Lyon, Université Lyon 1, INSERM U1208, Stem-cell and Brain Research Institute, Lyon, France, 4Université de Sherbrooke, Sherbrooke, Quebec, Canada, 5Brainnetome Center, Institute of Automation, Chinese Academy of Sciences, Beijing, China, 6Institute of Neuroscience, Shanghai Institutes for Biological Sciences, Chinese Academy of Sciences, Shanghai, China

T214 Alterations in Microstructural Lateralization in Chronic Schizophrenia: Diffusion Kurtosis Imaging
Faye McKenna1,2, Laura Miles1, Donald Goff1, Mariana Lazar2
1New York University School of Medicine, New York, NY, United States, 2Sackler Institute of Graduate Biomedical Sciences, New York, NY, United States

T215 Estimating power in ultra-strong gradient MRI: a cross tract and metric microstructural assessment
Kristin Koller1, Suryanarayana Rudrapatna1, Maxime Chamberland1, Erik Rosen1, Greg Parker1, Chantal Tax1, Mark Drakesmith1, Tobias Wood1, John Evans1, Derek Jones1
1Cardiff University Brain Research Imaging Centre, Cardiff, United Kingdom, 2Department of Neuroimaging, King’s College London, London, United Kingdom, London, United Kingdom

T216 Prediction of Multi-Shell from Single-Shell dMRI Data via Graph Convolutional Neural Networks
Geng Chen1, Yoonmi Hong1, Jaeli Kim1, Yongqin Zhang3, Jiquan Ma4,1, Dinggang Shen1, Pew-Thian Yap1
1University of North Carolina at Chapel Hill, Chapel Hill, NC, United States, 2Kyungpook National University, Daegu, Korea, Republic of, 3Northwest University, Xi’an, China, 4HeiLongjiang University, Harbin, China

T217 Behaviorally-relevant cytoarchitectonic insular traits: bridging dMRI microstructure and cognition
Demian Wassermann1, Weidong Cai2, Guillermo Gallardo-Diez2, Mark Pinsk1, Vinod Menon1
1Parietal, Inria, Neurospin, CEA, Université Paris-Saclay, Palaiseau, Ile-de-France, 2Stanford University, Palo Alto, CA, United States, 3INRIA, Sophia, France, 4Princeton University, Princeton, NJ, United States, 5Stanford University, Palo Alto, CA, United States

T218 Differentiating Schwannoma from Meningioma in CPA Using ADC of DWI and Machine Learning
Lihua Yuan1,2, Bing Zhang1, Jianing Lu1, Yong Chen1, Ruxue Guo1, Xiujuan Liu1, Ning Sun1, Zhishun Wang1
1Department of Psychiatry, College of Physicians and Surgeons, Columbia University, New York, NY, United States, 2The Affiliated Drum Tower Hospital of Nanjing University Medical School, Jiangsu, China, 3New York State Psychiatric Institute, New York, NY, United States

T219 Landmark Localization On Color Coded Diffusion Anisotropy Images Using Convolutional Neural Networks
Ahmet Emin Yetkin1, Andac Hamamci1
1Yeditepe University, Istanbul, Turkey
T220 Water Anisotropy within the Default Mode Network predicts Mood Shifts following Sleep Deprivation
Sahil Bojaj1, Adam Raikes1, William Killgore1
1University of Arizona, Tucson, AZ, United States

T221 Multiple sclerosis fatigue, interoception and white matter structural abnormalities
Julia Bogdan1, James Scott1, Waqar Rashid2, Marco Bozzali1, Charlotte Roe1,4, Mara Cercignani2
1Department of Neuroscience, Brighton & Sussex Medical School, Brighton, United Kingdom, 2St George's University Hospitals NHS Foundation Trust, London, United Kingdom, 3Sackler Institute for Consciousness Science, University of Sussex, Brighton, United Kingdom, 4School of Psychology, University of Sussex, Brighton, United Kingdom

T222 Can DTI and 3D-SHORE Based Indices Differentiate RRMS from PMS Patients?
Lorenza Brusini1, Federica Crucian1, Muge Akinci1, Ilaria Boscolla Galazzo4, Francesca Benedetta Pizzini1, Jorge Jovicich1, Silvia Francesca Sarti1, Massimiliano Calabrese1, Gloria Menegaz1
1Dept of Computer Science, University of Verona, Italy, Verona, Italy, 2Center for Mind/Brain Sciences, University of Trento, Trento, Italy, 3University of Verona, Verona, Italy, 4Dept. of Neuroradiology, University Hospital of Verona, Verona, Italy, 5CMiC (Center for Mind/Brain Sciences), University of Trento, Mattarello (TN), Italy, 6Dept. of Computer Science, University of Verona, Verona, Italy, 7Dept. of Neurosciences, Biomedicine and Movement, University Hospital of Verona, Italy, Verona, Italy

T223 The Timecourse of White Matter Reorganization During Prolonged Braille Learning in Sighted Subjects
Malwina Molendowska1, Bartosz Kossowski1, Jacek Matuszewski1, Łukasz Bola1, Marcin Furtak1, Marcin Szwed1, Katarzyna Jednoróg1, Artur Marchewka1
1Laboratory of Brain Imaging, Nencki Institute of Experimental Biology, Warsaw, Poland, 2Cognitive Neuropsychology Laboratory, Department of Psychology, Harvard University, Cambridge MA, United States, 3Department of Psychology, Jagiellonian University, Krakow, Poland, 4Laboratory of Psychophysiology, Nencki Institute of Experimental Biology, Warsaw, Poland

T224 Association of edge strength with specific load of White Matter Hyperintensities
Benedikt Frey1, Marvin Petersen1, Eckhard Schliem1, Carola Mayer1, Bastian Cheng1, Christian Gerloff1, Gábor Tóth1
1University Medical Center Hamburg-Eppendorf, Hamburg, Germany, 2University Medical Center Hamburg- Eppendorf, Hamburg, Germany

T225 Monitoring brain diffusion responses in proton-therapy cancer treatment: A pediatric case study
Lisa Novello1, Nivedita Agarwal1,2, Stefano Lorentini1, Sabina Vennarini1, Domenico Zacc1, Ofer Pasternak1, Jorge Jovicich1
1CMiC (Center for Mind/Brain Sciences), University of Trento, Mattarello (TN), Italy, 2Proton-Therapy Unit, S. Chiara Hospital, APSS, Azienda Provinciale per i Servizi Sanitari, Trento (TN), Italy, 3Radiology Unit, Santa Maria del Carmine Hospital, Rovereto (TN), Italy, 4Siemens Healthcare Italy, Milano (MI), Italy, 5Departments of Psychiatry and Radiology, Brigham and Women’s Hospital, Harvard Medical School, Boston, MA, United States

T226 White matter in low back pain patients with depression and anxiety: a preliminary DTI study
Liliana Jorge1, Liana da Rocha1, Pedro Paula de Oliveira Jr1, Edison Amarao Jr3
1Dept of Radiology, Clinics Hospital, University of Sao Paulo Medical School, Sao Paulo, SP, 2Hospital Israelita Albert Einstein - Instituto do Cérebro, Sao Paulo, SP, 3Dept of Radiology, Clinics Hospital, University of Sao Paulo Medical School, Sao Paulo, Brazil

T227 The effect of age and psychiatric disorder on head motion and its impact on white matter integrity
Sabine Dziemian1, Nicolas Langer1
1University of Zurich, Zurich, Switzerland

T228 Allometric scaling of corpus callosum fiber length in human brain
Liyuan Yang1, Gaolong Gong1
1Beijing Normal University, Beijing, China

T229 Diffusion Kurtosis Imaging of Gray Matter in Autism Spectrum Disorder
Faye McKenna1,2, Laura Miles1, Jeffrey Donaldson1, Francisco Castellanos3,4, Mariana Lazar1,2
1New York University School of Medicine, New York, NY, United States, 2Sackler Institute of Graduate Biomedical Sciences, New York, NY, United States, 3Department of Child and Adolescent Psychiatry, Hassenfeld Children’s Hospital at NYU Langone, New York, NY, United States, 4Nathan Kline Institute for Psychiatric Research, Orangeburg, NY, United States

T230 FiberVis: a tool for a fast fiber tractography visualization and segmentation
Ignacio Osorio1, Danilo Bonometti1, Diego Carrasco1, Andrea Vasquez1, Narciso Lopez1, Cyril Poupon1, Jean-Francois Margin1, Pamela Guevara1
1Universidad de Concepción, Concepción, Chile, 2Neurospin, Gif sur Yvette, France

T231 White Matter Abnormalities in Phenylketonuria Characterized by Diffusion Kurtosis Imaging
Sarah Helewell1, Thomas Welton1, Matthew Lyon1, Kate Eisenhuth1, Michel Tcham1, Stuart Grieve1
1University of Sydney, Sydney, 2Department of Genetic Medicine, Westmead Hospital, Sydney, Australia

T232 Diffusion Imaging of Neonates by Group Organization (DINGO): Cohort Analysis of Neonatal DTI
Benjamin Meyers1, Rafael Ceschin1, Vincent Lee1, Lauren Dennis1, Ashok Panigrahy2
1University of Pittsburgh, Pittsburgh, PA, United States, 2UPMC Children’s Hospital of Pittsburgh, Pittsburgh, PA, United States

T233 The Effects of Fiber Response Functions on Orientation Estimation in Baby Diffusion MRI
Ye Wu1, Welli Lin1, Dinggang Shen1, Pew-Thian Yap1, for the UNC/UMN Baby Connectome Project Consorti1
1University of North Carolina at Chapel Hill, Chapel Hill, NC, United States
T237 The influence of selective attention on foreign language processing: Evidence from ERP
Sandra Parhammer1, Barbara Hinger2, Sanja Rossi3
1University of Innsbruck & Medical University of Innsbruck, Innsbruck, Austria, 2University of Innsbruck, Innsbruck, Austria, 3Department for Hearing, Speech, and Voice Disorders, Medical University of Innsbruck, Innsbruck, Austria

T238 Letter and speech sound association in early blind and sighted adults
Joanna Płewka1, Gabriela Dziegielewska1, Marcin Szczepański1, Karolina Domarńska1, Marcin Szwed1, Artur Marchewka1, Katarzyna Jednoróg1
1Carnegie Mellon University, Pittsburgh, PA, United States, 2University of Warsaw, Warsaw, Poland, 3Nencki Institute of Experimental Biology, Warsaw, Poland, 4University College Cork, Cork, Ireland, 5The Maria Grazgorzewska University, Warsaw, Poland, 6Department of Psychology, Jagiellonian University, Krakow, Poland, 7Laboratory of Brain Imaging, Nencki Institute of Experimental Biology, Polish Academy of Sciences, Warsaw, Poland

T239 The Striatum is Shaped by Bilingual Experience and Muscular Denise Klein1
1McGill University, Montreal, Quebec, Canada, 2Concordia University, Montreal, Quebec, Canada

T240 Syntactic processing in 5-year-olds: An MEG study
Melanie Fish1, Maggie Clarke1, Eric Larsson1, Patricia Kuhl2
1University of Washington, Seattle, WA, United States

T241 Brain Connectivity Predicts Second-Language Learning Success
Kajsa Sander1, Elise Barbeau1, Shari Baun2, Michael Petrides1,2, Denise Klein1
1Montreal Neurological Institute - McGill University, Montreal, QC, Canada, 2School of Communication Sciences and Disorders - McGill University, Montreal, QC, Canada, 3Department of Psychology - McGill University, Montreal, QC, Canada

T242 Short term white matter changes after one month of language learning
Maren Johannbøke1, Joanna Bartkiewicz2, Vera Cruz e Silva1, Elisabeth Hartl1, Soheyl Naachtchat1, Christian Vollmar1
1National Tsing Hua University, Hsinchu, Taiwan, 2National Taiwan University, Taipei, Taiwan

T243 Neural correlates of syntactic and ambiguity processing in late proficient Mandarin
Chia-Ho Lai1, Chia-Lin Lee1,2, Shu-Kai Hsieh1, I-Wen Su1, Te-Hsin Liu1, Chia-Rung Lu1, I-Ni Tsai1, Tai-Li Chau1
1Graduate Institute of Linguistics, National Taiwan University, Taipei, Taiwan, 2Department of Psychology, National Taiwan University, Taipei, Taiwan, 3Graduate Program of Teaching Chinese as a Second Language, National Taiwan University, Taipei, Taiwan

T244 Brain activity during sentence picture verification of affirmative and negative sentences
Sara Zanelli1, Niels Jansen1, Gabriele Miceli2,3
1University of Trento, Trento, Italy, 2La Laguna University, Tenerife, Spain, 3University of Trento, Trento, Italy, 4Accademia dei Lincei, Rome, Italy

T245 The influence of family reading history on Chinese classifier processing: An fMRI study
Chi-Lin Yu1, Shu-Hui Lee2, Ting Chen2, Chuan-Ching Liao1
1National Tsing Hua University, Hsinchu, Taiwan, 2National Taiwan University, Taipei, Taiwan

T246 Skill effects on the neural correlates of semantic processing to Chinese classifiers in children
Shu-Hui Lee1, Chi-Lin Yu1, Chuan-Ching Liao1, Ting Chen2
1National Tsing Hua University, Hsinchu, Taiwan, 2National Taiwan University, Taipei, Taiwan

T247 Reliability of a multi-sensory pre-surgical fMRI language paradigm; an ICC & DCM analysis
Karsten Specht1, Erik Redlund2
1University of Bergen, Bergen, Norway, 2University of Bergen, Bergen, Norway

T248 Neural basis of symptoms in patients with Multiple Sclerosis: an exploratory fMRI study
Quentin Duchê1,2, Florian Chapelle1,3, Elise Bannier1,4, Jean-Christophe Fere1,5, Philippe Alain1,6, Philippe Gallien1, Virginie Darder1, Christian Baril1
1Univ Rennes, Inria, CNRS, Inserm, IRISa, EMMPE-ERL U1228, F-35000, Rennes, France, 2Pôle MPR Saint Hélène, Rennes, France, 3Bretagne Loire University-Rennes 2, Laboratory of Psychology: Cognition, Behaviour, Communication (LP3C, EA 1285), Rennes, France, 4Radiology Department, University Hospital of Rennes, Rennes, France, 5Neuropsychology Unit, Neurology Department, University Hospital of Angers, Angers, France, 6Laboratory of Psychology of the Pays de la Loire, PRES Lunam, University of Angers, Angers, France

T249* Morse Code: A Window on Language Encoding in the Brain
Frederick Junker1, Nikolai Aichert2, Tobias Schmidt-Wilcke3
1University Hospital Düsseldorf, Düsseldorf, Germany, 2Department of Neuropsychology, Faculty of Psychology, Ruhr-University Bochum, Bochum, Germany, 3Department of Clinical Neuroscience and Medical Psychology, Heinrich Heine University, Düsseldorf, Germany

T250 The Neural Network for Sentence Comprehension: Evidence from Aphasia
Sabrina Beber1, Rita Capasso2, Chiara Maffei2, Gabriele Miceli1
1CIMeC (Center for Mind/Brain Sciences) - University of Trento, Rovereto, TN, United States, 2Brain Associates, Rome, Italy, 3Athinoula A. Martinos Center, Massachusetts General Hospital and Harvard Medical School, Charlestown, MA, United States, 4University of Trento; Centro Interdisciplinare Linneo ‘Beniamino Segre, Accademia dei Lincei, Trento and Rome, Italy

T251 How cognitive abilities modulate the brain network for auditory lexical access in healthy seniors
Stefan Heim1, Barbara Wellner2, Bruno Fimm1, Katrin Amunts3
1RWTH Aachen University, Aachen, Germany, 2Research Centre Jülich, Jülich, Germany

T252 Visualizing the interdependence of motor and language systems using lesion-symptom mapping analyses
Analia Arevalo1, Guilherme Lepski2, Timothy Herron1, Nina Dronkers1,5, Juliana Baldo4,5, Xiuyi Wang1, Zhiyao Gao1, Daniel Margulies2, Jonathan Smallwood1, Elizabeth Jefferies1
1Department of Psychology, University of York, York, United Kingdom, 2Centre National de la Recherche Scientifique UMR 7225, Frontlab, Institut du Cerveau et de la Moelle, Pairs, France

T253 Intonation guides sentence processing in the left inferior frontal gyrus
Constantin van der Burgh1, Tomás Goucha1, Angela Friederici1, Jens Kreitewolf2, Gesa Hartwigsen1
1Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, 2University of Lübeck, Lübeck, Germany

T254 The role of decision making during word-picture verification: evidence from model-based fMRI
Cyril Pernet1, Constantinos Eleftheriou2
1Max Planck Institute for Human Cognitive and Brain Sciences and Harvard Medical School, Charlestown, MA, United States, 2Universiy of Trento; Centro Interdisciplinare Linneo ‘Beniamino Segre, Accademia dei Lincei, Trento and Rome, Italy

T255 The Functional Gradient of Semantic Processing
Xiaoyi Wang1, Zhiyao Gao1, Daniel Margulies2, Jonathan Smallwood1, Elizabeth Jeffries2
1Department of Psychology, University of York, York, United Kingdom, 2Centre National de la Recherche Scientifique UMR 7225, Frontlab, Institut du Cerveau et de la Moelle, Pairs, France
T256  Word abstractness is an emerging property of language, mirrored in neural activity
Anna Hulten1, Marijn van Vliet1, Sasa Kvisinaari2, Lotta Lammi1, Tiina Lindh-Knuttila1, Ali Faisal1, Riitta Salmelin2
1Aalto University, Espoo, Finland, 2Aalto University, Aalto, Finland, 3Department of Neuroscience and Biomedical Engineering, Aalto University, Espoo, Finland

T257  Information flow in abstract and concrete word processing revealed by Granger Causality analysis
Mansoureh Fahimi Hrazejel, Elvira Khachatryan1, Marc Van Hulle1
1KU Leuven, Leuven, Vlaams Brabant

T258  An fMRI study on the effect of bilingualism in semantic processing during encoding and retrieval
Eugenia Marin-Garcia1, Pedro Paz-Alonso2
1University of the Basque Country (UPV/EHU), San Sebastian, Spain, 2BCBL-Basque Center on Cognition, Brain and Language, San Sebastian, Spain

T259  Lexical processing involves both hemispheres while pre-lexical processing is left-lateralized
Azalea Reyes Aguilar1, Giovanni Licea Haquet2, Brenda Arce Lopez2, Magda Giardon2
1Facultad de Psicologia, UNAM, Mexico City, Mexico, 2Instituto de Neurobiologia, UNAM, Queretaro, Queretaro

T260  Task and resting state fMRI revealed impaired language processing in the older adults
Nanxi Fei1, Jiangiao Ge1, Meizhen Han1, Guoyuan Yang1, Sizhong Zhou1, Jia-Hong Gao1
1Center for MRI Research, Peking University, Beijing, China

T261  Absence of trade-off between negative and positive ERPs indicates syntactic processing
Shingo Tokimoto1, Yaoji Miyao1, Naoko Tokimoto1
1Meiji University, Tokyo, Japan, 2Hiroshima University of Economics, Hiroshima, Japan, 3Shobi University, Kagawo, Japan

T262  Constructing meanings of objects from bits of information
Sasa Kvisinaari2, Marijn van Vliet1, Anna Hulten1, Tiina Lindh-Knuttila1, Ali Faisal1, Riitta Salmelin2
1Department of Neuroscience and Biomedical Engineering, Aalto University, Espoo, Finland, 2Aalto Neuroimaging, Espoo, Finland

T263  No modulation of Auditory Steady State and Visual Gamma Band Responses by semantics in EEG/MEG
Olaf Hauk1, Marit Keemink1, Seyyedeh-Rezvan Farahbouzorg1, Gavin Perry1, Srivats Chennu1,2
1University of Cambridge, Cambridge, United Kingdom, 2University of Amsterdam, Amsterdam, Netherlands, 3University of Oxford, Oxford, United Kingdom, 4Cardiff University, Cardiff, United Kingdom, 5University of Kent, Canterbury, United Kingdom

T264  Abstract and concrete conceptual representation in the inferior parietal lobe: an fNIRS study
Maria Montefinese1,2, Paolo Pinti1,2, Ettore Ambrosini3,6, Ilias Tachtsidis1,2, David Vinson2
1Department of General Psychology, University of Padova, Padova, Italy, 2Department of Experimental Psychology, University College London, London, United Kingdom, 3Department of Medical Physics and Biomedical Engineering, University College London, London, United Kingdom, 4Institute of Cognitive Neuroscience, Alexandra House, University College London, London, United Kingdom, 5Department of Neuroscience, University of Padova, Padova, Italy, 6Department of Neuroscience, University of Padova, Padova, Italy

T265  Semantic processing in the inferior parietal cortex and in the dorsal stream
Antonietta Gabriella Liuzzi1, RoseBruffoets1, Patrick Dupont1, Ronald Peeters2, Simon De Deye3, Gerrit Storms4, Rik Vandenberghe1
1Laboratory for Cognitive Neurology, Department of Neurosciences, KU Leuven, Leuven, Belgium, 2University of Adelaide, Adelaide, Australia, 3KU Leuven, Leuven, Belgium

T266  Overlapping connectivity gradients underlie functional multiplicity in the anterior temporal lobe
Mythe Faber1, Izabela Przedzak1,2, Guillen Fernandez2,3, Christian Beckmann2,3, Koen Haak2,3
1Donders Centre for Cognitive Neuroimaging, Nijmegen, Netherlands, 2Radboudumc, Nijmegen, Netherlands, 3University of Oxford, Oxford, United Kingdom

T267  Brain Mechanisms Underlying Generalization of Concepts Across Languages
Usman Ayub Sheikh1, David Soto1, Manuel Carreiras1
1Basque Center on Cognition, Brain, and Language, San Sebastian-Donostia, Spain

T268  Effective Connectivity of Semantic Verbal Fluency: A Model of Dual Streams
Isabella Arrigo, Pedro da Silva1, Renata Leon2
1University of São Paulo, Ribeirão Preto, Brazil, 2University of São Paulo, Ribeirão Preto, Brazil

T269  Hemispheric differences in connectivity in semantic sites and their contribution to cognition
Tirso Gonzalez Alcaraz1, Jonathan Smallwood2, Theodoros Karapanagiotidis3, Elizabeth Jefferys1
1University of York, York, United Kingdom

T270  Predicting language-elicited event-related potentials by learning from behavioral data
Don Schwartz1, Tom Mitchell2
1Carnegie Mellon University, Pittsburgh, PA, United States

T271  Encoding of semantic similarity for abstract and concrete concepts: an fMRI study
Maria Montefinese1, David Vinson2
1University of Padova, Padova, Italy, 2Department of Experimental Psychology, University College London, London, United Kingdom

T272  Representation of concrete and abstract word meaning
Karen Meersmans1, Antonietta Gabriella Liuzzi1, Rose Bruffoets1, Simon De Deye3, Gerrit Storms4, Patrick Dupont1, Rik Vandenberghe1
1Laboratory for Cognitive Neurology, Department of Neurosciences, KU Leuven, Leuven, Belgium, 2CIMeC, University of Trento, Trento, Italy, 3Computational Cognitive Science Lab, University of Melbourne, Melbourne, Australia, 4Laboratory of Experimental Psychology, KU Leuven, Leuven, Belgium

T273  Task-specific neural correlates of basic semantic composition
Astrid Greßner1, Emiliano Zaccarella1, Angela Friederici2, Gesa Hartwigsen2
1Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany

T274  Investigating the neural correlates of spatial demonstratives using naturalistic fastfMRI
Roberta Rocco1, Marlene Staib1, Kristian Tylén1, Kenny Coventry2, Torben Lund1, Mikkel Wallentin1
1Aarhus University, Aarhus, Denmark, 2University of East Anglia, Norwich, United Kingdom

T275  The role of ATL and IPS in representing social and quantity concepts: a State-Dependent MEG study
Eleonora Catricalà1, Francesca Conca1, Anna Fertonani2, Carlo Miniussi3,2, Stefano Cappa1,2
1University of Trento, Trento, Italy, 2Aalto University, Aalto, Finland, 3Department of Neuroscience and Biomedical Engineering, University College London, London, United Kingdom

T276  Integrating form and meaning in the left parietal cortex: Evidence from agreement comprehension
Ileana Quinones1, Nicola Molinaro2, Cesar Caballero-Gaudes3, Simona Mancini2, Horacio Barber3, Manuel Carreiras1
1Basque Center on Cognition Brain and Language, San Sebastian-Donostia, None/Not Applicable, 2Basque Center on Cognition Brain and Language, San Sebastian-Donostia, Spain
T277  Speech comprehension in noise – contribution of domain-specific and domain-general control regions
Anna Rysso1, Leo-Maria Schmitt1, Jonas Obleser2, Gesa Hartwigsen1
1Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, 2University of Lübeck, Lübeck, Germany

T278  Cortical Dynamic Network of Predictive Speech Processing of Individual Words
Zhaowei Liu1, Su Shu1, Lingxi Lu1, Yoyo Zhang2, Jingwei Sheng3, Jianqiao Ge1, Jiahong Gao1
1Center for MIRS Research, Peking University, Beijing, China

T279  Spontaneous synchronization to speech reveals neural mechanisms facilitating language learning
M. Florencia Assaned1, Pablo Ripoll2, Joan Orpella2, Wy Ming Lin1, Ruth de Diego-Balagué2, David Poeppel3
1New York University, New York, NY, United States, 2New York University, New York, NY, United States, 3Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany

T280  Musicians differ in hemispheric asymmetry in relation to their language lateralization pattern
Esteban Villor-Rodriguez1, Jesús Adrián-Ventura1, Maria-Angela Polanor-García1, Mireia Hernández2, Gustau Oclina-Semperé1, Lidon Marin-Marin1, Cesar Avisa1
1Universitat Jaume I, Castellón de la Plana, Spain, 2Universitat de Barcelona, Barcelona, Spain

T281  The Broca Neurocorrelates of Gestural Communication in Baboon
Yannick Becker1, Konstantin Mandigoutova2, Muriel Roth2, Bruno Nazarian1, Romain Lacoste1, Jean-Luc Anton1, Olivier Coulon1, Samain-Aupic Leonard1, Adrien Meguerditchian1
1Laboratoire de Psychologie Cognitive, CNRS, Aix-Marseille Univ, Marseille, France, 2Institut de Neurosciences de la Timone, Centre IRMf, CNRS, Aix-Marseille Univ, Marseille, France, Station de Primatologie CNRS, Rousset, France, 3Institut de Neurosciences de la Timone, CNRS, Aix-Marseille Univ, Marseille, France

T282  Comprehension of language in social contexts
Elizabeth Valles-Capetillo1, Magda Giordano2
1Instituto de Neurobiologia, UNAM, Juriquilla, Queretaro, 2Instituto de Neurobiologia, UNAM, Queretaro, Queretaro

T283  Modulation of communicative intention through facial expression and its neural correlate
Joli Rosgada1, Magda Giordano2
1Instituto de Neurobiologia, UNAM, Queretaro, 2Instituto de Neurobiologia, UNAM, Queretaro, Queretaro

T284  Neural correlates of emotional prosody comprehension in right and left handers
Agnieszka Pilute1, Marta Marciniak2, Jakub Wojciechowski1, Tomasz Wolański1
1Faculty of Psychology, Warsaw University, Warsaw, Poland, 2Institute of Physiology and Pathology of Hearing, Warsaw, Poland

T285  Is the Pen Mightier than the Word? A High-Density EEG Study
Ruud Van der Weel1, Audrey van der Meer1
1Norwegian University of Science & Technology, Trondheim, Norway

T286  Examining the role of Discrepant IQ and Reading Ability in Reading Network Activation
Rita Barakat1, Stephen Gonzalez1, Maya Rojan1, Anisa Aza1, Anthony Krafnick1, Max Orozco2, Hadley McGregor1, Jason Zevin1, Frank Manis1, Kristi Clark1
1University of Southern California, Los Angeles, CA, United States, 2California State University Channel Islands, Camarillo, CA, United States

T287*  Brain circuit for word processing differentiate children with distinct reading and spelling deficits
Agnieszka Debska1, Katarzyna Chy2, Gabriela Dzregiel2, Agnieszka Kocprzak2, Magdalena Luniewska1, Joanna Plewko3, Artur Marchewka3, Anna Grabowska2, Katarzyna Jednorog4
1The Nencki Institute of Experimental Biology Polish Academy of Sciences, Warszawa, Poland, 2The Nencki Institute of Experimental Biology Polish Academy of Sciences, Warsaw, Poland, 3Laboratory of Brain Imaging, Nencki Institute of Experimental Biology, Polish Academy of Sciences, Warsaw, Poland

T288  Removal of Ocular Artifacts from Magnetoencephalographic Natural Reading Data: Recommended Methods
Sasu Mäkelä1,2, Jan Kujala1, Riitta Salmelin1
1Department of Neuroscience and Biomedical Engineering, Aalto University, Espoo, Finland, 2Aalto Neuroimaging, Espoo, Finland

T289  Inter-Subject Correlation During Long Narratives Uniquely Reveals fMRI Correlates of Reading Ability
David Jangraw1, Emily Finn1, Peter Molfese2, Kenneth Pugh2,3, W Menc3,4, Gang Chen4, Peter Bandettini5
1National Institute of Mental Health, Bethesda, MD, United States, 2Yale University, New Haven, CT, United States, 3Haskins Laboratories, New Haven, CT, United States, 4University of Connecticut, Storrs, CT, United States

T290  Sex and DYX1C1 genotype effects on pediatric cortical thickness and surface area
Anthony Krafnick1, Tanya Evans2
1Dominican University, River Forest, IL, United States, 2University of Virginia, Charlottesville, VA, United States

T291  Functional alterations in children with dyslexia and isolated spelling deficits
Chiara Bonif1, Karl Koschutnig1, Melanie Gangl1, Ferenc Kemény1, András Fink1, Kristina Moll2, Karin Landers1
1University of Graz, Graz, Austria, 2Department of Child and Adolescent Psychiatry, Psychosomatics and Psychotherapy, LMU, Munich, Germany

T292  Resting State Functional Connectivity in Chinese Developmental Dyslexics Applying Near Infrared Spec
Yueh-Lin Lee1, Zhi-Yun Yang1, Tzu-Chi Liao1, Hsin-Chin Chen1
1National Chung Cheng University, Chia-Yi County, Taiwan

T293  The Development of the Neuronal Network for Tactile Reading and Speech Processing in Early Blind
Gabriela Dzregiel1, Joanna Plewko1, Marcin Szczepiński2, Karolina Domanińska2, Artur Marchewka3, Marcin Szwed4, Katarzyna Jednorog4
1The Maria Grzegorzewska University, Warsaw, Poland, 2University Collage Cork, Cork, Ireland, 3The Maria Grzegorzewska University, Warsaw, Poland, 4Dept of Psychology, Jagiellonian University, Krakow, Poland
T294 Development of the handwriting network: A coupled fMRI and kinematics study in middle-age children
Sarah Parnis1, Jean-Luc Velay1, Elie Fabiani1, Michel Habib2, Jean-Luc Anton3, Bruno Nazarian2, Sein Julien2, Marieke Longcamp1
1Laboratoire de Neurosciences Cognitives, CNRS UMR 7291, Aix-Marseille university, Marseille, France, 2Institut de neurosciences de la timaie, Marseille, France

T295 Examining Chinese Homophone Density Effect Applying Near Infrared Spectroscopy
Hsin-Chin Chen1, Zh-Yun Yang2, Yueh-Lin Lee3
1National Chung Cheng University, Chia-Yi County, Taiwan

T296 Delineating the cognitive-neural substrates of writing
Haobo Chen1, Xiaoqing Pan1, Wai-Ling Bickerton2, Johnny King L Lau3, Jin Zhou2, Beinan Zhou2, Lara Harris4, Pia Rostheim5
1Guangzhou First People's Hospital, School of Medicine, South China University of Technology, Guangzhou, China, 2Guangzhou First People's Hospital, School of Medicine, Guangzhou, China, 3University of Birmingham, Birmingham, United Kingdom, 4University of Reading, READING, United Kingdom, 5University of Oxford, Oxford, United Kingdom, 6King's College London, London, United Kingdom

T297 Visual-processing and executive-function regions are related to subsequent reading memory
Tzipi Horowitz-Kraus1,2, Rola Farah1, Rebecca Coalson1, Steven Petersen1, Bradley Schloggar2
1Educational Neuroimaging Center, Technion, Haifa, Israel, 2Reading and Literacy Discovery Center, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, United States, 3Technion, Haifa, Israel, 4Washington University in St. Louis, St. Louis, MO, United States, 5Washington University School of Medicine, St. Louis, MO, United States, 6Kennedy Krieger Institute, Baltimore, MD, United States

T298 Functional connectivity identifies infants at risk of dyslexia and predicts phonological development
Silvina Ferrada1, Xi Yu1, Danielle Silvo1, Jade Dunstan1, Clarisa Carruthers1, Joseph Sanfilippo1, Jennifer Zuk1, Lilla Zölei2, Emma Boyd3, Bojan Gagoski1, P. Ellen Grant4, Nadine Gaab1
1Boston Children’s Hospital, Boston, MA, United States, 2Brawn University, Providence, RI, 3Massachusetts General Hospital, Charlestown, MA, United States, 4Boston Children's Hospital, Harvard Medical School, Boston, MA, United States

T299 Disentangling Language Processing from Decision Making: a Multimodal and Computational Approach
Mia Lisiewski1,2, Annika Hulten1, Jan Kujala1, Riitta Salmelin1,3
1Department of Neuroscience and Biomedical Engineering, Aalto University, Espoo, Finland, 2NatMEG, Department of Clinical Neuroscience, Karolinska Institutet, Stockholm, Sweden, 3Aalto Neuroimaging, Aalto University, Espoo, Finland

T300 Cortical structures in the reading network correlate with reading proficiency in early bilinguals
Hsin-Yu Lin1, Chiao-Yi Wu1, Beth O'Brien1, Marilyn Yeo2, Yuvdashori Ilang Kumarar3, Brenda Rapp2, Michael McCloskey1, Kenichi Oishi1, John Desmond1, SH Annabel Chen1,2
1Centre for Research and Development in Learning, Nanyang Technological University, Singapore, Singapore, 2Centre for Research in Child Development, National Institute of Education, Singapore, Singapore, 3Psychology, School of Social Sciences, Nanyang Technological University, Singapore, Singapore, 4Department of Cognitive Science, Johns Hopkins University, Baltimore, MD, United States, 5Department of Radiology and Radiological Science, Johns Hopkins University, Baltimore, MD, United States, 6Department of Neurology, Johns Hopkins University, Baltimore, MD, United States, 7Lee Kong Chian School of Medicine, Nanyang Technological University, Singapore, Singapore

T301 Speech neural system plays different roles in reading : comparison between children and adults
Yin He1, Li Liu2
1Beijing Normal University, Beijing, China, 2University of Calgary, Calgary, Alberta, Canada

T302 Intrinsic Functional Connectivity Mediate the Relationship Between Parental Education and Reading
Mengmeng Su1, Wei Zhou1, Hua Shu2
1Capital Normal University, Beijing, China, 2Beijing Normal University, Beijing, China

T303 Magnocellular and parvocellular contributions to visual object and word recognition
Maddi Ibarburen1, Pedro Paz-Alonso1
1BCBL - Basque Center on Cognition, Brain and Language, San Sebastian, Spain

T304 Critical Neural Correlates of Lexicality, Consistency, and Imageability Effects in Reading Aloud
Olga Boukri1, Bing Yao2, Mateusz Kowalczyk3,4, A. M. Barrett2, William Graves2
1Kessler Foundation, West Orange, NJ, United States, 2Seton Hall University, South Orange, NJ, United States, 3Rutgers, The State University of New Jersey, Newark, NJ, United States

T305 Cognitive Correlates of N1 Print Tuning Effects
Lau Fung1, Kang-Kwong Luke1, Francis Chun Kit Wong1, Alice Hui Don Chan1
1Nanyang Technological University, Singapore, Singapore

T306 Exploring Connectivity in Exner's Area: A Dysgraphia Case Study
Maeliosa Ni Almhain1, Stephanie Forkel1, Claudia Cramer1, Naianna Robertsson1,2, Ahmad Beyh1,2, Gabriele Miceli1,2, Flavio Dell'Acqua1, Marco Catani1,2
1Nabtrainlab, Centre for Neuroimaging Sciences, Institute of Psychiatry, Psychology and Neuroscience, King’s College London, London, United Kingdom, 2Nabtrainlab, Department of Forensic and Neuropsychological Sciences and Sackler Institute for Translational Neurodevelopmental Institute, Institute of Psychiatry, psychology and neuroscience, King’s College London, London, United Kingdom, 3Centro Interdepartimentale Mente/Cervello (CIMEC), Università di Trento, Trento, Italy, 4Centro Interdisciplinare Lincoa ‘Beniavino Segre, Accademia dei Lincei, Rome, Italy

T307* Links between White Matter Microstructure and Components of Reading vary in Reading-Related Tracts
Yin He1, Li Liu1
1Beijing Normal University, Beijing, China, 2University of Calgary, Calgary, Alberta, Canada

T308 Neural adaptation to words and pseudo-homophones in healthy adults
Sarah Di Pietro1,2, Gorka Fraga-Gonzalez1,2, Iliana Karipidis1, Silvia Brem1,2
1University Hospital of Psychiatry Zurich, University of Zurich, Zurich, Switzerland, 2Neuroscience Center Zurich, University of Zurich and ETH Zurich, Zurich, Switzerland

T309 Structural and functional contributions to the relationship between reading and spatial attention
Chelsea Ekstrand1, Jash Neuford1, Ron Borowsky2
1University of Saskatchewan, Saskatoon, Saskatchewan, Canada, 2University of Saskatchewan, Saskatoon, Canada, 3University of Saskatchewan, College of Arts and Science, Department of Psychology, Saskatoon, Saskatchewan, Canada

T310 An fMRI study of the cerebellum's role in reading and math disabilities
Sikoya Ashburn1, Anna Matejko1, Lynn Flowers1, Guinevere Eden1
1Center for the Study of Learning, Georgetown University, Washington, DC, United States

T311 Structural connectivity defines the function of VWFA: Beyond just word reading
Lang Chen1, Demian Wassermann1, Daniel Adams2, Guillermo Gallardo-Diez2, John Kochalka3, Vinod Menon4
1Stanford University, Palo Alto, CA, United States, 2Parietal, Inria, Neurospin, CEA, Université Paris-Saclay, Palaiseau, Ile-de-France, 3INRIA, Sophia, France, 4Stanford Cognitive and Systems Neuroscience Laboratory, Palo Alto, CA, United States

To view full abstract text and ePosters, visit www.aievolution.com/hbm1901
T312  Right Prefrontal Connectivity Predicts Response to Reading Intervention: An Independent Replication
William Mend1, Ryan Staples2, Stephen Frost3, Robin Morris2, Kenneth Pugh1
1Haskins Laboratories, New Haven, CT, United States, 2Rutgers University, Newark, NJ, United States, 3Georgia State University, Atlanta, GA, United States, 4Yale University, New Haven, CT, United States

T313  Neurocognitive basis of audiovisual integration deficits in Chinese dyslexic children
Zhichao Xia1, Xin Cui1, Ting Yang1, Xiangping Liu1, Hua Shu1
1Beijing Normal University, Beijing, China

T314  Reading in Czech: fMRI evidence for a dual-route neural architecture in a shallow orthography
Marek Barton1, Irena Rektorova1, Vojtech Zvonak2, Radek Marecek1, Steven Rapcsak3
1CEITEC MU, Brno, Czech Republic, 2Brno University of Technology, Brno, Czech Republic, 3Department of Neurology, University of Arizona, Tucson, AZ, United States

T315  Functional connectivity as a biomarker for specific learning disorders with impairment in reading
Haeil Park1, Hyunseok Bong2, Hoe-Jeong Park2
1Kyunghee University, Seoul, Korea, Republic of, 2Yonsei University, Seoul, Korea, Republic of, 3Yonsei University College of Medicine, Seoul, Korea, Republic of

T316  Neuroanatomical signature of the Chinese Character Spurt
Xin Cui1, Zhichao Xia1, Hua Shu1
1Beijing Normal University, Beijing, China

T317  Understanding the multimodal brain structural phenotype associated with reading performance
Clare Palmer1, Wesley Thompson1, Donald Hagler1, Anders Dale1, Terry Jernigan1, Marek Barton1, Irena Rektorova1, Vojtech Zvonak2, Radek Marecek1, Steven Rapcsak3
1University of California San Diego, San Diego, CA, United States, 2CEITEC MU, Brno, Czech Republic, 3Department of Neurology, University of Arizona, Tucson, AZ, United States

T318  Transforming acoustic input into a hierarchy of linguistic representations
Laura Gwilliams1, Jean-Remi Kings2, David Poeppel3
1New York University, New York, NY, United States, 2Facebook AI Research, Paris, France, 3New York University, New York, NY, United States

T319  Lip-reading enables the brain to synthesize auditory features of unknown silent speech
Mathieu Bourguignon1, Martijn Baart2, Efthymia Kapnoula1,3, Nicola Molinaro3
1Université libre de Bruxelles, Brussels, Belgium, 2Tilburg University, Tilburg, Netherlands, 3Basque Center on Cognition, Brain and Language, San Sebastian, Spain

T320  Cortical sensitivity to phonemes forming words: An EEG steady-state study
David Bredwell1, Jitthingi Wangasinghe1, Naiyom Martin1, Perera KAU1,2, Chamika Janith Perera1, Thilina Dulantha Lahirathne1, Seema Bansal1, Deepthi Kanade1, Priyadasa Kodituwakkul1,2, Vince Calhoun2, John Phillips1
1Mind Research Network, Albuquerque, NM, United States, 2University of Colombo, Colombo, Sri Lanka, 3Mind Research Network, Albuquerque, NM, United States, 4University of Moratuwa, Moratuwa, Sri Lanka, 5University of New Mexico, Albuquerque, NM, United States, 6New Horizons Group, Mumbai, India, 7University of New Mexico Health Sciences Center, Albuquerque, NM, United States, 8The Mind Research Network University of New Mexico, Albuquerque, NM, United States, 9University of New Mexico, Albuquerque, NM, United States

T321  Development of speech-in-noise perception during childhood: Insights from speech-brain tracking
Julie Bertels1, Florian Destoky1, Maxime Niesen1, Sara-Zohra Arrou1, Vincent Wens1, Xavier De Tiège1, Mathieu Bourguignon1
1Université Libre de Bruxelles, Brussels, Belgium

T322  Simultaneous representation of syllable features in temporal and sensorimotor cortex
Mario E. Archila-Melendez1, João Correia1, Giancarlo Valente1, Rob Rouhi1, Vivianne van Kranen-Mastenbroek1, Erik Gommers1, Bernadette Jansma1, Mark Roberts1
1Maastricht University, Maastricht, Netherlands, 2Basque Center on Cognition, Brain and Language, Donostia-San Sebastián, Spain

T323  Speech Perception Network Underpins the Generalization of Speech Category in Non-speech Contexts
Gangyi Feng1,2, Zhenzhong Gan1,2, Danting Meng1, Suiping Wang1, Patrick Wong1,2, Bharath Chandrasekaran1
1Department of Linguistics and Modern Languages, The Chinese University of Hong Kong, Hong Kong SAR, China, 2Brain and Mind Institute, The Chinese University of Hong Kong, Hong Kong SAR, China, 3School of Psychology, South China Normal University, Guangzhou, China, 4Department of Communication Science and Disorders, University of Pittsburgh, Pittsburgh, United States

T324  Impact of noise on neural tracking of hierarchical linguistic structures
Maxime Niesen1, Mathieu Bourguignon1, Marc Vander Ghinst1, Julie Bertels1, Vincent Wens1, Sergio Hossli1, Serge Goldman1, Xavier De Tiège1
1Université libre de Bruxelles, Brussels, Belgium

T325  Resting-State Perisylvian Beta-Gamma MEG Power Predicts Words-in-Noise Recognition
Thomas Haunweling1, Robert Becker1, Alexis Hervais-Adelman1
1Neurolinguistics, Dept. of Psychology, University of Zuerich, Zuerich, Switzerland

T326  Eye Movements Reveal Bilinguals’ Phonological Units in Spoken Word Recognition
Yu-Cheng Lin1, Pei-Ying Lin2
1University of Texas at Rio Grande Valley, Edinburg, TX, United States, 2University of Saskatchewan, Saskatoon, Saskatchewan, Canada

T327  Phoneme-level processing in low-frequency MEG responses to speech explained by acoustic features
Christoph Doube1,2, Robin Ince1,3, Joachim Gross1,2
1Institute of Neuroscience and Psychology, University of Glasgow, Glasgow, 2Institute for Biomagnetism and Biosignalanalysis, University of Münster, Münster, Germany

T328  Formant model reconstruction from vowel listening brain activity in the pars triangularis
Alessandra Rampinini1, Gaicoma Handjaras2, Andrea Leo1, Luca Cecchetti3, Monica Betta1, Giovanna Marotta1, Emiliana Ricciardi1, Pietro Pietrini1
1IMT AII School for Advanced Studies Lucca, Lucca, Italy, 2IMT School for Advanced Studies Lucca, Lucca, Italy, 3Dipartimento di Filologia, Letteratura e Linguistica, Pisa, Italy, 4IMT School for Advanced Studies Lucca, Lucca, Italy

T329  The modality dependent and independent representations of Letters and Numbers: an fMRI study at 3T
Francesco Gentile1, Dora Gouzakara1, Milene Bonte1
1Faculty of Psychology and Neuroscience, Maastricht, Netherlands

T330  Lateralized processing of spectral and temporal speech features during speech production
Morieke Flögel1,2, Susanne Fuchs3, Christian Alexander Keil1
1Goethe University, Frankfurt, Germany, 2Leibniz Center for General Linguistics (ZAS), Berlin, Germany
T331 Ventral-stream white matter pathways associated with performance on a morpheme-based production task
Moya Yablonski1, Benjamin Menashe1, Michal Ben-Shachar1
1Bar Ilan University, Ramat Gan, Israel

T332 Hemisphere Complementarity for Language and Body Recognition
Robin Gerrits1, Lise Van der Haegen1, Marc Brysbaert1, Guy Vingerhoets1
1Ghent University, Ghent, Belgium

T333 Test-retest reliability of naming-related evoked activity in magnetoencephalography recordings
Heidi Ala-Salomäki2, Mia Liljeström1, Jan Kujala1, Riitta Salmelin1
1Department of Neuroscience and Biomedical Engineering, Aalto University, Espoo, Finland, 2Aalto Neuroimaging, Aalto University, Espoo, Finland

T334 Quantitative MRI correlates of the ability to articulate novel word forms in adolescents
Saloni Krishnan1, Daniel Papa1, Harriet Smith1, Hannah Willis1, Kate Watkins1
1University of Oxford, Oxford, United Kingdom

T335 Decreased Gray-matter Volume of Insula as a Correlate of Singers’ Enhanced Sensorimotor Cont
Hanjun Liu1, Wenda Wang2
1Sun Yat-sen University, Guangzhou, China, 2Sun Yat-sen University, Guangzhou, China

T336 Speech rate associations in cerebellar pathways of adults who stutter
Sivan Jossinger1, Vered Krontfeld-Duenias1, Avital Zislin1, Ofer Amir1, Michal Ben-Shachar1
1Bar Ilan University, Ramat Gan, Israel, 2Tel Aviv University, Tel Aviv, Israel

T337 The N2 Changes during Switching but Not Repetition of Language in Bilingual Picture Naming
Xiaochen Zheng1, Ardi Roelofs1, Hasan Erkan2, Kristin Lemhöfer1
1University of Manchester, Manchester, United Kingdom, 2MRC Cognition and Brain Science Unit, University of Cambridge, Cambridge, United Kingdom

T338 Mapping human laryngeal motor cortex during vocalisation
Nicole Eichert1, Rogier Mars2, Kate Watkins1
1University of Oxford, Oxford, United Kingdom, 2Donders Institute for Brain, Cognition, & Behaviour, Nijmegen, Netherlands

T339 Cerebral localization and network of articulatory system suggested by direct electrical stimulation
Masashi Kinoshita1, Masato Kigawa1, Yuki Ogawa1, Ryo Yamada1, Yoshitaka Kato1, Hideki Aihara1, Katsuhiko Nakamura1, Hiroaki Enomoto1, Hiroshi Sekihara1
1Kanazawa University, Kanazawa, Japan, 2University of Oxford, Oxford, United Kingdom

T340 The neural correlates of noun and verb production at single word and connected speech levels
Reem Alyabya1, Ajoy Halari2, Paul Conroy2, Matthew Lambon Ralph2
1University of Manchester, Manchester, United Kingdom, 2MRC Cognition and Brain Unit, University of Cambridge, Cambridge, United Kingdom

T341 Investigating the Neural Correlates of Argument Structure Processing: An fMRI Study
Ekaterina Deliskhina1, Angelika Lingnaa1, Gabriele Micali2,3
1University of Trento, Trento, Italy, 2Institute of Psychology, University of Regensburg, Regensburg, Germany, 3University of Trento, Trento, Italy, 4Centro Interdisciplinare Linceo ‘Beniamino Segre’, Accademia dei Lincei, Rome, Italy

T342 Reduced volumes of the dorsal striatum in people who stutter
Hannah Willis1, Jennifer Chesters1, Emily Connolly1, Patricia Gough1, Peter Howell1, David Ward2, Kate Watkins1
1University of Oxford, Oxford, United Kingdom, 2University College London, London, United Kingdom, 3University of Reading, Reading, United Kingdom

T343 Using novel phonetics and tractography to distinguish Apraxia of Speech from Aphasia in acute stroke
Claudia Cramer1, Stephanie Forke1, Ahmad Beyh1, Maeliosa Ni Almhain1, Naianna Robertsson1, Nina Dronkers2,3, Laura Goldstein1, Flavio Dell’Acqua1, Marco Catan1
1NatBrainLab, Department of Forensic and Neurodevelopmental Science, IoPPN, King’s College London, London, United Kingdom, 2Department of Neurology, University of California, Davis, CA, United States, 3Department of Psychology, University of California, Berkeley, CA, United States, 4Department of Psychology, IoPPN, King’s College London, London, United Kingdom

T344 Critical Networks for Competitive Selection and Compensatory Activation in Aphasic Picture Naming
Grant Walker1, Julius Friidrikksson2, Gregory Hickok1
1University of California, Irvine, Irvine, CA, United States, 2University of South Carolina, Columbia, SC, United States

T345 An fMRI study of initiation and inhibition of manual and speech responses in people who stutter
Charlotte Wiltshire1, Jennifer Chesters1, Mairéad Healy1, Saloni Krishnan1, Kate Watkins1
1University of Oxford, Oxford, United Kingdom

T346 The dynamics and task-dependency of motor-to-sensory transformation
Xing Tan1, Wenjia Zhang1
1New York University Shanghai, Shanghai, Shanghai

T347 The role of the Frontal Aslant Tract in speech and language processing
Allison Zhong1, Maria Ivanova2, Brian Curran3, And Turken3, Nina Dronkers2
1University of Oxford, Oxford, United Kingdom, 2University of California, Davis, CA, United States, 3VA Northern California Health Care System, Martinez, CA, United States

T348 Regional Age-Related Atrophy in an Amyloid-PET Negative Cohort
Lauren Koeng1, Sarah Keefe1, Laura Marple1, Justin Long2, Brian Gordon1, John Morris1,2, Michelle Miller-Thomson1, Gregory Day1,2, Joshua Shimony1, Tammie Benzing1
1Washington University in St. Louis School of Medicine, Saint Louis, MO, United States, 2Knight Alzheimer Disease Research Center, Saint Louis, MO, United States

T349 The neural signature of impaired dual tasking in idiopathic REM sleep behaviour disorder patients
Kaviena Etteoetz Martens1, Elie Matar1, James Shine1, Joseph Phillips1, Matthew Georgiades1, Ronald Grunstein1, Glenda Halliday1, Simon Lewis1
1University of Sydney, Camperdown, New South Wales, Australia, 2University of Western Sydney, Sydney, New South Wales, Australia, 3Woolcock Institute of Medical Research, Glebe, New South Wales, Australia
T350 Fiber-specific White Matter Reductions Associated with Motor Performance Decline in Aging
Hamed Zivari Adab1, Sima Chalovi1, Thjis Dhollander1, Dante Mantini1, Stephan Swinnen2,3
1Movement Control and Neuroplasticity Research Group, Biomedical Sciences Group, KU Leuven, Leuven, Belgium, 2The Florey Institute of Neuroscience and Mental Health, Melbourne, Australia, 3Leuven Brain Institute (LBI), Leuven, Belgium

T351 Altered connection properties during dynamic decision making in older adults
Xuerui Peng1, Chao Xie2,3, Xu Lei1, Jing Yu4
1Faculty of Psychology, Southwest University, Chongqing, China, 2Institute of Science and Technology for Brain-Inpired Intelligence, Fudan University, Shanghai, China, 3Key Laboratory of Computational Neuroscience and Brain-Inspired Intelligence (Fudan University), Ministry of Education, China

T352 Age-related differences in the neural correlates of self-generated thoughts at rest
David Maillet1, Roger Beatty1, Kieran Fox1, Areeba Adnan4, Gary R Turner1, R Nathan Spreng5
1University of Toronto, Toronto, Ontario, Canada, 2Pennsylvania State University, State College, PA, United States, 3Stanford University, Stanford, CA, United States, 4York University, Toronto, Ontario, Canada, 5McGill University, Montreal, Quebec, Canada

T353 BOLD modulation and white matter diffusivity contributions to cognitive aging: A lifespan SEM study
Christina Webb1, Karen Rodrigue1, David Hoagey1, Chris Foster1, Kristen Kennedy1
1Center for Vital Longevity, School of Behavioral Brain Sciences, The University of Texas at Dallas, Dallas, TX, United States

T354 The Effect of Age on Resting state fMRI Carbon dioxide Response Function
Azin Esmeibling1,2, M. Aros Kovanrad2,3, Jean Chen2,3
1University of Toronto, Toronto, Ontario, Canada, 2Rotman Research Institute at Baycrest Hospital, Toronto, Ontario, Canada

T355 Mental motor representations across the adult life-span: behavioural and fMRI evidence
Laura Zapparoli1, Eraldo Paulesu1
1IRCCS Istituto Ortopedico Galeazzi, Milan, Italy, 2University of Milano-Bicocca, Milan, Italy

T356 Brain-predicted age difference as a neuromarker of cognitive function
Rory Boyle1, Lee Jollans1, Laura Rueda-Delgado1, Rossella Rizzo1, Ezgi Fide1, Görev Yener1,2,3, Daniel Carey1,2,3,4, Ian Robertson1,2, Derya Emek-Savas1,2,3,4,5, Yaokun Stern6, Rose Anne Kelly1,6, Robert Whelen1
1Trinity College Institute of Neuroscience, Trinity College Dublin, Dublin, Ireland, 2Physics Department, University of Calabria, Calabria, Italy, 3Department of Neurosciences, Institute of Health Sciences, Dokuz Eylul University, Izmir, Turkey, 4Department of Neurology, Dokuz Eylul University Medical School, Izmir, Turkey, 5Brain Dynamics Multidisciplinary Research Center, Dokuz Eylul University, Izmir, Turkey, 6The Irish Longitudinal Study on Ageing, Trinity College Dublin, Dublin, Ireland, 7Global Brain Health Institute, Trinity College Dublin, Dublin, Ireland, 8Department of Psychology, Faculty of Letters, Dokuz Eylul University, Izmir, Turkey, 9Cognitive Neuroscience Division, Department of Neurology, Columbia University, New York, NY, United States, 10Mercer’s Institute for Successful Ageing, St. James’s Hospital, Dublin, Ireland

T357 Age-Related Distance-Dependent Connectivity Changes in Hub Regions over the Adult Lifespan
Epifanio Baganad1, Hiroshi Watanabe1, Satoshi Maesawa1, Daikyu Morii1, Kazuya Kawabata1, Kauushiro Hara1, Hiroki Tanabe1, Shuji Koyama1, Minoru Hashiyama1, Haruo Isoda1, Shinji Naganawa1,2, Gen Sobue1
1Brain and Mind Research Center, Nagoya University, Nagoya City, Japan, 2Department of Neurology, Nagoya University Graduate School of Medicine, Nagoya City, Japan, 3Graduate School of Informatics, Nagoya University, Nagoya City, Japan, 4Department of Radiology, Nagoya University Graduate School of Medicine, Nagoya City, Japan

T358 Cardio- and neurovascular factors are independently associated with resting BOLD signal variability
Kamen Tsvetanov1,2, Richard Henson1, Simon Jones1, Henk-Jan Mutsaerts3, Delia Fuhrmann1, Lorraine Tyler1, Cam-CAN4, James Rowe1,2
1Department of Clinical Neurosciences, University of Cambridge, Cambridge, United Kingdom, 2Department of Psychology, University of Cambridge, Cambridge, United Kingdom, 3MRC Cognition and Brain Sciences Unit, University of Cambridge, Cambridge, United Kingdom, 4Amsterdam University Medical Center, Amsterdam, Netherlands

T359 Default mode network connectivity in healthy aging. Results from two longitudinal aging studies
Franziskus Lien1, Paul Robinson1, Jessica Oschwald1, Susan Mérrill2, Lutz Jancke3, Sherry Willis3
1University of Zurich, Zurich, Switzerland, 2University of Washington, Seattle, WA, United States, 3University of Washington, Seattle, WA, United States

T360 Reconfiguration of functional networks during cognitive control across the adult lifespan
Jenny Beck1, Giulia Baracchin1, Dan Nichol2, Herve Abdi1, Cheryl Grady1,2
1Rotman Research Institute at Baycrest, Toronto, Ontario, Canada, 2University of Texas at Dallas, Dallas, TX, United States, 3University of Toronto, Toronto, Ontario, Canada

T361 Whole-brain structural health status mediates the effect of age on cognition
Xiaowei Song1,2,3, Xin Guo1,2,4, Hui Guo1,2,4,5, Ryan D’Arcy6,7
1Fraser Health Authority, Surrey, BC, Canada, 2Simon Fraser University ImageTech Laboratory, Surrey, BC, Canada, 3Dalhousie University, Halifax, NS, Canada, 4Tianjin Medical University General Hospital, Tianjin, China, 5Simon Fraser University, Burnaby, BC, Canada

T362 Cardiovascular risk factors and the accumulation of age-related whole-brain structural changes
Xiaowei Song1,2,3, Xin Guo1,2,4,5, Ryan D’Arcy6,7
1Fraser Health Authority, Surrey, Canada, 2Simon Fraser University ImageTech Laboratory, Surrey, Canada, 3Beijing Hospital, Beijing, China, 4Tianjin Medical University General Hospital, Tianjin, China, 5Simon Fraser University, Burnaby, Canada

T363 Metabolic Support of Mental Task Performance Is Preserved in Cognitively Normal Aging
Andrej Vlassenko1, Lars Couture1, Tony Durbin1, Marcus Goyal1
1Washington University School of Medicine, St. Louis, MO, United States

T364 Altered functional connectivity of precuneus and PCC in the ninth decade of life and beyond
Jingyang Jiang1,2, Stefanie Enriquez-Geppert1,2, Perminder Sachdev1,2,3,4,5,6, Tony Delo1,2,3,4,5,6, Wei Wen1,2,3,4,5,6, Centre for Healthy Brain Ageing, School of Psychiatry, University of New South Wales, Sydney, NSW Australia, 7Beihang University, Beijing, China

T365 A t/f y neural noise perspective on age-related changes in cognitive and emotion control
Stefanie Enriquez-Geppert1,2, Simin Berend1,2, Clemens Dickhut1, Manouche Bösterling1, Svea Heike1, Mariës Grel1, Bradley Voityek1, Andre Aleman1
1Department of Clinical and Developmental Neuropsychiatry, University of Groningen, Groningen, Netherlands, 2Department of Biomedical Sciences of Cells & Systems, Section of Cognitive Neuropsychiatry, University Medical Center, Groningen, Netherlands, 3Department of Cognitive Science, University of California, San Diego, La Jolla, CA, United States, 4Hannover Medical School, Hannover, Germany, 5Department of Cognitive Science, University of California, San Diego, La Jolla, CA, United States, 6BCN Neuroimaging Center, University Medical Center Groningen, University of Groningen, Groningen, Netherlands
T366* Functional differentiation of transmodal cortices across the lifespan
Richard Bethlehem1, Casey Paquola2, Jakob Seidlitz3, Konrad Wagnitz4, Boris Bernhardt5, Cam-CAN6, Kamen Tsvetanov
1Brain Mapping Unit, University of Cambridge, Cambridge, United Kingdom, 2Montreal Neurological Institute, McGill University, Montreal, Quebec, Canada, 3Medical Research Council Cognition and Brain Sciences Unit, University of Cambridge, Cambridge, United Kingdom, 4Department of Clinical Neurosciences, University of Cambridge, Cambridge, United Kingdom

T367 Predicting Age from Neuroimaging using Automated Machine Learning
Jessica Dafflon1, Federico Turkheimer1, James Cole2, Robert Leech1, Peter Hellyer1
1Centre for Neuroimaging Sciences, Institute of Psychiatry, King's College London, London, United Kingdom

T368 QMRI grey matter microstructural changes predict healthy aging and identify Multiple Sclerosis
Asier Erramuzpe1, Roey Schurr1, Aviv Mezer1
1The Edmond and Lily Safra Center for Brain Sciences, Hebrew University of Jerusalem, Jerusalem, Israel

T369 Accelerated aging in posterior dorsal default mode network in mild cognitive impairment patients
Kai Xu1, Xin Li2
1Beijing Normal University, Beijing, China, 2Beijing Normal University, Beijing

T370 Six-year changes in the cortical thickness covariance network in older adults: MAS Cohort
Heidi Foo1, Jiyang Jiang1, Wei Wen1, Perminder Sachdev1
1Centre for Healthy Brain Ageing, School of Psychiatry, University of New South Wales, Sydney, NSW, Australia

T371 Microstructural changes of white matter tracts across late lifespan on 7,167 UK Biobank participants
Gordon Waiter1, Yung-Chin Hsu2,3, Yun-Jing Kang2, Te-Wei Kao2, Chen Chang-Le2, Pin-Yu Chen2, Wen-Yih Isaac Tseng
1Aberdeen Medical Imaging Centre, School of Medicine, Medical Sciences and Nutrition, University, Aberdeen, Scotland, United Kingdom, 2Institute of Medical Device and Imaging, National Taiwan University College of Medicine, Taipei, Taiwan, 3AcroViz Technology, Inc., Taipei, Taiwan, 4Molecular Imaging Center, National Taiwan University, Taipei, Taiwan

T372 Age-related Changes in the Topological Organization of Brain Structural Connectome with Normal Aging
Yezhou Wang1, Xin Li2, Wenxiao Wang3, Ni Shu4, Zhanjun Zhong5
1State Key Laboratory of Cognitive Neuroscience and Learning, Beijing Normal University, Beijing, China

T373 4-year increases in functional homotopy are associated with reduced white matter and memory
Barbara Avalar-Pereira1, Lars Bäckman1, Anders Wahlén2, Lars Nyberg2, Alireza Salami1
1Karolinska Institutet, Stockholm, Sweden, 2Umeå University, Umeå, Sweden

T374 A Deep Learning Model of Brain Ageing in the UK Biobank MRI
Emma Bluemke2, Stephen Smith2, Zobair Arya3, Diego Vidalauri4, Mark Jenkinson4, Ana Namburete5
1University of Oxford, Oxford, United Kingdom, 2FMRIB, Wellcome Centre for Integrative Neuroimaging, University of Oxford, Oxford, United Kingdom, 3University of Oxford, Oxford, United Kingdom, 4University of Oxford, Oxford, United Kingdom

T375 A longitudinal study of functional reorganization of inter-network connectivity in healthy aging
Brigitte Malagurski1, Franziskus Lien2, Jessica Oschwald1, Susan Merillat1, Lutz Jäncke1,2
1University Research Priority Program “Dynamics of Healthy Aging”, University of Zurich, Zurich, Switzerland, 2Division of Neuropsychology, Institute of Psychology, University of Zurich, Zurich, Switzerland

T376 The dorsal cingulum white-matter integrity predicts both loneliness and resilience in older adults
Mengxia Gao1, Robin Shaw1, Tao Tao2
1The State Key Laboratory of Brain and Cognitive Sciences, The University of Hong Kong, Hong Kong, Hong Kong, 2Laboratory of Neuropsychology, The University of Hong Kong, Hong Kong, Hong Kong

T377 Exposure to air pollution and noise is associated with cognition and brain structure in older adults
Christiane Jockwitz1,2, René Nussbaum1,2, Sarah Lucht1,6, Susanne Moebus1, Barbara Hofmann4, Svenja Caspers1,2,4
1Institute of Neuroscience and Medicine (INI-M), Institute for Psychotherapy and Psychosomatics, RWTH Aachen University, Medical Faculty, Aachen, Germany, 2JARA-BRAIN, Juelich-Aachen Research Alliance, Juelich, Germany, 3Institute of Anatomy I, Medical Faculty, Heinrich Heine University Duesseldorf, Duesseldorf, Germany, 4Institute of Epidemiology and Medical Statistics, Medical Faculty, Heinrich Heine University Duesseldorf, Duesseldorf, Germany, 5Institute for Medical Statistics, Medical Faculty, Heinrich Heine University Duesseldorf, Duesseldorf, Germany, 6Institute of Medical Informatics, Biometry and Epidemiology, University of Duisburg-Essen, Essen, Germany

T378 Intrinsic resting-state activity in older adults with video game experience
Huijie Li1, Hanyou Hou2
1Key Laboratory of Behavioral Science, Institute of Psychology, Chinese Academy of Sciences, Beijing, China

T379 Changes in the intracranial volume from early adulthood to the sixth decade of life
Yaron Caspi1, Rachel Brouwer1, Hugo Schnack1, Marieke van der Nieuwenhuijzen1, Wiepke Cahn1,2, Rene Kahn1, Wiro Niessen1,2, Aad van der Lugt1,2, Hilleke Hulshoff Pof1,2, Brain Center Rudolf Magnus, University Medical Center Utrecht, Utrecht, The Netherlands, 3Department of Psychiatry, Brain Center Rudolf Magnus, University Medical Center Utrecht, Utrecht, The Netherlands, 4Department of Radiology, Erasmus MC: University Medical Center Rotterdam, Rotterdam, South Holland, The Netherlands

T380 The organizational principles of aging topographic maps
Esther Kueb1, Thomas Wolbers2
1DZNE Magdeburg, Magdeburg, Germany

T381 Netrank: A Multiplex Community Network approach for profiling Neurocognitive Ageing
Giovanna Dimitti1, Kamen Tsvetanov2,3, Lorraine K Tyler1,2, Cam-CAN3, Pietro Lio3
1Computer Laboratory, University of Cambridge, Cambridge, Cambridgeshire, 2Department of Psychology, University of Cambridge, Cambridge, United Kingdom, 3MRC Cognition and Brain Sciences Unit, University of Cambridge, Cambridge, United Kingdom, 4University of Cambridge, Cambridge, United Kingdom

T382 Youth-Like Functional Connectivity Changes After Non-Pharmacological Interventions in the Elderly
Rui Li1, Juan Li2, Xinyi Zhu3, Shufei Yin3, Lijuan Huo4
1Institute of Psychology, Chinese Academy of Sciences, Beijing, China, 2Hubei University, Wuhan, China
T383 Using Brain Cortical Thickness to Predict Chronological Age: Evidence from an Adult Lifespan Sample
Sivanya Subramaniapillai1,2, A. Ross Otto1, Srirachana Rajagopal1, Stamatoula Pasvani1, M. Natasha Rajan1
1McGill University, Montreal, Quebec, Canada, 2Douglas Mental Health University Institute, Montreal, Quebec, Canada

T384 Machine learning methods for age prediction using cortical thickness and cerebral blood flow
M. Ethan Macdonald1, Deepthi Rajashekar1, Rebecca Williams1, Hongfu Sun1, Cheryl R. McCready1, Richard Frayne1, Nils Forkert1, G. Bruce Pike1
1University of Calgary, Calgary, Alberta, Canada

T385 Age-related changes in cortical myelin, thickness and neurite in adult human
Akhiro Sasaki1,2,3,4, Hikaru Fukutomi1, KyoSuKe Watanabe1,2, YusuKe Morita1, Kanako Tajima2,4, Kyoko Ebisu1, MiHo Iwasaki1, Kei Mizuno1,2,3,4, Takuya Hayashi1, Yasuyoshi Watanabe1,2,4
1RIKEN Center for Biosystems Dynamics Research, Kobe, Japan, 2RIKEN Compass to Healthy Life Research Complex Program, Kobe, Japan, 3Osaka City University Graduate School of Medicine, Osaka, Japan, 4Osaka City University Center for Health Science Innovation, Osaka, Japan

T386 Early White Matter Tract Alteration in Subjective Cognitive Decline and Mild Cognitive Impairment
Shih-Ni Chen1, Pin-Yu Chen1,2, Chang-Le Chen1, Yung-Chin Hsu1, Yu-Ling Chang1, Ming-Jang Chiu1, Wen-Yih Isaac Tseng1,2,5
1Department of Medical Device and Imaging, National Taiwan University College of Medicine, Taipei, Taiwan, 2Molecular Imaging Center, National Taiwan University, Taipei, Taiwan, 3AcroViz Technology, Inc., Taipei, Taiwan, 4Department of Psychology, National Taiwan University, Taipei, Taiwan, 5Department of Neurology, National Taiwan University Hospital, College of Medicine, National Taiwan University, Taipei, Taiwan

T387 PMd-seeded functional connectivity during the learning of a bimanual task in young and older adults
Celine Moe1, Sima Chalavi1, Julien Gooijers1, Geneviève Albouy1, Stefan Sunaert1, Stephan Swinnen1, Lisa Pauwels1
1KU Leuven, Leuven, Belgium, 2KU Leuven, Leuven, Belgium, 3UZ Leuven, Leuven, Belgium

T388 Total and Regional Brain Atrophy Analysis in a Population Based Normative Sample from UK Biobank
JiaJia Kang1, Jianfeng Fong1, Zeyu Jiao1
1Shanghai Center for Mathematical Science, Fudan University, Shanghai, China, 2Institute of Science and Technology for Brain Inspired Intelligence, Fudan University, Shanghai, China, 3Shanghai Center for Mathematical Sciences, Fudan University, Shanghai, China

T389 Multiplex networks: a novel framework for structural brain connectivity
Nicola Amoroso1, Domenico Diamanti1, Eufemia Lello1, Angela Lombardi1, Tommaso Maggipinto1, Alfonso Monaco2, Sabina Tangaro1, Roberto Bellotti1
1Università degli studi di Bari, Bari, Italy, 2Istituto Nazionale di Fisica Nucleare - sez. di Bari, Bari, Italy

T390 White matter diffusion changes across adulthood: analysis of 18,090 individuals from 9 cohorts
Gregory Beaudet1, Ami Tsuchido1, Alexandre Laurent1, Naka Bugeaudou1, Fabrice Crivello1, Nathalie Tzourio-Mazoyer1, Laurent Petit1, Christophe Tzourou1, Svenja Caspers1,2, Jan Schreiber1, Zdenka Pausova1, Yash Patel1, Tomás Paus2, Reinhold Schmidt1, Lukas Pipramer1, Perminder Sachdev1, Wei Wen1, Nicola Armstrong1, Ian Deary1,2, Mark Bastin3, Jo Anna Wardlaw3, Susana Munóz Maniego3, Marco Duering1, Stephanie Debette1, Bernard Mazoyer1
1Univ. Bordeaux, GIN, IMN, UMR 5293, Bordeaux, France, 2University of Bordeaux, Bordeaux Population Union, U1219, INSERM, Bordeaux, France, 3Institute of Neuroscience and Medicine (INM-1), Research Centre Juelich, Juelich, Germany, 4Institute for Anatomy I, Medical Faculty, Heinrich Heine University Düsseldorf, Düsseldorf, Germany, 5Forschungszentrum Jülich, Jülich, Germany, 6The Hospital for Sick Children, University of Toronto, Toronto, Ontario, Canada, 7Institute of Medical Science, University of Toronto, Toronto, Ontario, Canada, 8Clinical Division of Neurogeriatrics, Department of Neurology, Medical University of Graz, Graz, Austria, 9Centre for Healthy Brain Ageing, School of Psychiatry, University of New South Wales, Sydney, NSW, Australia, 10Centre for Cognitive Epidemiology and Cognitive Ageing, University of Edinburgh, Edinburgh, United Kingdom, 11Institute for Stroke and Dementia Research, Munich, Germany

T391 Frequency-Specific Link of the Cingulo-Opercular Network with Visual Processing Speed in Aging
Sebastian Schneider1, Adriana Ruiz-Rizzo1, Kathrin Finke1, Christian Sorg1
1Ludwig-Maximilians-Universität München, Munich, Germany, 2Universitätsklinikum Jena, Jena, Germany, 3Technical University of Munich, Munich, Germany

T392* Modelling cognition, aging, cerebrovascular health, and brain network integrity in UK Biobank data
Michele Veldsman1, Xin-You Tai1,2,3, Thomas Nichols1, Sanjay Manohar1,2, Masud Husain1,2
1Department of Experimental Psychology, University of Oxford, Oxford, United Kingdom, 2Nuffield Department of Clinical Neuroscience, University of Oxford, Oxford, United Kingdom, 3Division of Clinical Neurology, John Radcliffe Hospital, Oxford University Hospitals Trust, Oxford, United Kingdom, 4Nuffield Department of Population Health, University of Oxford, Oxford, United Kingdom

T393 Positive mood boosts memory training gains (via enhanced amygdala-hippocampus connectivity)
Shufei Yin1, Xinyi Zhu2, Rui Li3, Juan Li3
1Department of Psychology, Faculty of Education, Hubei University, Wuhan, China, 2Institute of Psychology, Chinese Academy of Sciences, Beijing, China

T394 Disentangling the relation of structural and functional connectivity reorganization in older adults
Johanna Stumme1,2, Christiane Jockwitz1,2, Jan Schreiber3, Svenja Caspers1,2
1Institute of Neuroscience and Medicine (INM-1), Research Centre Juelich, Juelich, Germany, 2Department of Psychiatry, Psychotherapy and Psychosomatics, Medical Faculty, RWTH Aachen University, Aachen, Germany, 3JARA-BRAIN, Juelich-Aachen Research Alliance, Juelich, Germany, 4Institute for Anatomy I, Medical Faculty, Heinrich Heine University Düsseldorf, Düsseldorf, Germany

T395 Multi-shell diffusion imaging reveals gender-specific trajectories of white matter changes in aging
Nicola Toschi1, Rebeca Arrais Gisbert2, Santiago Canals2, Silvia De Santis2
1Martinos Center for Biomedical Imaging (MGH) and Harvard Medical School, Boston, MA, United States, 2Institute of Neurociencias de Alicante, Alicante, Spain

T396 Lifespan Variability in Local Spatiotemporal Consistency of Brain Activity During Movie-watching
Li Dong1, Jie Yang1, XiaoBo Li1, HongShuo Feng1, Xin Wen1, Cheng Luo1, DezHong Yao1
1University of Electronic Science and Technology of China, Chengdu, China
TUESDAY, JUNE 11

Odd numbers: 12:45 – 13:45; Even numbers: 13:45 – 14:45; Poster Reception: 17:00 – 18:00

T397 Neuroplasticity and Cognitive Benefits Associated with Chronic Intranasal Oxytocin in Aging
Natalie Ebner1, Kristoffer Månsson2, Tian Lir1, Desiree Lussier1, Marilyn Horta1, Ian Frazier1, Peiwei Liu1, Devon Weir1, David Feihe1, Håkan Fischer2
1University of Florida, Gainesville, FL, United States, 2Stockholm University, Stockholm, Sweden, 3Department of Psychiatry, San Diego, CA, United States

T398 Neuroimaging-Derived Brain-Age in Midlife Relates to CAIDE Dementia Risk Scores
Andrea Haley1, James Cole1, Evan Pasha1, Brennan Hickson1, Drew Gourley1, Hirofumi Tanaka1
1The University of Texas at Austin, Austin, TX, United States, 2King’s College London, London, United Kingdom, 3UT Southwestern Medical Center, Dallas, TX, United States

T399 Effects of age and DRD2 polymorphisms on fronto-striatal brain activity and cognitive performance
Xin Li1, Lars Backman1, Jonas Persson1
Karolinska Institutet, Stockholm, Sweden

T400 Brain activity during altered perception of hand movement in the elderly
Anne Kavounoudias1, Caroline Landelie2, Bruno Nazarian3, Jean-Luc Anton3, Sein Julien3, Olivier Feliciant4
1Aix-Marseille University - CNRS, Marseille, 2Aix-Marseille University, Marseille, France, 3Institut de neurosciences de la timone, Marseille, France, 4Institut de Neurosciences des Systemes, INSERM, Marseille, France

T401 Age-related differences in prefrontal networks during a logical reasoning task
Maryam Ziae1, Mohammad Reza Bonyadi1, David Reutens1
1Centre for advanced imaging, Brisbane, QLD, Australia

T402 Neurophysiological Mechanisms of Attentional Ageing: A Multi-level Analysis of Event-Related Fields
Heshom EShafe1, Remy Masson1, Camille Fakche1, Lesy Fornon1, Anne CALCN1, Aurélie Bident-Coulet1
1Lyon Neuroscience Research Center, Bron, France, 2Lyon Neuroscience Research Center, Bron, France, 3Lyon Neuroscience Research Center, Lyon, France

T403 Effects of age on the BOLD hemodynamic response function and on parameters of the balloon model
Wiktore Olszowy1, Guy Williams1, Darren Price2, Richard Henson3
1Department of Clinical Neurosciences, University of Cambridge, Cambridge, United Kingdom, 2MRC Cognition & Brain Sciences Unit, University of Cambridge, Cambridge, United Kingdom

T404 Amyloid-β relates to lower structural degree and higher local efficiency in the posterior cingulate
Laura Jonkman1, Martijn Steenwijk1, Yvon Gois1, Nicky Boesen1, Annemieke Rozennuiller1, Jeroen Geurts1, Frederik Barkhof2, Linda Douw1, Wilma van de Berg3
1Amsterdam UMC VUMc, Amsterdam, the Netherlands, 2University College London, London, United Kingdom

T405 Using naturalistic stimuli to investigate the aging brain
Linda Geurts1, Cam-CAN, Karen Campbell2
1Donders Institute for Brain, Cognition and Behaviour, Nijmegen, Netherlands, 2University of Cambridge, Cambridge, United Kingdom, 3Department of Psychology, Brock University, St. Catharines, Ontario, Canada

T406 Correlating brain morphology, circadian rhythm, and affectivity
Florence Steiner1, Nina Siggi1, Marco Caviezel1, Thomas Leyhe1, Tobias Melcher1
1University of Basel, Center of Old Age Psychiatry, Psychiatric University Hospital (UPK), Basel, Switzerland

T407 Lagged Coupled Dependences between White Matter Microstructure and Processing Speed in Healthy Aging
Jessica Oschwald1, Susan Mérillot1, Franziskus Liem2, Christina Röckel1, Mike Martin1, Lutz Jäncke2
1University Research Priority Program (URPP) Dynamics of Healthy Aging, University of Zurich, Zurich, Switzerland, 2Division Gerontology, Department of Psychology, University of Zurich, Zurich, Switzerland, 3Division Neuropsychology, Department of Psychology, University of Zurich, Zurich, Switzerland

T408 Brain age estimation using kernel-based regression – comparison of different methods
Tora Dünst1,2, Lars Nyberg1, C. J. Baroxbeki1,2,3
1CEDAR, Umeå University, Umeå, Sweden, 2UFBI, Umeå University, Umeå, Sweden, 3DRCMR, Copenhagen University Hospital, Hvidovre, Denmark

T409 A clinical fMRI protocol for cognitive-motor dual task
Oana Rus-Oswald1,2, Julia Reinhardt1,2, Céline Burki2, Stephanie Bridenbaugh2, Christoph Stippich1, Reto Kressig1, Maria Blatow1
1Department of Neuroradiology, University Hospital Zurich, University of Zurich, Zurich, Switzerland, 2Felix Platter-Hospital, University Center for Medicine of Aging, Basel, Switzerland, 3Division of Diagnostic and Interventional Neuroradiology, Department of Radiology, University Hospital Basel, University of Basel, Basel, Switzerland

T410 Brain aging and Psychometric Intelligence
Silvano Seli1,2, Susan Mérillot1, Franziskus Liem2, Lutz Jäncke1,2
1Division Neuropsychology, Department of Psychology, University of Zurich, Zurich, Switzerland, 2University Research Priority Program (URPP), Dynamics of Healthy Aging, University of Zurich, Zurich, Switzerland

T411 4-week Intranasal Oxytocin Increases Insula Volume and Associated Empathy Scores in Aging
Elisha Myers1, Desiree Lussier1, Marilyn Horta1, Ian Frazier1, Rebecca Polk2, David Feihe1, Natalie Ebner1
1University of Florida, Gainesville, FL, United States, 2University of Florida, Gainesville, FL, United States

T412 Differences in response inhibition in healthy aging and its link to activation laterality
Bianca Kollmann1, Alexandra Sebastian1, Andreas Fellgiebel1, Stefan Teipel2, the German AgeGain Study Group3, Oliver Tüscher4
1University Research Priority Program (URPP) Dynamics of Healthy Aging, University of Zurich, Zurich, Switzerland, 2Department of Psychiatry, San Diego, CA, United States, 3University of Florida, Gainesville, FL, United States, 4Dept. of Psychiatry and Psychotherapy, Johannes Gutenberg University Medical Center, Mainz, Germany

T413 Cross-hemispheric Connectivity Benefits in Normal Aging and MCI
Daisy Bon1, Olga Lucia Gamboa Arana1, Mariam Hovhannisyan1, Courtney Crowell1, Simon Davies1
1Duke University, Durham, NC, United States
T414 Compensatory brain connectivity in SuperAgers: a Joint-ICA of rs-fMRI and FDG-PET
Wyllians Borelli1, José Osmar Filho1, Eduardo Leal-Conceição1, Michele Andrade1, Lucas Schilling2, Cristina Matsushita1, Louise Hartmann1, Ana Maria da Silva1, Mirna Portuguez2, Jaderson Costa da Costa1, Alexandre Franca1
1Brain Institute of Rio Grande do Sul, PUCRS, Porto Alegre, Brazil, 2Child Mind Institute, New York, NY, United States

T415 Dopamine-Dependent Cognitive Processes after Menopause: An fMRI Study
Julie Dumais1, Jenna Makarowicz1, Janice Bunni1, Joshua Nickerson2, Elizabeth McGee3
1University of Vermont, Burlington, VT, United States, 2Orgeon Health and Science University, Portland, OR, United States

T416 Graph mining on Aging using Brain Structural Networks
Haoteng Tang1, Lei Guo1, Heng Huang2, Oliosula Ajilore3, Hiroko Dodge3,4, Paul Thompson3, Alex Leow2, Liang Zhan2
1Electrical and Computer Engineering, University of Pittsburgh, Pittsburgh, PA, United States, 2University of Illinois at Chicago, Chicago, IL, United States, 3Department of Neurology, Oregon Health and Science University, Portland, OR, United States, 4Department of Neurology, University of Michigan, Ann Arbor, MI, United States, 5Imaging Genetics Center, Stevens Neuroimaging & Informatics Institute, Keck, USC, Marina del Rey, CA, United States

T417 Aging Related Brain Morphometric Alterations: A Comparative Approach
Yashar Zeighami1, Mahsa Dador1, Claude Lepage2, Louis Collins1, Lindsay Lewis3, Alan Evans4, James Roe5, Didac Vidal-Pineiro5, Rebeca Igual6
1McGill University, Montreal, Quebec, Canada, 2Montreal Neurological Institute, McGill University, Montreal, Quebec, Canada, 3Montreal Neurological Institute, McGill University, Westmount, Quebec, Canada, 4McGill University, Montreal, Quebec, Canada

T418 Age-dependent Links between Neural Variability and Visual Sampling Behavior during Scene Viewing
Niel Kloosterman1, Marija Tochade1, Alistair Perry2, Douglas Garrett3
1Max Planck UCL Centre for Computational Psychiatry and Ageing Research, Berlin, Germany

T419 Lower asymmetry in older adults during memory retrieval revisited: no evidence for compensation
Julie Gonneaud1, Jude Pearce2, John Breiter1, Sylvia Villeneuve1, Etienne Vachon-Presseau1, Alzheimer’s Disease Neuroimaging Initiative2, PREVENT-AD Research Group3
1McGill University, Montreal, Quebec, Canada, 2University of Southern California, Los Angeles, CA, United States

T420 Aging-related differences in the structural and functional basis of attentional flexibility
Alistair Perry1, Julian Kosciessa2, Sarah Polk2, Douglas D Garrett2
1Max Planck UCL Centre for Computational Psychiatry and Ageing Research, Berlin, Germany, 2Max Planck Institute for Human Development, Berlin, Germany

T421 Vertex-wise gyriation associates with age and cognition in late life: The Rotterdam Study
Sander Lamballais1, Eline Vink1, Hieab Adams2, Meike Vernooij2, Mohammad Iram2, Ryan Muetzel2
1Erasmus MC University Medical Center Rotterdam, Rotterdam, Netherlands, 2Department of Epidemiology, Erasmus University Medical Center Rotterdam, Rotterdam, the Netherlands, Rotterdam, Netherlands

T422 Grey matter volume & whole-brain pattern organization across lifespan and Alzheimer’s disease
Alexo Pichet Binette1, Julie Gonneaud1, Jude Pearce2, John Breiter1, Sylvia Villeneuve1, Etienne Vachon-Presseau1, Alzheimer’s Disease Neuroimaging Initiative2, PREVENT-AD Research Group3
1McGill University, Montreal, Quebec, Canada, 2University of Southern California, Los Angeles, CA, United States

T423 Detailed shape measures capture age-related neural differences better than volumetric approaches
Sophia Borgese1, Tim Kietzmann1, Delia Fuhrmann1, Richard Henson1, Rogier Kievit1
1MRC Cognition and Brain Sciences Unit, Cambridge, United Kingdom

T424 Combining structural MRI images and MEG recordings for Biological brain age prediction
Ama Ghosh1, Alba Xifra-Porxas2, Georgios Mitsis1, Marie-Hélène Boudrias1
1McGill University, Montréal, Quebec, Canada

T425 The Oscillatory Neural Dynamics of Selective Attention Are Predicted by Epigenetic Measures of Aging
Alex Wiesman1, Michael Rezich1, Jennifer O’Neill1, Brenda Morsey2, Tina Wang1, Trey Ideker1, Susan Swendells1, Howard Fox1, Tony Wilson2
1University of Nebraska Medical Center, Omaha, NE, United States, 2University of California San Diego, San Diego, CA, United States

T428 The Relationship between Loneliness and Cognitive Function in The Elderly
Chao Du2, Xin Li1, Xia Jianan1, Zhanjun Zhang1
1Beijing Normal University, Beijing, China

T430 Reduced Hippocampal Volume in Subjective Cognitive Decline: A Voxel-Based Morphometric Study
Giovanna Bubacco1, Mariella Lauriola1, Gianna Sepede1, Angelo Di Iorio2, Roberto Esposito2, Mauro Gianni Perrucc3, Armando Tartaro3
1University G. d’Annunzio Chieti-Pescara, Chieti, CH, 2University of Chieti, Chieti, Italy, 3Department of Neuroscience Imaging and Clinical Sciences, G. d’Annunzio University Chieti-Pescara, Chieti, Italy

T440 Adult Age Differences in Inhibitory Control as Revealed by the Drift-Diffusion Model and fMRI
Arthur Tsai1, Siddharth Nayak1, Chih-Chan Hsu1, Chi-Chiang Kuo1, Shuo-Heng Li1, Joshua Goh2,3,4, Yi-Ping Chao5, Jingling Li6, Su-Ling Yeh2,4
1Center for Lifespan Longevity, School of Behavioral and Brain Sciences, University of Texas at Dallas, Dallas, TX, United States, 2Department of Psychological Sciences, Florida State University, Tallahassee, FL, United States, 3Department of Biomedical Informatics, Duke University School of Medicine, Durham, NC, United States, 4Department of Neurology, University of California San Francisco, San Francisco, CA, United States, 5Department of Neurology, Medical College of Wisconsin, Milwaukie, WI, United States, 6Department of Psychology, National Taiwan University, Taipei, Taiwan

T445 Compensatory brain connectivity in pMCI: a Joint-ICA of rs-fMRI and FDG-PET
Sander Lamballais1, Elain Vink1, Hieab Adams2, Meike Vernooij2, Mohammad Iram2, Ryan Muetzel2
1Erasmus MC University Medical Center Rotterdam, Rotterdam, Netherlands, 2Department of Epidemiology, Erasmus University Medical Center Rotterdam, Rotterdam, the Netherlands, Rotterdam, Netherlands

T446 Combining structural MRI images and MEG recordings for Biological brain age prediction
Ama Ghosh1, Alba Xifra-Porxas2, Georgios Mitsis1, Marie-Hélène Boudrias1
1McGill University, Montréal, Quebec, Canada

T447 Brain metabolites assessed by 1H-MRS in healthy aging and mild cognitive impairment
Antoine Houne-Blanchet1, Lisa Krishnamurthy1, Qixiang Lin1, Salman Shahid1, Candace Fleischer2, Allan Levey3, James Lah3, Deqiang Qiu2, Bruce Crosson1
1Emory University, Atlanta, GA, United States, 2Georgia State University, Atlanta, GA, United States

T448 The Relationship between Loneliness and Cognitive Function in The Elderly
Chao Du2, Xin Li1, Xia Jianan1, Zhanjun Zhang1
1Beijing Normal University, Beijing, China

T449 Adult Age Differences in Inhibitory Control as Revealed by the Drift-Diffusion Model and fMRI
Arthur Tsai1, Siddharth Nayak1, Chih-Chan Hsu1, Chi-Chiang Kuo1, Shuo-Heng Li1, Joshua Goh2,3,4, Yi-Ping Chao5, Jingling Li6, Su-Ling Yeh2,4
1Center for Lifespan Longevity, School of Behavioral and Brain Sciences, University of Texas at Dallas, Dallas, TX, United States, 2Department of Psychological Sciences, Florida State University, Tallahassee, FL, United States, 3Department of Biomedical Informatics, Duke University School of Medicine, Durham, NC, United States, 4Department of Neurology, University of California San Francisco, San Francisco, CA, United States, 5Department of Neurology, Medical College of Wisconsin, Milwaukie, WI, United States, 6Department of Psychology, National Taiwan University, Taipei, Taiwan
**Inhibition of a response to a social stimulus: a developmental fMRI study**

Atilia Atvamli, Franziska Geringswald, Bruno Nazarian, Julien Sein, Jean-Luc Anton, Marie-Hélène Grosbras

Aix Marseille Université, CNRS, LUM UMR 7291, Marseille, France, "Institut de neurosciences de la tomme, UMR 7289 CNRS et Aix Marseille University, Marseille, France

**Corticosteroids and Regional Variation in Thickness of the Human Cerebral Cortex Across the Lifespan**

Nadine Parker1, Didac Vidal-Pineiro1, Leon French1, Jean Shin1, Hieab Adams2, Simon Cox2, Ian Deary1, Anders Fjell3, Stefan Frenzel4, Hans Grabe3, Norbert Hosten3, Mohammad Ikram2, Maria Knol1, Bernard Mazoyer1, Aniket Mishra4, Perminder Sachedeva4, Giovanni Salumn4, Helena Schmidt4, Reinhold Schmidt4, Sudha Seshadri5, Gunter Schumann5, Henry Volzke6, Kristine Walhovd7, Wei Wen8, Katharina Wittfeld8, Qiong Yang9, Stephanie Debette10, Zdenka Pausova11, Tomas Paus11

Institute of Medical Science, University of Toronto, Toronto, Ontario, Canada, "Centre for Lifespan Changes in Brain and Cognition, Department of Psychology, Oslo, Norway, "Centre for Addiction and Mental Health, University of Toronto, Toronto, Ontario, Canada, "The Hospital for Sick Children, University of Toronto, Toronto, Ontario, Canada, "Department of Epidemiology, Erasmus MC University Medical Center Rotterdam, Rotterdam, Netherlands, "Centre for Cognitive Ageing and Cognitive Epidemiology, University of Edinburgh, Edinburgh, United Kingdom, "Centre for Lifespan Changes in Brain and Cognition, Department of Psychology, University of Oslo, Norway, 1Department of Psychiatry and Psychotherapy, University Medicine Greifswald, Greifswald, Germany, "Institute for Diagnostic Radiology and Neuroradiology, University Medicine Greifswald, Greifswald, Germany, "Departments of Epidemiology, Erasmus MC University Medical Centre, Rotterdam, Netherlands, "Department of Epidemiology, Erasmus MC University Medical Center Rotterdam, Rotterdam, Netherlands, "Groupe d’Imagerie Neurofonctionnelle, Université de Bordeaux, Bordeaux, France, "University of Bordeaux, Bordeaux Population Health Research Center, INSERM UMR Bordeaux, France, "Centre for Healthy Brain Ageing, School of Psychiatry, University of New South Wales, Sydney, NSW, Australia, "Department of Psychiatry, Federal University of Rio Grande do Sul, Porto Alegre, Brazil, "Gottfried Schatz Research Center for Cell Signaling, Metabolism and Aging, Medical University of Graz, Graz, Austria, "Clinical Division of Neurogeriatrics, Department of Neurology, Medical University of Graz, Graz, Austria, "Department of Neurology, Boston University School of Medicine, MA, United States, "KCL, London, United Kingdom, "Department of SHIP/ Clinical-Epidemiological Research, Institute for Community Medicine, University M, Greifswald, Germany, "University of Oslo, Oslo, Norway, "German Center for Neurodegenerative Diseases (DZNE), Greifswald, Germany, "Department of Biostatistics, Boston University School of Public Health, MA, United States, "CHU de Bordeaux, Department of Neurology, Bordeaux, France

**Inhibition of a response to a social stimulus: a developmental fMRI study**

Anton Tokariev1, James Roberts2, Andrew Zalesky2, Xuelong Zhao1, Sampsa Vanhatalo1, Michael Breakspear1, Luca Cocchi2

1University of Helsinki, Baby Brain Activity Center, Helsinki, Finland, 2QIMR Berghofer Medical Research Institute, Brisbane, Australia, 3University of Melbourne, Melbourne, Australia, 4University of Pennsylvania, Philadelphia, PA, United States, 5Helsinki University Central Hospital, Helsinki, Finland

**Lifespan trajectories of the macro- and microstructure of the anterior and posterior hippocampus**

Anders Fjell1, Espen Langnes1, Donatas Sedevicius1, Inge Amlien1, Kristine Walhovd2

1University of Oslo, Oslo, Norway

**Lifespan change in asymmetry of superior longitudinal fasciculus**

Kao Arami Amiyati1, Eiichi Naito2, Hiromasa Takemura2

1Center for Information and Neural Networks (CiNet), NICT, Osaka, Japan, 2Center for Information and Neural Networks (CiNet), NICT, Osaka, Japan, 3Graduate School for Frontier Biosciences, Osaka University, Osaka, Japan

**Genetic markers for brain plasticity**

Rachel Brouwer1, Marieke Klein2, Neda Jahanshad4, Katrina Grasby5, Sarah Medland1, Barbara Franke6, Paul Thompson1, Hilke Hulshoff Po1, for the ENIGMA plasticity working group

1University Medical Center Utrecht, Brain Center Rudolf Magnus, Utrecht, Netherlands, 2Radboud University Medical Center, Nijmegen, Netherlands, 3Imaging Genetics Center, Stevens Neuroimaging & Informatics Institute, Keck, USC, Marina Del Rey, CA, United States, 4QIMR Berghofer Medical Research Institute, Brisbane, Australia, 5Keck School of Medicine of the University of Southern California, Marina del Rey, CA, United States

**Traces of childbirth in the female brain**

Ann-Marie de Lange1, Tobias Kaufmann1, Dennis van der Meer1, Lars Westlye2

1Norwegian Center for Mental Disorders Research, Oslo, Norway, 2Department of Psychology, University of Oslo, Oslo, Norway

**Metacognitive questionnaire using adolescent-parent response difference**

Keiiss Kowata1, Ryu-ichiro Hashimoto2, Kiyoto Kasa3, Hiroruki Nakatani4, Shinsuke Koike4

1The University of Tokyo, Tokyo, Japan, 2Showa University, Tokyo, Japan, 3Department of Neuropsychiatry, Graduate School of Medicine, The University of Tokyo, Tokyo, Japan, 4University of Tokyo Institute for Diversity & Adaptation of Human Mind, Tokyo, Japan

**Brain correlates of air pollution in cognitively healthy individuals at risk of Alzheimer’s disease**

Marta Crous1, Carles Falcon1, Mireia Gascon2, Marta Cirach2, José Luis Molinuevo3, Mark Nieuwenhuizen4, Juan Domingo Gispert5

1BarcelonaBeta Brain Research Center, Barcelona, Spain, 2iGlobal, Barcelona Institute for Global Health, Barcelona, Spain, 3BarcelonaBeta Brain Research Center, Barcelona, Catalonia

**Larger Regional Volumes in Alcohol-Exposed Infants Born to Mothers on Choline Supplementation**

Fleur Warton1, Ernesta Meintjes2, Christopher Warton1, Christopher Molteno3, R Colin Carter4, Nadine Lindinger5, Pia Wintermark6, Andre van der Kouwe7, Joseph Jacobson8, Sandra Jacobson9

1University of Cape Town, Cape Town, Western Cape, South Africa, 2University of Cape Town, Cape Town, Western Cape, South Africa, 3Columbia University College of Physicians, New York, NY, United States, 4McGill University, Montreal, Quebec, Canada, 5Department of Radiology, Massachusetts General Hospital, Boston, MA, United States, 6Wayne State University, Detroit, MI, United States, 7Wayne State University, Detroit, MI, United States
T442 Sex differences in cerebral white matter across the lifespan
Suheyla Cetin Karayumak1, Natalia Chonga1, Nathaniel Somes1, Benjamin Reid1, Amanda Loyal1, Sinead Kelly2, Mark Vangel3, Petra Viher4, Sebastian Waithers, Jungsun Lee5, Tim Crow6, Anthony James6, Aristoff Vineskos6, Filip Szewski7, Ani Malhotra7, Keshavan Matcheri8, Martha Shenton9, Yogesh Rathi10, Marek Kubicki1
1Psychiatry Neuroimaging Laboratory, BWH, HMS, Boston, MA, United States, 2Psychiatry Neuroimaging Laboratory, BWH, BIDMC, HMS, Boston, MA, United States, 3Massachusetts General Hospital, HMS, Boston, MA, United States, 4University Hospital of Psychiatry, Bern, Switzerland, 5Department of Psychiatry, University of Ulsan College of Medicine, Asan Medical Center, Seoul, Korea, Republic of, 6Department of Psychiatry, SANE POWIC, Wanneroo Hospital, University of Oxford, Oxford, United Kingdom, 7Centre for Addiction and Mental Health. Department of Psychiatry, University of Toronto, Toronto, Ontario, Canada, 8VA Medical Center, Department of Psychiatry, Icahn School of Medicine at Mount Sinai, Bronx, NY, United States, 9The Feinstein Institute for Medical Research and Zucker Hillside Hospital, NYC, NY, United States, 10Beth Israel Deaconess Medical Centre, HMS, Boston, MA, United States, 11Psychiatry Neuroimaging Laboratory, BWH, VA Medical Center, HMS, Boston, MA, United States

T443 Group-level Structural Correlation with Age in the Life-span Brain on 6000+ subjects
Na Lu1,2, Jing Sui1,2,3, Dongdong Lin1, Jiuyu Chen2, Victor Vergaro2, Jessica Turner2, Zening Fu3, Anees Abrol3, Yuhui Du4, Eswar Damaraju3, Amanda Rodrigue8, David Glahn8, Vince Calhoun3,8,9
1Brainnetome Center, Institute of Automation, Chinese Academy of Sciences, Beijing, China, 2University of Chinese Academy of Sciences, Beijing, China, 3The Mind Research Network, Albuquerque, NM, United States, 4University Hospital of Psychiatry, Bern, Switzerland, 5Department of Neurology, The Chinese Academy of Sciences, Beijing, China, 6The Mind Research Network, Albuquerque, NM, United States, 7Department of Psychology, Neuroscience Institute, Georgia State University, Atlanta, GA, United States, 8Shanxi University, Taiyuan, China, 9Department of Psychiatry, Yale University, School of Medicine, New Haven, CT, United States, 10Department of Electrical and Computer Engineering, the University of New Mexico, Albuquerque, NM, United States

T444 Functional Connectivity Predicts Individual Longitudinal Development in Inhibitory Control Ability
Haiyan Wang1,2,3, Dongdong Lin1, Jiuyu Chen2, Victor Vergaro2, Jessica Turner2, Zening Fu3, Anees Abrol3, Yuhui Du4, Eswar Damaraju3, Amanda Rodrigue8, David Glahn8, Vince Calhoun3,8,9
1Brainnetome Center, Institute of Automation, Chinese Academy of Sciences, Beijing, China, 2University of Chinese Academy of Sciences, Beijing, China, 3The Mind Research Network, Albuquerque, NM, United States, 4University Hospital of Psychiatry, Bern, Switzerland, 5Department of Psychology, Neuroscience Institute, Georgia State University, Atlanta, GA, United States, 6Shanxi University, Taiyuan, China, 7Department of Psychiatry, Yale University, School of Medicine, New Haven, CT, United States, 8Department of Electrical and Computer Engineering, the University of New Mexico, Albuquerque, NM, United States

T445 Developmental trajectory of striatal reward processing and the modulatory role of urban upbringing
Ren Ma1, Gabriela Gan1, Markus Reichert1, Urs Braun1, Kristina Schwarz1, Carolin Moßnang1, Iris Reinhard1, Ulrich Ebner-Priemer2, Andreas Meyer-Lindenberg1, Heike Tost1
1Central Institute of Mental Health, Mannheim, Germany, 2Department of Sports and Sports Science, Karlsruhe Institute of Technology, Karlsruhe, Germany

T446 Differential Coupling between Subsequent Memory BOLD Response and Performance Across the Life-span
Patrick Pruitt1, Lingfei Tang1, Jessica Hayes1, Naa Ofen1, Jessica Damoiseaux1
1Wayne State University, Detroit, MI, United States

T447 A prospective MRI study of the human father’s brain changes within the default mode network
Maria Paternina Die1, Magdalena Martinez Garcia2, Erika Barba-Muller3, Lara W. Wierenga4, Yasser Alleman-Gomez5, Clara Pretusi6, Luis Marcos-Vidal7, Alberto Fernandez-Pena8, Daniel Martin de Blas9, Laura Carretero-Gomez10, Cristina Pozzobon10, Marco Picado2, Florencia Lucci10, Adolfo Tabaño7, Jiska Peper10, Eswar Damaraju3, Agustin Ballesteros4, Oscar Vilarroya4, Manuel Desco3, Esieline Hoekzema4, Susanna Carmona9
1Universidad Carlos III Madrid, Madrid, Spain, 2Centro de Investigacion Biomedica en Red de Salud Mental, Madrid, Spain, 3University Institute of Mental Health Vidal i Barraquer, Ramon Llull University, Barcelona, Spain, Barcelona, Spain, 4Leiden University, Leiden, Spain, 5CHUV, Lausanne, Switzerland, 6Unitat de Recerca en Neurociencia Cognitiva, Department of Psychiatry and Forensic Medicine, Univers, Madrid, 7Departamento de Bioingenieria e Ingenieria Aeroespacial, Universidad Carlos III de Madrid, Leganes, Madrid, Spain, 8Instituto de Investigacion Sanitaria Gregorio Marañon, Madrid, Spain, 9Departamento de Bioingenieria e Ingenieria Aeroespacial, Universidad Carlos III de Madrid, Madrid, Spain, 10IVI Barcelona, Assisted Medicine Reproduction, Barcelona, Spain, Barcelona, Spain, 11Unitat de Recerca en Neurociencia Cognitiva, Department of Psychiatry and Forensic Medicine, Univers, Barcelona, Spain, 12Brain and Development Laboratory, Leiden University, Leiden, the Netherlands, Leiden, Netherlands, 13Fundacion Centro Nacional de Investigaciones Cardiovasculares Carlos III, Madrid, Spain, Madrid, Spain, 14Hospital General Gregorio Marañon, Madrid, Spain

T448 Neural Profiles of Socioeconomic Status in Multi-parametric MRI Maps
Leyla Louden-Khenissi1, Olga Trafoimova1, Peter Vollenweider1, Martin Freisi1, Antoine Lutti2, Ferhat Khen1, Cristian Carmel1, Dusan Petrovic3, Silvio Stringhini4, Bogdan Draganski5
1Centre Hospitalier Universitaire de Lausanne, Lausanne, Switzerland, 2University de Lausanne, Lausanne, Switzerland, 3Lausanne University Hospital, Lausanne, Switzerland, 4IREN, Lausanne, Switzerland

T449 Linking Individual Differences in Brain Development to Behavioral Heterogeneity in Autism Spectrum
Birkan Tunç1,2,3, Lisa Yankowitz1, Drew Parker1, Juli Pandey1, Robert Schultz1,2,3, Ragini Verma1
1Center for Autism Research, The Children’s Hospital of Philadelphia, Philadelphia, PA, United States, 2Department of Biomedical and Health Informatics, The Children's Hospital of Philadelphia, Philadelphia, PA, United States, 3Department of Psychiatry, University of Pennsylvania, Philadelphia, PA, United States, 4Center for Biomedical Image Computing and Analytics, University of Pennsylvania, Philadelphia, PA, United States, 5Department of Pediatrics, University of Pennsylvania, Philadelphia, PA, United States

T450 Thalamic volume associations with altered resting cortical power in children born very preterm
Adonyv Nunes1, Natalieh Koizaki2, Vasily Vakarin3, Evan Hutcheon1, Cecil Chau4, Urs Riberay1, Ruth Gruanu1, Sam Doesburg1
1Simon Fraser University, Vancouver, BC, Canada, 2BC Children's Hospital, Vancouver, BC, Canada, 3University of British Columbia, Vancouver, BC, Canada

T451 Perivascular spaces in 881 adults: correlation with physiological, behavioral, and volumetric data
Giuseppe Barisano1,2, Farshid Sepehrband1, Nasim Sheikh-Bahaei3, Meng Law4, Arthur Toga5
1Laboratory of Neuro Imaging, Keck School of Medicine of USC, University of Southern California, Los Angeles, CA, United States, 2Neuroscience Graduate Program, University of Southern California, Los Angeles, CA, United States, 3Department of Radiology, Keck School of Medicine of USC, University of Southern California, Los Angeles, CA, United States, 4Radiology and Nuclear Medicine, Alfred Health, Melbourne, Australia

T452* Spatio-Temporal Patterns of Age-Related Gene Expression and Cortical Morphology
Annie Lee1, Anqi Qiu1
1National University of Singapore, Singapore, Singapore

Note: * Indicates the abstract has been selected for a poster presentation.
T453  Associations Between Prenatal Alcohol Exposure and White Matter Microstructure in Young Children
Preeti Kar1, Jess Reynolds2, Melody Grohs1, Ben Gibbard3, Deborah Dewey4, Carly McMorris5, Christina Tortorelli6, Catherine Lebel7
1University of Calgary, Calgary, Alberta, Canada, 2Alberta Children’s Hospital Research Institute, Calgary, Alberta, Canada, 3Ministry of Children’s Services, Calgary, Alberta, Canada

T454*  Associations Between Neighborhood SES and Functional Brain Network Development
Tino Dooley1, Alyson Mackey1, Rastko Cinc2, Kosha Rupare2, Tyler Moore1, Ruben Gur2, Raquel Gur2, Theodore Satterthwaite1, Danielle Bassett1
1University of Pennsylvania, Philadelphia, PA, United States

T455  Miniature pigs: a neuroimaging/spectroscopy model for human adolescent brain white matter development
Meghan Ryan1, Paul Sherman2, Laura Rowland3, S. Andrea Wijtenburg4, John Sladky5,6, P. Dana Perallo2
1Maryland Psychiatric Research Center, Dept. of Psychiatry, University of Maryland School of Medicine, Catonsville, MD, United States, 2U.S. Air Force School of Aerospace Medicine, Aeromedical Research Department, Wright-Patterson AFB, OH, United States, 3Department of Radiology, 59th Medical Wing, Joint Base San Antonio, TX, United States, 4Department of Neurology, 59th Medical Wing, Joint Base San Antonio, TX, United States, 5Department of Psychiatry, University of Arkansas for Medical Sciences, Little Rock, AR, United States, 6United States, 7United States, 8United States, 9United States, 10United States, 11United States, 12University of Pennsylvania, Philadelphia, PA, United States, 13Indiana University, Bloomington, IN, United States, 14University of Electronic Science and Technology, Chengdu, China, 15University of California, Riverside, CA, United States

T456  Optimization of State Transition Trajectory Supports Development of Executive Function During youth
Zaiku Cui1,2, Jennifer Stiso1, Graham Baum1, Jason Kim1, David Roall1, Richard Betzel1, Gu Shi2, Zhixin Lu1, Cedric Xie1, Rastko Cinc2, Desmond Oathes1, Tyler Moore1, Russell Shinohara1, Kosha Rupare1, Christos Davatsikos1, Fabio Pasqualetti1, Raquel Gur2, Ruben Gur2, Danielle Bassett2, Theodore Satterthwaite1
1University of Pittsburgh, Pennsylvania, Philadelphia, PA, United States, 2University of California, Riverside, CA, United States, 3Department of Neurology, Toronto, ON, Canada, 4The Hospital for Sick Children, Division of Neurology, Toronto, ON, Canada

T457  Parental education predicts functional connectivity of the hippocampus and amygdala 10 years later
Fanny Degelich1,2, Miriam Beauchamp1,2, Elizabeth Leblanc1,2, Véronique Daneault1,2,4, Annie Bernier1
1University of Montreal, Montreal, Quebec, Canada, 2Sainte-Justine Research Center, Montreal, Quebec, Canada, 3Functional Neuroimaging Unit, Montreal, Quebec, Canada, 4Center for Advanced Research in Sleep Medicine, Montreal, Quebec, Canada

T458  Network segregation is associated with executive function development in Chinese children
Chunjie Wang1,2, Jian Weng1,3, Huafeng Liu1, Feiyan Chen1
1Bio-X Laboratory, Department of Physics, Zhejiang University, Hangzhou, China, 2Department of Optical Engineering, Zhejiang University, Hangzhou, China, 3College of Biomedical Engineering and Instrumental Science, Zhejiang University, Hangzhou, China

T459*  Predicting deviations from the norm in the developing brain using cortico-genetic fingerprinting
Tobias Kaufmann1, Dennis van der Meer1, Dag Alnæs2, Oleksandr Frei3, Olov Smeland1, Ole Andreassen1, Lars Westlye1
1Norwegian Centre for Mental Disorders Research, Oslo, Norway

T460  Corpus callosum microstructure discriminates SSRI-exposed male and female term-born neonates
Kayleigh Campbell2, Lynne Williams1, Ursula Brain3, Bruce Bjornson1, Ruth Grunau3, Dan Gurak2, Steven Miller3, Tim Oberlander1,3
1BC Children’s Hospital Research Institute, Vancouver, BC, Canada, 2University of British Columbia, Department of Obstetrics & Gynecology, Vancouver, BC, Canada, 3University of British Columbia, Department of Pediatrics, Vancouver, BC, Canada, 4The Hospital for Sick Children, Division of Neurology, Toronto, ON, Canada

T461  Structural and functional network organisation in the developing human connectome project
Dafnis Batalle1, Serena Counsell1, Daan Christiaens2, Sean Fitzgibbon2, Antonios Makropoulos3, Lucilla Cordero-Grande2, Andreas Schuh3, Judith Ciarustra2, Rolica Dimitrova4, Tonya Poppe2, Jana Hutter1, Anthony Price1, Emer Hughes1, Eugene Duff1, Emma Robinson1, Jonathan O’Muircheartaigh1,2, Tomoki Arichi2, J-Donald Tournier1, Stephen Smith1, Joseph Hajnal1, Daniel Rueckert2, A David Edwards2
1Forensic and Neurodevelopmental Science, King’s College London, London, United Kingdom, 2Centre for the Developing Brain, King’s College London, London, United Kingdom, 3FMRIB, Wellcome Centre for Integrative Neuroimaging, University of Oxford, Oxford, United Kingdom, 4Biomedical Image Analysis Group, Imperial College London, London, United Kingdom

T462  Altered structure-function coupling in preterm babies from the developing human connectome project
Dafnis Batalle1, Daan Christiaens2, Sean Fitzgibbon2, Antonios Makropoulos3, Lucilla Cordero-Grande2, Andreas Schuh3, Judith Ciarustra2, Rolica Dimitrova4, Tonya Poppe2, Yassine Taoudi Benheckour1, Jana Hutter1, Anthony Price1, Emer Hughes1, Eugene Duff1, Emma Robinson1, Maria Deprez1, Jonathan O’Muircheartaigh1,2, Tomoki Arichi2, J-Donald Tournier1, Stephen Smith1, Serena Counsell1, Joseph Hajnal1, Daniel Rueckert2, A David Edwards2
1Forensic and Neurodevelopmental Science, King’s College London, London, United Kingdom, 2Centre for the Developing Brain, King’s College London, London, United Kingdom, 3FMRIB, Wellcome Centre for Integrative Neuroimaging, University of Oxford, Oxford, United Kingdom, 4Biomedical Image Analysis Group, Imperial College London, London, United Kingdom

T463  Effects of alloparenting status for brain development in children: Resting-state fMRI study
Takashi Fujisawa1, Ryo Kuboshita1, Ryoka Kasabori, Kaz Makita, Akemi Tomoda1
1University of Fukui, Fukui, Japan, 2Osaka University, Osaka, Japan

T464  Disrupted synchrony and metastability in preterm babies from the developing human connectome project
Dafnis Batalle1, Tomoki Arichi2, Sean Fitzgibbon2, Antonios Makropoulos3, Sofia Dall’Orso4, Tonya Poppe2, Lucilla Cordero-Grande2, Andreas Schuh3, Judith Ciarustra2, Rolica Dimitrova4, Anthony Price1, Emer Hughes1, Eugene Duff1, Emma Robinson1, Grainne McAulaini1, Gustavo Deco5, Serena Counsell1, Joseph Hajnal1, Stephen Smith1, Daniel Rueckert2, A David Edwards2
1Forensic and Neurodevelopmental Science, King’s College London, London, United Kingdom, 2Centre for the Developing Brain, King’s College London, London, United Kingdom, 3FMRIB, Wellcome Centre for Integrative Neuroimaging, University of Oxford, Oxford, United Kingdom, 4Biomedical Image Analysis Group, Imperial College London, London, United Kingdom, 5Universitat Pompeu Fabra, Barcelona, Spain
T465 Joint Modelling of Brain Tissue Intensity and Shape Across the Perinatal Period in the dHCP
Jonathan O’Muircheartaigh1, Emma Robinson2, Mary Rutherford2, Maximilian Pietsch1, Rui Pedro AG Teixeira1, Dafnis Bataire2, Jelena Böök3, Andreas Schuh4, Antonios Makropoulos5, Emer Hughes2, Lucillo Cordero-Grande2, Anthony Price2, Stephen Smith5, Jo Højland2, Daniel Rueckert2, Serena Counsell5, A David Edwards1
1Centre for the Developing Brain & Forensic and Neurodevelopmental Science, King’s College London, London, United Kingdom, 2Centre for the Developing Brain, King’s College London, London, United Kingdom, 3Faculty of Electrical Engineering and Computing, University of Zagreb, Zagreb, Croatia, 4Biomedical Image Analysis Group, Imperial College London, London, United Kingdom, 5Image Analysis Group, Imperial College London, London, United Kingdom, *FMRIB, Wellcome Centre for Integrative Neuroimaging, University of Oxford, Oxford, United Kingdom

T466 Developmental change of cross-modal inhibition during a finger motor task in humans
Tomoyo Morita4,5, Minoru Asada4,5, Eichi Naito1
1Osaka University, Suita, Osaka, Japan, 2CiNet, NICT, Suita, Osaka, Japan

T467 Developmental modelling of perinatal brain microstructure: effects of preterm birth - a dHCP study
Rafica Dimitrova1, Daan Christiaensen1, Maximilian Pietsch1, Thomas Wolffers1, Dafnis Bataire2, Jana Hutter2, Lucillo Cordero-Grande2, Price Anthony2, Emer Hughes1, Andre Marquand2, Serena Counsell5, J-Donald Tournier1, Jo Højland2, Daniel Rueckert2, A David Edwards1, Jonathan O’Muircheartaigh2
1Centre for the Developing Brain, King’s College London, London, United Kingdom, 2Donders Centre for Brain, Cognition and Behaviour, Radboud University Medical Centre, Nijmegen, Netherlands, 3Department of Forensic and Neurodevelopmental Science, King’s College London, London, United Kingdom, 4FMRIB, Wellcome Centre for Integrative Neuroimaging, University of Oxford, Oxford, United Kingdom, 5Biomedical Image Analysis Group, Imperial College London, London, United Kingdom

T468 Structural and functional connectivity in the emerging scene processing network
Tobias Meissner1,2, Erhan Genç3, Sarah Weigelt1
1TU Dortmund University, Dortmund, Germany, 2Ruhr University Bochum, Bochum, Germany

T469 Spatio-Temporal Changes of Transient Fetal Zones of the Human Brain Revealed by in-utero MRI
Lana Vasung1, Claude Lepage2, Caitlin Rollins2, Clemente Velasco-Annis1, Konrad Wagstyl1, Ivica Kostovic2, Simon Warfield2, Alan Evans2, Ali Gholi2,3
1Boston Children’s Hospital/Harvard Medical School, Boston, MA, United States, 2Montreal Neurological Institute, McGill University, Montreal, Quebec, Canada, 3University of Cambridge, Cambridge, United Kingdom, 4Croatian Institute for Brain Research, School of Medicine, Zagreb, Croatia

T470* Genetic influences on cortical functional connectivity during longitudinal adolescent development
Jalmar Tseu1, Rachel Rouver1, João Guimarães2,1, Philip Brandner3,1, Marinka Koenis4,1, Suzanne Swagerman4,1, Maxime Verwoert1, Dorret Boomsma5,6,7, Sila Genc2, Kate Duffy1, Chantal Tax1, Greg Parker1, Derek Jones1
1Cardiff University Brain Research Imaging Centre, Cardiff, United Kingdom, 2Murdoch Children’s Research Institute, Parkville, Australia

T471 Influence of neighbourhood on brain and mental health: A large scale MRI study of 4523 children
Nea Bhutan1, Budhachandra Khundrakpam1, Suparna Choudhury2, Karys Peterson-Katz2, Ian Gold2, Alan Evans3
1Montreal Neurological Institute, McGill University, Montreal, Quebec, Canada, 2McGill University, Montreal, Quebec, Canada

T472 Association Between Intelligence and Cortical Thickness in Adolescents: Evidence from the ABCD Study
Qi Zhao1, Lingli Zhang2, Chun Shen3, Jianfeng Feng4
1School of Mathematical Sciences, Fudan University, Shanghai, China, 2Shanghai Children’s Medical Center, Shanghai Jiao Tong University School of Medicine, Shanghai, China, 3Institute of Science and Technology for Brain Inspired Intelligence, Fudan University, Shanghai, China

T473* Development of long-term network uniqueness in the functional connectomes of the school-age children
Xiaodan Chen1,2,3, Xuhong Liao1, Tengda Zhao1,2, Weiwei Men1,2, Yanpei Wang1, Shaoheng Qin1,2,3, Jiahong Gao1,7, Sha Tao1, Qi Dong1, Yong He1,2,3
1State Key Laboratory of Cognitive Neuroscience and Learning, Beijing Normal University, Beijing, China, 2Beijing Key Laboratory of Brain Imaging and Connectomics, Beijing Normal University, Beijing, China, 3IDG-McGovern Institute for Brain Research, Beijing Normal University, Beijing, China, 4School of Systems Science, Beijing Normal University, Beijing, China, 5Center for MRI Research, Academy for Advanced Interdisciplinary Studies, Peking University, Beijing, China, 6Beijing City Key Laboratory for Medical Physics and Engineering, Institute of Heavy Ion Physics, School of Physics, Peking University, Beijing, China, 7McGovern Institute for Brain Research, Peking University, Beijing, China

T474 Aberrant gyration mediates the link between gestational age and adult IQ at premature birth
Dennis Hedderich1, Joseph Bauml1, Marcel Daamen1, Aurore Menegaux1, Peter Bartmani2, Henning Boecker1, Claus Zimmer1, Dieter Wolke1, Christian Gaser1, Christian Sorg1
1Technical University of Munich, Munich, Germany, 2University of Bonn, Bonn, Germany, 3University of Warwick, Warwick, United Kingdom, 4Jena, Germany

T475 The impact of infant diet influences early postnatal development of gamma coherence across cortical hemispheres
J-Donald Tournier1, Jo Hajnal1, Stephen Smith4, Daniel Rueckert5, A David Edwards1, Jonathan O’Muircheartaigh1
1Centre for the Developing Brain, King’s College London, London, United Kingdom, 2Centre for the Developing Brain & Forensic and Neurodevelopmental Science, King’s College London, London, United Kingdom, 3Faculty of Electrical Engineering and Computing, University of Zagreb, Zagreb, Croatia, 4Biomedical Image Analysis Group, Imperial College London, London, United Kingdom

T476 Neonatal white matter microstructure and emotional development during pre-school years in children
Dana Kanell1, Anita Montagno1, Shona Falconer1, Danielle Stoller1, A David Edwards1, Serena Counsell5, Chiara Nosarti2
1Centre for the Developing Brain, Kings College, London, United Kingdom, 2Department of Psychosis Studies, Kings College, London, United Kingdom

T477 Mapping the hemispheric asymmetries of cortical microstructure in infants with multi-modal MRI
Cindy Rolland1, Jessica Leibenberg2, François Leray1, Eric Moulton1, Parvaneh Adlipoor1, Denis Rivière3, Cyril Poupon1, Lucie Hertz-Pannier4, Jean-François Mangin5, Ghislaine Dehaene-Lambertz4, Jessica Dubois1
1Inserm, Gif-sur-Yvette, France, 2Inserm, Paris, France, 3CEA, Gif-sur-Yvette, France, 4CNRS, Gif-sur-Yvette, France

T478 Infant diet influences early postnatal development of gamma coherence across cortical hemispheres
Linda Larsson-Prior1,2, Yuyuan Gu1, Aline Andres1,2, Heather Downs1, Jayne Bellando2,1, Kelly Jarratt2,1, Philip Brandner3,1, Marinka Koenis4,1, Suzanne Cournell1, Maxime Swagerman1, Dorret Boomsma5,6,7, Alan Evans3
1University of Arkansas for Medical Sciences, Little Rock, AR, United States, 2Arkansas Children’s Nutrition Center, Little Rock, AR, United States
T479 White matter micro- and macro-structural development in early childhood  
Dimitri Dimond, Christiane Rohr, Ivy Cho, Catherine Lebel, Deborah Dewey, Robert Smith,  
Thjis Dhillonleet, Alan Connely, Signe Bray

1University of Calgary, Calgary, Alberta, Canada, 2University of Toronto, Toronto, Ontario, Canada,  
3The Florey Institute of Neuroscience and Mental Health, Melbourne, Australia, 4University of  
Melbourne, Melbourne, Australia

T480 The Developing Human Connectome Project: Neonatal imaging markers of spatiotemporal  
gene expression  
Gareth Ball, Jakob Seidittle, Antonios Makropoulos, Andreas Schult, Jelena Bozek, Jo Hajoñ,  
Daniel Rueckert, Stephen Smith, Lucilio Cordero-Grande, Emer Hughes, Anthony Price, Emma  
Robinson, A David Edwards

1Centre for the Developing Brain, Imaging Sciences and Biomedical Engineering, King’s College  
London, London, United Kingdom, 2Developmental Imaging, Murdoch Children’s Research Institute,  
Melbourne, Australia, 3Developmental Neurogenetics Unit, National Institute of Mental Health,  
Bethesda, MD, United States, 4Department of Psychiatry, University of Cambridge, Cambridge, United  
Kingdom, 5Biomedical Image Analysis Group, Imperial College London, London, United Kingdom,  
6Faculty of Electrical Engineering and Computing, University of Zagreb, Zagreb, Croatia, 7FMRI,  
Wellcome Centre for Integrative Neuroimaging, University of Oxford, Oxford, United Kingdom

T481 White matter connectivity sub-networks associated with pubertal onset and attention difficulties  
Silvia Genc, Emmanuel Pud1, Joseph Yuan-mou Yang, Timothy Sikel, Marc Searf

1Murdoch Children’s Research Institute, Parkville, Australia, 2University of Melbourne, Parkville,  
Australia, 3Deakin University, Geelong, Australia

T482 Brain Responses to Human Voice Stimuli Reflect Development and Intelligence in Young Children  
Kyung-Min An, Yuko Yoshimura, Chiaki Hasegawa, Tetsu Hirosawa, Mitsuru Kikuchi

1Kazan University, Kazan, Russia, 2Kanazawa University, Kanazawa, Japan, 3Kanazawa University,  
Kanazawa City, Ishikawa, 4Kanazawa University, Kanazawa City, Japan

T483 Frequency specificity of spontaneous brain activity in developing infant brain  
Liming Hu, Ran Zhang, Xuyun Wen, Bin Jing, Tae-Eui Kam, Li Wang, Zhengwang Wu, Pew-Thian  
Yap, Kristine Baluyot, Brittany Howell, Martin Syner, Essa Yacoubi, Geng Chen, Taylor Potts, John  
Gilmore, Joseph Piven, Keith Smith, Kamil Ugurbil, Hongtu Zhu, Filipe Cunha, Jed Elison, Weili  
Lin, Dinggang Sheng1, for UNC/UMN Baby Connectome Project Consortium

1University of North Carolina at Chapel Hill, Chapel Hill, NC, United States, 2University of  
Minnesota, Minneapolis, MN, United States, 3University of North Carolina at Chapel Hill, NC,  
United States, 4University of Minnesota, Minneapolis, MN, United States

T484 Time-varying Features of Functional Connectomes During Preterm Development  
Yuehua Xu, Xuhong Liao, Miao Cao, Tina Jeon, Minhui Ouyang, Lin Chaik, Nancy Rollins, Hao  
Huang, Yong He

1State Key Laboratory of Cognitive Neuroscience and Learning, Beijing Normal University, Beijing,  
China, 2School of System Science, Beijing Normal University, Beijing, China, 3Institute of Science  
and Technology for Brain-inspired Intelligence, Fudan university, Shanghai, China, 4Department of  
Radiology, Children’s Hospital of Philadelphia, Philadelphia, PA, United States, 5Department of  
Pediatrics, University of Texas Southwestern Medical Center, Dallas, TX, United States, 6Department  
of Radiology, University of Texas Southwestern Medical Center, Dallas, TX, United States, 7Department  
of Radiology, University of Pennsylvania, Philadelphia, PA, United States

T485 Rest functional brain maturation during the first year of life  
Hervé Lemaitre, Pierre Augé, Jean-Marc Tacchella, Ana Salitvitch, Ludovic Fillon, David Grévent,  
Nathalie Bodaert, Monica Zibovicus

1Inserm U1000, Necker Hospital, Paris, France

T486 Habituation and Novelty Detection of young infants in rural Africa and the UK: an auditory  
ERP study  
Laura Kischke, Maria Roztko, Sam McCann, Luke Mason, Claire Elwell, Sarah Lloyd-Fox, Michelle  
de Hoarn

1University College London, London, United Kingdom, 2Medical Research Council Unit, The Gambia,  
London, United Kingdom, 3Centre for Brain and Cognitive Development, Birkbeck College, London,  
United Kingdom

T487 The intrinsic link between Language, Attention and Executive Control revealed by fetal rs-fMRI  
Pasquale Della Rosa, Matteo Canin, Paolo Cavoretto, Mirko Pozzoni, Antonella Iadarola, Silvia  
Pontessi, Roberto Scotti, Paola Scifo, Massimo Candiani, Andrea Falleti, Cristina Baldoli

1San Raffaele Scientific Institute, Milan, Italy

T488 The development of the two-streams visual system during the first two years of life  
Weyyan Yari, Sheng-Ching Huang, Meng-Hsiang Chen, Jessica Cohen, Peter Mucha, Wei Lin

1University of North Carolina at Chapel Hill, Chapel Hill, NC, United States, 2Department of  
Diagnostic Radiology, Kaohsiung Chang Gung Memorial Hospital, Kaohsiung, Taiwan

T489 Associations between testosterone and estradiol with amygdala subnuclei in adolescents  
Claire Campbell, Adam Mezher, Sandrah Eckert, Michael Tyszka, Wolfgang Pauli, Bonnie Nagel,  
Megon Herbig

1Department of Preventive Medicine, Keck School of Medicine, University of Southern California,  
Los Angeles, CA, United States, 2Division of Humanities and Social Sciences, California Institute of  
Technology, Pasadena, CA, United States, 3Departments of Psychiatry & Behavioral Neuroscience,  
Oregon Health and Science University, Portland, OR, United States

T490 Magnetoencephalographic Signatures of Hierarchical Rule Learning in Fetuses  
Julia Moser, Franziska Schlegler, Magdalene Weiß, Katrin Sippel, Hubei Preis1,  
1IDM/IMEG Center of the Helmholtz Center Munich at the University of Tübingen, Tübingen, Germany,  
2Department of Obstetrics and Gynecology, University Hospital, University of Tübingen, Tübingen,  
Germany, 3Wilhelm-Schickard-Institute for Computer Science, University of Tübingen, Tübingen,  
Germany

T491 Long-range Connectivity in the Developing Brain Based on Morphometric Similarity: A dHCP study  
Daphne Fenchel, Rolika Dimitrova, Dafnis Battaillé, Emer Hughes, Lucilio Cordero-Grande, Daan  
Christena2, Anthony Price, Jo Hajoñ, Daniel Rueckert, Stephen Smith, Declan Murphy, Grainne  
McAlonan, Armin Raznahan, A David Edwards, Jonathan O’Luircheartaigh3,  
1Institute of Psychiatry, Psychology and Neuroscience, King’s College London, London, United  
Kingdom, 2Centre for the Developing Brain, King’s College London, London, United Kingdom,  
3Biomedical Image Analysis Group, Imperial College London, London, United Kingdom

T492 Task-specific neural signatures of working memory in childhood  
Monica Rosenberg, Krisnapa Rana, Richard Watts, May Conley, Steven Martinez, BJ Casey

1Yale University, New Haven, CT, United States

T493 Cerebral Blood Flow Increases Across Early Childhood  
Dmitri Panjkou, Gerald Giesbrecht, Catherine Lebel

1University of Calgary, Calgary, Alberta, Canada
T494 Graph theoretical analysis of age-related differences in the episodic memory network in children
Morgan Bodor,¹, Fengji Geng,², Tracy Riggins¹
¹University of Maryland, College Park, College Park, MD, United States, ²Zhejiang University, Hangzhou, China

T495 Beta oscillations correlate differentially with social bargaining through development
Pablo Billeke,¹ Patricia Soto-Icaza,² Alejandro Figueroa,³ Josefina Larrain-Volenzuela,³ Francisco Zamorano³
¹CICs, Universidad del Desarrollo, Santiago, Chile, ²Universidad del Desarrollo, Santiago, Chile, ³Universidad del Desarrollo, Santiago, Chile

T496 Comparison of brain volumes in term and preterm babies from the Developing Human Connectome Project
Maria Deprez¹, Dafnis Batalle²,³ Antonios Makropoulos¹, Andreas Schuh¹, John Cupitt¹, Jonathan O'Muircheartaigh¹,²,³ Emma Robinson¹, Stephen Smith¹, Daniel Rueckert¹, Jo Hajnal¹, A David Edwards¹
¹Centre for the Developing Brain, King's College London, London, United Kingdom, ²Department of Forensic and Neuropsychological Development, Institute of Psychiatry, Psychology and Neuroscience, King's College London, London, United Kingdom, ³Biomedical Image Analysis Group, Imperial College London, London, United Kingdom, ⁴FMRIB, Wellcome Centre for Integrative Neuroimaging, University of Oxford, Oxford, United Kingdom

T497 Fetal resting-state in the developing Human Connectome Project
Vyacheslav Karolis¹, Sean Fitzgibbon², Emer Hughes², Mary Rutherford², Laura McCabe², Lucilio Cordero-Grande², Anthony Price³, Mark Jenkins¹, Daniel Rueckert¹, A David Edwards¹, Jo Hajnal¹, Stephen Smith³, Eugene Duf²
¹FMRIB, University of Oxford, London, United Kingdom, ²University of Oxford, Oxford, United Kingdom, ³King's College London, London, United Kingdom, ⁴Centre for the Developing Brain, King's College London, London, United Kingdom, ⁵King's College London, London, United Kingdom, ⁶Centre for the Developing Brain, Imaging Sciences and Biomedical Engineering, King's College London, London, United Kingdom, ⁷Biomedical Image Analysis Group, Imperial College London, London, United Kingdom, ⁸FMRIB, Wellcome Centre for Integrative Neuroimaging, University of Oxford, Oxford, United Kingdom

T498 3-tissue compositional data analysis of developing HCP (dHCP) diffusion MRI data
This Dhollandier¹,², Remika Mito¹,², Alon Connelly¹,²
¹The Florey Institute of Neuroscience and Mental Health, Melbourne, Australia, ²University of Melbourne, Melbourne, Australia

T499 In Vivo Development of Proliferative Compartments and Periventricular Crossroads Assessed by MRI
Lana Vosung¹, Caitlin Rollins¹, Kiho Im¹, Simon Warfield¹, Ali Ghofourian¹, P. Ellen Grant¹
¹Boston Children's Hospital, Harvard Medical School, Boston, MA, United States

T500 Functionally Dependent Improvement of Brain Network Communication Speed in the First Two Years
Sheng-Che Hung¹, Weiyan Yin¹, Jessica Cohen¹, Peter Mucha¹, Tengfei Li¹, Bingxin Zhao¹, Hongtu Zhu¹, Weili Lin¹
¹University of North Carolina at Chapel Hill, Chapel Hill, NC, United States, ²UNC Chapel Hill, Chapel Hill, NC, United States, ³University of North Carolina at Chapel Hill, Chapel Hill, NC, United States, ⁴UNC at Chapel Hill, Chapel Hill, NC, United States, ⁵University of North Carolina Chapel Hill, Chapel Hill, NC, United States, ⁶UNC at Chapel Hill, Chapel Hill, NC, United States, ⁷Department of Radiology and BRIC, Chapel Hill, NC, United States

T501 Development of White Matter Under the Middle Temporal Gyrus in Individual Infant Brain
Fumitaka Hama,¹ Daiisuke Tsuzuki,²,³, Hama Watanabe,²,³ Gentaro Taga²
¹Tokyo Metropolitan University, Tokyo, Japan, ²The University of Tokyo, Tokyo, Japan, ³Chuo University, Tokyo, Japan

T502 FMRI study of the neural correlates of associative learning in newborn infants
Sofia Dall'Orso², William Filer³, Balsa Balsam³, Jacqueline Brandon¹, Camilla O'Keeffe¹, David Edwards¹, Etienne Burdet¹, Tomoki Aichi³
¹Imperial College London, London, United Kingdom, ²Columbia University, New York, United States, ³King's College London, London, United Kingdom

T503 Screen exposure related to increased theta/beta and theta/gamma band ratio in preschoolers
Michal Ziwan¹, Kapil Bar¹, Roliah Farah¹, John Hutton¹, Tizpi Horowitz-Kraus²
¹Educational Neuroimaging Center, Technion, Haifa, Israel, ²Cincinnati Children's Hospital Medical Center, Cincinnati, OH, United States, ³Technion and Cincinnati Children's Hospital Medical Center, Haifa, Israel

T504 Brain activity during transitive and social action observation in adults and adolescents
Mathieu Lesourde²,³, Aliya Ayyoubi³, Franciska Gerinswald², Lisa Raoul², Fabien Cignetti², Julien Seint², Bruno Naizaram², Jean-Luc Anton³, Marie-Hélène Grasbras³,²
¹Aix Marseille Univ, CNRS, LNC, Laboratoire de Neurosciences Cognitives, Marseille, France, ²Aix Marseille Univ, CNRS, Fédération 3C, Marseille, France, ³Univ. Grenoble Alpes, CNRS, TIMC-IMAG, La Tranche, France, ⁴Aix Marseille Univ, CNRS, Institut de neurosciences de la timone, UMR 7289, Centre IRM Fonctionnelle, Marseille, France

T505 Folding dynamics of the Central Sulcus : a longitudinal study on preterms
Héloise de Vareilles¹, Zhongyi Sun¹, Manon Benders², Clara Fischer³, François Leroy⁴, Linda de Vries⁵, Floris Groenendaal⁶, Denis Rivière⁶, Jessica Dubois⁶, Jean-Francois Mangin⁶
¹NeuroSpin-CEA (Commissariat à l'Energie Atomique et aux Energies Alternatives), Gif-sur-Yvette, France, ²Wilhelmina Children's Hospital and Brain Center Rudolf Magnus, University Medical Center Utrecht, Netherlands, ³Insem, Gif-sur-Yvette, France

T506 Early structural brain development in non-human primate
Akiho Uematsu¹,², Junichi Hatta²,³, Makoto Fukushima³, Noriyuki Kishi³, Ayako Murayama³, Shinsuke Kohke³, Hideyuki Okano³
¹University of Tokyo, Tokyo, Japan, ²RIKEN CBS, Wako, Japan, ³Central Institute for Experimental Animals, Kawasaki, Japan, ⁴RIKEN CBS, Wako, Japan, ⁵RIKEN CBS, Japan, ⁶Keio University, Tokyo, Japan

T507 The Developmental Characteristics of the Brain Diverse Club
Weiyan Yin¹, Jessica Cohen¹, Peter Mucha¹, Weili Lin¹
¹University of North Carolina at Chapel Hill, Chapel Hill, NC, United States

T508 Functional Segregation of the Sensory–motor and Associative Networks in Adolescence
Zeus Gracia-Tabuenca¹, Martha Moreno¹, Fernando Barriouso¹, Sarael Alcauter¹
¹University Nacional Autonoma de Mexico, Queretaro, Mexico

T509 Default Mode Network compensates for immature executive functional brain network during childhood
Menglu Chen¹, Menglu Chen¹, Lei Hao¹, Jiahu Xu¹, Yanli Zhao¹, Ying He¹, Ting Tian¹, Min Jiang¹, Jiaohong Gao², Shuping Tan¹, Yong He¹, Sha Tao¹, Qi Dong⁵, Shaozheng Qin¹
¹State Key Laboratory of Cognitive Neuroscience and Learning, Beijing Normal University, Beijing, China, ²Peking University, Beijing, China, ³Beijing HuLingGuan Hospital, Peking University, Beijing, China, ⁴Beijing Normal University, Beijing, China

To view full abstract text and ePosters, visit www.aievolution.com/hbm1901
T510  Forming A Functionally Flexible Brain During Early Infancy: The Brain Flexible Club
Weijian Yin1, Sheng-Che Hung2, Han Zhang2, Jessica Cohen1, Peter Mucha1, WeiL Lin1
1University of North Carolina at Chapel Hill, Chapel Hill, NC, United States, 2Department of Radiology and BRIC, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States

T511  Premature brain maturation in offspring of mothers experiencing objective stress during gestation
Katja Franke1, David Laplante2, Guillaume Elgie13, Suzanne King1
1University Hospital Jena, Germany, Jena, Thüringen, 2Douglas Hospital Research Centre, Montreal, Quebec, Canada, 3Douglas Hospital Research Centre, M, Canada

T512  Premature Birth and Maternal Psychiatric Disorders Alter Hippocampal connectivity during Infancy
Yuanjuan Chen1, Andrew Salzwedel2, Rebecca Stephens3, Barbara Goldman2, John Gilmore2, Wei Gao1
1Cedars Sinai Medical Center, Los Angeles, CA, United States, 2University of California Los Angeles, Los Angeles, CA, United States, 3University of California Irvine, Irvine, CA, United States

T513  Characterizing the emergence of circuitry underlying cognitive control and reward motivation
Kristina Repuano1, Monica Rosenberg1, Richard Watts1, BJ Casey1
1Yale University, New Haven, CT, United States

T514  Prenatal Drug Exposure Alters Amygdala Functional Connectivity Growth During the First Year
Andrew Salzwedel1, Karen Greisen1, Wei Gao1
1Cedars Sinai Medical Center, Los Angeles, CA, United States, 2University of California Los Angeles, Los Angeles, CA, United States

T515  Hemispheric Asymmetries of Macaque Cortical Properties during Early Brain Development
Jing Xiao1, Fan Wang2, Zhengwang Wu2, Li Wang2, Caiming Zhang1, Dinggang Shen12, Gang Li12
1Department of Computer Science and Technology, Shandong University, Jinan, China, 2Department of Radiology and BRIC, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States, 3Department of Brain and Cognitive Engineering, Korea University, Seoul, Korea, Republic of Korea

T516  The Predictive Architecture of Infant Functional Connectivity for 4-year Behavioral Outcomes
Yuanjuan Chen1, Andrew Salzwedel2, Rebecca Stephens3, Barbara Goldman2, John Gilmore2, Wei Gao1
1Cedars Sinai Medical Center, Los Angeles, CA, United States, 2University of California Los Angeles, Los Angeles, CA, United States

T517  Aerobic fitness associated with structural organization of hippocampal subfields in male adolescents
Sandhya P. Chakravarti1, Bonnie Nagel2, Megan Hertig2
1University of Southern California (USC), Los Angeles, CA, United States, 2Oregon Health and Science University, Portland, OR, United States

T518  Neural correlates of cognitive flexibility in typically developing children
Bryce Dirks1, Willa Voorhees1, Dina Dajan1, Paola Odorizzi2, Casey Burrows2, Jason Nami2, Meaghan Parla2, Michael Alessandri1, Jennifer Britton1, Lucina Uddin1
1University of Miami, Coral Gables, FL, United States, 2University of California, Berkeley, Berkeley, CA, United States, 3Yale University, New Haven, CT, United States, 4University of California, Minneapolis, MN, United States

T519  Brain Structure and Mental Health in Youth with Prenatal Alcohol Exposure and Postnatal Adversities
Quinn Andre1, Carly McMorris1, Chantel Ritter1, Preeti Kari1, Ben Gibbard1, Christina Tortorelli2, Catherine Lebel1
1University of Calgary, Calgary, Alberta, Canada, 2Alberta Children’s Services, Calgary, Alberta, Canada

T520  Sexual Dimorphism in Human Newborn Functional Connectivity of the Reward System
Jered Rasmussen1, Alice Graham2, Sanja Etranger1, Philipp Toepfer1, Damien Foir1, Patrik Wadhwa1, Claudia Buss2
1University of California Irvine, Irvine, CA, United States, 2Oregon Health & Science University, Portland, OR, United States, 3Charité – Universitätsmedizin, Berlin, Germany, 4Oregon Health and Science University, Portland, OR, United States, 5University of California Irvine, Irvine, United States

T521  Characterising infant pain using neural pain signatures
Eugene Duff1, Sean Fitzgibbon1, Tor Wager1, Rebecca Slater1, Fiona Moultrie1, Sezgi Goksan2, Luke Baxter1
1Department of Paediatrics, University of Oxford, Oxford, United Kingdom, 2University of Oxford, Oxford, United Kingdom, 3University of Colorado Boulder, Boulder, CO, United States, 4Department of Paediatrics, University of Oxford, Oxford, United Kingdom, 5University of Oxford, Oxford, United Kingdom, 6UCL Institute of Education, University College London, London, United Kingdom

T522  The Impact of Within-volume Motion Correction on Newborn Diffusion Tensor Imaging
Jered Rasmussen1, Martin Styner1, Damien Fair1, Alice Graham2, Patrik Wadhwa1, Thomas O’Connor1, Claudia Buss2
1University of California Irvine, Irvine, CA, United States, 2UNC at Chapel Hill, Chapel Hill, NC, United States, 3Oregon Health and Science University, Portland, OR, United States, 4Oregon Health & Science University, Portland, United States, 5University of Rochester, Rochester, NY, United States, 6Charité – Universitätsmedizin, Berlin, Germany

T523  Maternal cannabis use during pregnancy effects fetal hippocampal functional connectivity
Jasmine Hector1, Toni Lewis1, Brenden Coyte1, Tamara Gawsasmer1, Chris Trentacosta1, Moriah Thompson1
1Wayne State University, Detroit, MI, United States, 2NYU Longone, New York, NY, United States

T524  Reliability of multimodal MRI data in youth at risk for mental illness
Vladislav Drobnič2,3, Holly Van Gesteren1, Carl Helmick2,3, Chris Bowen2,3, Rudolf Uher2,3
1Dalhousie University, Halifax, NS, Canada, 2Nova Scotia Health Authority, Halifax, NS, Canada

T525  Functional Connectome Fingerprint of the Neonatal Human Brain
Qushi Wang12,3, Xuhong Liao1, Yuehua Xu1,2,3, Tengda Zhao1,2,3, Zhilei Xu1,2,3, Yong He12,3
1State Key Laboratory of Cognitive Neuroscience and Learning, Beijing Normal University, Beijing, China, 2Beijing Key Laboratory of Brain Imaging and Connectomics, Beijing Normal University, Beijing, China, 3IDG/McGovern Institute for Brain Research, Beijing Normal University, Beijing, China, 4School of Systems Science, Beijing Normal University, Beijing, China
TS26  Month-by-month brain functional network development during the first two years of life
Han Zhang1, Gang Li2, Xuyun Wen2, Bin Jing3, Li-Ming Hsu2, Tae-Eui Kam1, Zhengwang Wu2, Li Wang2, Pew-Thian Yap3, Kristine Baliuou4, Brittany Howell5, Martin Stein6, Essa Yacoub7, Geng Chen2, Taylor Potts8, John Gilmore9, Joseph Piven10, Keith Smith11, Kamil Ugurbil12, Hongtu Zhu12, Heather Hazlett13, Jed Elison10, Dinggang Shen12, WeiLi Lin14, for UNC/UMN Baby Connectome Project Consortium15
1Department of Radiology and BRIC, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States, 2Department of Radiology and BRIC, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States, 3Department of Radiology and BRIC, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States, 4Department of Radiology and BRIC, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States, 5Department of Radiology and BRIC, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States, 6Department of Radiology and BRIC, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States, 7Department of Radiology and BRIC, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States, 8UNC-CHapel Hill, Chapel Hill, NC, United States, 9University of Minnesota, Minneapolis, MN, United States, 10University of North Carolina at Chapel Hill, Chapel Hill, NC, United States, 11Department of Radiology and BRIC, Chapel Hill, NC, United States, 12UNC/UMN, United States

TS27  Machine learning and ultrasound indices: Predicting a child’s age
Marie Arsalidou1, Evgeny Khalezov2, Ekaterina Kondrateva2, Nikolay Skuratov2, Svetlana Sushchinskaya3, Maxim Sharaev3, Alexander Bernstein3, Evgeny Burnaev3
1National Research University Higher School of Economics, Moscow, Russian Federation, 2York University, Toronto, Ontario, Canada, 3Skolkovo Institute of Science and Technology, Moscow, Russian Federation, 4Moscow Institute of Physics and Technology, Moscow, Russian Federation

TS28  Estimating Brain Maturation in Developing Adolescents with Multicontrast MRI
Shady El Damaty1, John VanMeter1, Emna Rose2, Diana Fishbein2
1Georgetown University, Washington, DC, United States, 2The Pennsylvania State University, University Park, PA, United States

TS29  Prediction of age in preterm infants using automated analysis of EEG
Nathan Stevenson1, Lisa Oberdorfer1, Tobias Werther2, Katrin Kliebemass-Schreoher2, Michael Breakspear1, Sompas Vanhatalo3, James Roberts3
1QIMR Berghofer Medical Research Institute, Brisbane, Australia, 2Medical University Vienna, Vienna, Austria, 3University of Helsinki, Helsinki University Central Hospital, Helsinki, Finland

TS30  Functional Network Connectivity for Early Language and Motor Milestone Development
Muriel Bruchgagne2, 3, Giang Chau Ngo2, 3, Viren D’Souza4, 5, Sean Deoni1, 2, 3
1Advanced Baby Imaging Lab, Women & Infants Hospital of RI, Warren Alpert Medical School at Brown Uni, Providence, RI, United States, 2Department of Pediatrics, Warren Alpert Medical School at Brown University, Providence, RI, United States, 3MNCHD & T, Bill & Melinda Gates Foundation, Seattle, WA, United States

TS31  An adolescent brain development index validated across multiple cohorts
Monica Truelove-Hill1, Guray Erus1, Vishnu Bhashyam1, Chiharu Sako1, Theodore Satterthwaite1, Daniel Wolf2, Christos Davatzikos1
1University of Pennsylvania, Philadelphia, PA, United States

TS32  Effect of dopamine on developmental changes in frontostriatal connectivity in a reward learning task
Ashley Pott1, Will Foran1, Finnegan Calabro1, Beatriz Luna1
1University of Pittsburgh, Pittsburgh, PA, United States

TS33  Infant resting-state fMRI analysis pipeline for UNC/UMN Baby Connectome Project
Han Zhang1, Xuyun Wen2, Bin Jing3, Li-Ming Hsu2, Tae-Eui Kam1, Zhengwang Wu2, Li Wang2, Pew-Thian Yap3, Kristine Baliuou4, Brittany Howell5, Martin Stein6, Essa Yacoub7, Geng Chen2, Taylor Potts8, John Gilmore9, Joseph Piven10, Keith Smith11, Kamil Ugurbil12, Hongtu Zhu12, Heather Hazlett13, Jed Elison10, Dinggang Shen12, WeiLi Lin14, for UNC/UMN Baby Connectome Project Consortium15
1University of North Carolina at Chapel Hill, Chapel Hill, NC, United States, 2Department of Radiology and BRIC, Chapel Hill, NC, United States, 3Department of Radiology and BRIC, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States, 4Department of Radiology and BRIC, University of North Carolina at Chapel Hill, CHAPEL HILL, NC, United States, 5UNC-Chapel Hill, Raleigh, NC, United States, 6UNC-Chapel Hill, Chapel Hill, NC, United States, 7Department of Radiology and BRIC, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States, 8UNC/UMN, Chapel Hill, NC, United States

TS34  Differential macaque cortical thickness development in the light of maternal interleukin-6 and diet
Julian Ramirez1, Alice Graham1, Elina Thomas1, Robert Hermosillo1, Jennifer Zhu2, Derrick Sturgeon2, Emma Schifsky3, Jacqueline Thompson4, Jennifer Bagley5, Samantha Papadakis5, Muhammed Bah6, AJ Mitchell1, Eric Feczko1, Elinor Sullivan1, 2, Damien Fair7
1Oregon Health & Science University, Portland, OR, United States, 2University of Oregon, Eugene, OR, United States

TS35  Contributions of changes in frontal glutamate levels to emotion processing through adolescence
Orma Ravaudpanan1, Finnegan Calabro2, Will Foran1, Hoby Hetherington2, Victor Yushmanov3, Beatriz Luna1
1University of Pittsburgh, Pittsburgh, PA, United States, 2University of Pittsburgh, Pittsburgh, PA, United States, 3University of Pittsburgh MR Research Center, Pittsburgh, PA, United States

TS36  Maturation of subcortical and cortical responses to lexical tones in the first two years of life
Nikolay Novitskii1, 2, Akshay Maggu1, 2, 3, Patrick Wong1
1Department of Linguistics and Modern Languages, The Chinese University of Hong Kong, Hong Kong, China, 2Brain and Mind Institute, The Chinese University of Hong Kong, Hong Kong, China, 3Kresge Hearing Research Institute, University of Michigan, Ann Arbor, MI, United States

TS37  Assessing Age-Related White Matter Microstructure of the Connections Between the Thalamus and Cortex
Stefanie Badison1, Ryan Cabeen1, Kirsten Lynch1, Arthur Toga1
1Chan Division of Occupational Science & Occupational Therapy, University of Southern California, Los Angeles, CA, United States, 2Laboratory of Neuro Imaging, Keck School of Medicine of USC, University of Southern California, Los Angeles, CA, United States

MODELING AND ANALYSIS METHODS
Bayesian Modeling

TS38  Bayesian network change point detection for resting state fMRI
Lingbin Bai1, Adeel Razii1, Trianggang Cui1, Jonathan Keith1
1Monash University, Melbourne, Australia

TS39  A Spatial Bayesian GLM for Cortical Surface Task fMRI Analysis
Amanda Majari1, Yu Ryan Yue1, David Bolin1, Finn Lindgren1, Martin Lindquist1
1Indiana University, Bloomington, IN, United States, 2Baruch College, Cty University of New York, New York, NY, United States, 3University of Gothenburg, Gothenburg, Sweden, 4University of Edinburgh, Edinburgh, United Kingdom, 5Johns Hopkins University, Baltimore, MD, United States

To view full abstract text and ePosters, visit www.aievolution.com/hbm1901
TS40 Bayesian Connective Field Modeling: a Markov Chain Monte Carlo approach
Azzurra Invernizzi, Koen Haak, Joana Carvalho, Remco Renken, Frans Cornelissen
University Medical Center Groningen, Groningen, Netherlands, Donders Institute, Nijmegen, Netherlands

TS41 Synthesizing PET from MRI Using Conditional Flow-Based Generative Models
Haoliang Sun, Vikas Singh, Vivek Prabhakaran, Ronak Mehta, Hao Zhou, Sterling Johnson
University of Wisconsin-Madison, Madison, WI, United States

TS42 Efficient Inter-Subject Correlation Analysis for Naturalistic data via ROI-Based Multilevel Modeling
Gang Chen, Paul Taylor, Harvey Qu, Peter Molfese, Peter Bandettini, Robert Cox, Emily Finn
NIMH, Bethesda, MD, United States, Oakland University, Rochester, MI, United States, NIMH, Washington, DC, United States

TS43 Measuring and Suppressing M/EEG Connectivity Leakage
Deirel Paz-Linares, Eduardo Gonzalez-Moreira, Adi Deniz Duru, Pedro Valdes SOSa
University of Electronic Science and Technology of China, Chengdu, China, Cuban Neuroscience Center, Havana, Cuba, Universidad Central “Marta Abreu” de las Villas, Santa Clara, Cuba, Marmara University, Istanbul, Turkey

TS44 Model comparison with multimodal data: Concurrent Bayesian inference on imaging and behavioural data
Darije Custovic, Adam Hampshire
Imperial College London, London, United Kingdom

TS45 Human adaptive learning during passive listening of oddball sequences
Francoise Lecaignard, Pauline Duret, emmanuel maby, Gaetan Sanchez, Christina Schmitz, Jeremie Matteau
Lyon Neuroscience Research Center, Lyon, France, University Lyon 1, Lyon, France, University of Montreal, Montreal, Quebec, Canada

TS46 An Integrative Approach to Matrix-Based Analyses in Neuroimaging Connectomics
Gang Chen, Paul-Christian Burkner, Paul Taylor, Zhihao Li, Lijun Yin, Daniel Glen, Joshua Kinnison, Robert Cox, Luiz Pessoa
NIMH, Bethesda, MD, United States, University of Münster, Münster, Germany, Shenzhen University, Shenzhen, China, Department of Psychology, Sun Yat-sen University, Guangzhou, China, University of Maryland, College Park, MD, United States

TS47 Hierarchical Bayesian Models of Social Inference for Probing Persecutory Delusional Ideation
Katharina Wellstein, Andreae Diaconescu, Lars Kasper, Christoph Mathys, Kaas Enno Stephan
Translational Neuromodeling Unit, ETH & University of Zurich, Zurich, Switzerland, University of Basel, Basel, Switzerland, Translational Neuromodeling Unit, Zurich, Switzerland, International School for Advanced Studies, Trieste, Italy, Translational Neuromodeling Unit, Zurich, Switzerland

TS48 Blue-wavelength Light Strengthens the Default Mode Network following Mild TBI: A DCM-DTI Study
Sahil Bajaj, Adam Raikes, Adeel Razvi, William Killgore
University of Arizona, Tucson, AZ, United States, Monash University, Melbourne, Victoria

TS49 A Bayesian model-based fMRI analysis of risk and volatility processes in humans
Vincenzo Fiore, Xiaosi Gu
Department of Psychiatry, Icahn School of Medicine at Mount Sinai, New York, NY, United States

TS50 Informing Bayesian Functional Connectivity Modeling with Structural Connectivity Priors
Sameer Manchanda, Carolyn Murray, Sanmi Koyejo
University of Illinois at Urbana-Champaign, Urbana, IL, United States, University of Illinois at Urbana-Champaign, Urbana-Champaign, IL, United States

Segmentation and Parcellation
TS51 A simulation framework for validating surface-based cortical parcellation methods
Roy Haast, Giancarlo Valente, Kamil Uluçak
Centre for Functional and Metabolic Mapping, Western University, London, ON, Canada, Maastro Clinic, University Maastricht, Netherlands, Institute for Basic Science, Sungkyunkwan University, Suwon, Korea, Republic of Korea

TS52 Influence of parcellation granularity on heritability of brain cortical brain structure
Sofie Valk, B. T. Thomas Yeo, Peter Kochunov, Felix Hoffstaedter, Simon Eickhoff
FZ Jülich, Jülich, Germany, Department of Electrical and Computer Engineering, ASTAR-NUS Clinical Imaging Research Centre, Singapore, Singapore, University of Maryland, Baltimore, MD, United States, Forschungszentrum Jülich, Jülich, Germany

TS53 Structural brain differences in patients with schizotypal personality disorder
Jinhui Huang, Yishan Luo, Lin Shi, Jing Shen, Qiang Zhang, Shijian Chen, Long Zhang, Yueji Sun
The Chinese University of Hong Kong, BrainNow Medical Technology Limited, Hong Kong, China, BrainNow Medical Technology Limited, Hong Kong, Hong Kong, Affiliated Zhongshan Hospital of Dalian University, Dalian, China, Dalian Medical University, Dalian, China, Neuropsychiatric Department, Dalian Medical University, Dalian, China

TS54 Toblerone: partial volume estimation on the cortical ribbon
Tom Kirk, Timothy Coalson, Fiona Kennedy McConnell, Michael Chappell
Institute of Biomedical Engineering, University of Oxford, Oxford, United Kingdom, Wellcome Centre for Integrative Neuroimaging, University of Oxford, Oxford, United Kingdom, Department of Neuroscience, Washington University Medical School, St Louis, MO, United States

TS55 Deep Learning speeds up gapless Cytoarchitectonic Mapping in the Human Brain
Christian Schiffer, Hannah Spitzer, Kai Kiwitz, Katrin Amunts, Tim Dickoscheid
Institute of Neuroscience and Medicine, INM-1, Research Centre Jülich, Jülich, Germany, Cécile & Oskar Vogt Institute for Brain Research, Medical Faculty, University Hospital Düsseldorf, Düsseldorf, Germany

TS56 A Fully Convolutional Network-based Segmentation of the Deep Cerebellar Dentate Nucleus from 7T MRI
Jinyoung Kim, Rémi Patriat, Jordan Kaplan, Noam Harel
University of Minnesota, Minneapolis, MN, United States

TS57 Multimodal segmentation of liquor spaces
Roberto Viviani, Anna-Maria Paul, Julia Stingl
University of Innsbruck, Innsbruck, Austria, BfArM, Bonn, Germany

TS58 Type of physical activity correlates with hippocampal subfield volume
Sara Lazano-Seoane, Laura Estamo-Fornando, Niels Janssen
University of La Laguna, Tenerife, Spain, Institute of Biomedical Technologies, Universidad de La Laguna, Tenerife,Spain, Institute of Neurosciences, Universidad de La Laguna, Tenerife, Spain
T559  Accuracy of automated amygdala MRI segmentation tools in the IMAGE-HD Huntington's disease cohort
Bonnie Alexander1, Nellie Georgiou-Karistianis2, Richard Beare1, Lotta Ahveninen1, Julie Stout1, Yllef Glikmann-Johnston3
1Monash University, Clayton, Australia, 2Monash University, Melbourne, Victoria, 3Murdoch Childrens Research Institute, Parkville, VIC, 4Monash University, Melbourne, Australia

T560  Automatic recognition of cortical sulci using a CNN-based approach
Leoniore Born1, Jean-Francois Margin1, Denis Riviere2
1Neurospin, Gif-sur-Yvette, France, 2Neurospin, Gif sur Yvette, France, 3NeuroSpin-CEA (Commissariat à l’Energie Atomique et aux Energies Alternatives), Gif-sur-Yvette, France

T561  Multimodal parcellations and extensive behavioral profiling tackling hippocampus' gradient
Anna Placht1, Simon Eickhoff2, Felix Hofstaedter2, Kaustubh Patil2, Angela Laird1, Peter Fox2, Katrin Amunts2, Sarah Geon3
1Forschungszentrum Jülich, Jülich, Germany, 2FZ Jülich, Jülich, Germany, 3Research Centre Jülich, Jülich, Germany, 4Florida International University, Miami, FL, USA, 5University of Texas Health Science Center San Antonio, San Antonio, TX, USA, 6Research Centre Jülich, Jülich, Deutschland

T562  Robust and accurate modeling of whole-head anatomy for individualized non-invasive brain stimulation
Oula Puonti1, Koen Van Leemput2, Guillaume Bicalho Saturnino3, Jesper Nielsen2, Hartwig Siebner1, Kristoffer Madsen1, Axel Thielscher1
1Danish Research Centre for Magnetic Resonance, Copenhagen, Denmark, 2Technical University of Denmark, Kgs. Lyngby, Denmark

T563  Brain Tissue and Lesion Segmentation from MRI Using an Unsupervised Convolutional Autoencoder
Hans Atlasson1, Askell Lové2, Sigurdur Sigurdsson3, Vilmundur Gudnason4, Lotta Ellingsen5
1Dept. of Electrical and Computer Engineering, University of Iceland, Reykjavik, Iceland, 2Dept. of Medicine, University of Iceland, Reykjavik, Iceland, 3Dept of Radiology, Landspitali - University Hospital, Reykjavik, Iceland, 4The Icelandic Heart Association, Kopavogur, Iceland, 5Dept. of Electrical and Computer Engineering, The Johns Hopkins University, Baltimore, MD, USA, 6University of Texas Health Science Center San Antonio, San Antonio, TX, USA, 7Research Centre Jülich, Jülich, Deutschland

T564  Bagging Halves Data Needs for Reliable Functional Parcellation
Aki Nikolaidis1, Anibal Heinsfeld1, Ting Xu1, Pierre Bellec2, Joshua Vogelstein3, Michael Milham1
1Integrative Model-based Cognitive Neuroscience Research Unit, University of Amsterdam, Amsterdam, Netherlands, 2Department of Neurosurgery, Maastricht University Medical Center, Maastricht, Netherlands, 3McGill University, Montreal, Quebec, Canada, 4University of British Columbia, Vancouver, BC, Canada, 5University Hospitals, Leuven, Belgium, 6Medical Imaging Research Centre MIRC UZ Leuven, Leuven, Belgium, 7Medical Imaging Research Centre MIRC UZ Leuven, Leuven, Belgium

T565  Comparing delineations of the Subthalamic Nucleus at 7 and 3 Tesla MRI
Bethany Isaacs1, Martijn Mulder1, Josephine Groot1, Pierre-Louis Bazin1, Birte Forstmann2, Anneke Alkemade3
1Department of Neurosurgery, Maastricht University Medical Center, Maastricht, Netherlands, 2Department of Psychiatry, Freie Universität Berlin, Berlin, Germany, 3University of Cambridge, Cambridge, UK, 4University of Manchester, Manchester, UK, 5University of British Columbia, Vancouver, BC, Canada, 6University of Leuven, Leuven, Belgium, 7Medical Imaging Research Centre MIRC UZ Leuven, Leuven, Belgium

T566  Evaluating Brain Parcellation using the Multi-Domain Task Battery
Jörn Diedrichsen4, Maedhbh King5, Carlos Hernandez Castillo, Da Zh2, Richard Ivry5
4Western University, London, Ontario, Canada, 5University of California, Berkeley, Berkeley, CA, United States

T567  Knowing what you know in brain segmentation using deep neural networks
Patrick McClure1, Nao Rho1, John Lee1, Jakub Kaczmarzyk2, Charles Zheng2, Satrajit Ghosh2, Dylan Niem2, Adam Thomas1, Peter Bandettini1, Francisco Pereira1
1NIMH, Bethesda, MD, USA, United States, 2MIT, Cambridge, MA, United States

T568  Hierarchical spectral clustering for global-to-local segmentation in frontotemporal degeneration
Rik Vandenbroucke1, Dorothy Gors2, Rosanna Suetens2, Mathieu Van Dyck2, Philip Vandenbulcke3, John van Swieten4, Barbara Barroni5, Daniela Galimberti5, Raquel Sanchez-Velez5, Robert Lofarce Jr.5, Ferrim Moreno6, Mathys Strobelt7, Caroline Grahl4,8, Maria Tartaglia4, John Rowé9, Elizabeth Principles10, Fabrizio Taglialat11, Alexandre de Mendraud12, Isabel Santana12, Chris Butler12, Simon Ducharme2, Alex Gerhardt1, Adrian Danev1, Johannes Levin1, Markus Otto2, Jonathan Rohrer2
1Laboratory for Cognitive Neurology, Department of Neurosciences, KU Leuven, Leuven, Belgium, 2Medical Imaging Research Centre UZ Leuven, Leuven, Belgium, 3KU Leuven, Leuven, Belgium, 4University Hospitals, Leuven, Belgium, 5Department of Neurology, Erasmus Medical Center, Rotterdam, Italy, 6Centre for Neurodegenerative Disorders, University of British Columbia, Vancouver, BC, Canada, 7Department of Pathophysiology and Transplantation, IRCCS Ospedale Maggiore Policlinico, Milan, Italy, 8Neurology Department, Hospital Clinic, Institut d’Investigacions Biomèdiques, Barcelona, Spain, 9Clinique Interdisciplinaire de Mémoire, Département des Sciences Neurolgiques, CHU de Québec, Québec, Canada, 10Department of Neurology, Hospital Universitario Donostia, San Sebastian, Spain, 11Department of Cognitive Neurology, Center for Neurology and Hertie-Institute for Clinical Brain Rese, Tubingen, Germany, 12Karloinska Institutet, Department NIVS, Center for Alzheimer Research, Division of Neurogenetics, Solna, Sweden, 13Toronto Western Hospital, Tan Centre for Research in Neurodegenerative Disease, Toronto, Ontario, Canada, 14Department of Clinical Neurosciences, University of Cambridge, Cambridge, United Kingdom, 15Department of Clinical Neurological Sciences, University of Western Ontario, London, Ontario, Canada, 16Fondazione Istituto di Ricerca e Cura a Carattere Scientifico Istituto Neurologo Carlo Besta, Milan, Italy, 17Faculty of Medicine, University of Lisbon, Lisbon, Portugal, 18Neurology Department, Centro Hospitalar e Universitário de Coimbra, Coimbra, Portugal, 19Department of Clinical Neurology, University of Oxford, Oxford, United Kingdom, 20Department of Neurology and Neurosurgery, McGill University, Montreal, Quebec, Canada, 21Institute of Brain, Behaviour and Mental Health, The University of Manchester, Manchester, United Kingdom, 22Neurologische Klinik und Poliklinik, Ludwig-Maximilians-Universität, Munich, Germany, 23Department of Neurology, University Hospital Ulm, Ulm, Germany, 24Dementia Research Centre, UCL Institute of Neurology, London, United Kingdom, 25Medical Imaging Research Centre MIRC UZ Leuven, Leuven, Belgium, 26Medical Imaging Research Centre MIRC UZ Leuven, Leuven, Belgium

T569  Global-to-local segmentation of cortical shape using hierarchical spectral clustering
Alejandra Ortega Castrillon1, James Thompson2, Peter Claes1
1Medical Imaging Research Centre MIRC UZ Leuven, Leuven, Belgium, 2Department of Psychology George Mason University, Fairfax, VA, United States

T570  Domain adaptation for inter-dataset segmentation in T1w MRI: a deep learning approach
Philip Novosad1, Vladimir Fonov2, Louis Collins2
1McGill University, Montreal, Quebec, Canada, 2McConnell Brain Imaging Centre, Montreal, Quebec, Canada, 3McGill University, Montreal, Quebec, Canada

T571  Vessel segmentation using MP2RAGE images at 7T MRI
Uk-Su Choi1, Hirokazu Kawaguchi2, Tobias Kober1, Ikuiro Kido1
1Center for Information and Neural Networks, NICT, Osaka, Japan, 2Graduate School of Frontier Biosciences, Osaka University, Osaka, Japan, 3Siemens Healthcare K.K., Osaka, Japan, 4Advanced Clinical Imaging Technology, Siemens Healthcare AG, Lausanne, Switzerland
T572 Manual versus automated segmentation of data from 9-10-year-old children on different scanners
  
  Steven Randall1, Christopher WorTRAN1, Leah Morgan2, Allison Moreau2, Mark Cotton2, Barbara Laughton3, Andre van der Koo123, Enneta Meinjies23, Martha Holmes8
  
  1Department of Human Biology, University of Cape Town, Cape Town, Western Cape, 2A.A. Martinos Centre for Biomedical Imaging, Massachusetts General Hospital, Boston, MA, United States, 3Family Clinical Research Unit, Department of Paediatrics & Child Health, Stellenbosch University, Cape Town, South Africa, 4Department of Radiology, Massachusetts General Hospital, Boston, MA, United States, 5UCT Medical Imaging Research Unit, Division of Biomedical Engineering, Department of Human Biology, University of Cape Town, Cape Town, South Africa, 6UCT Medical Imaging Research Unit, Division of Biomedical Engineering, Department of Human Biology, Cape Town, South Africa, 7Cape Universities Body Imaging Centre, University of Cape Town, Cape Town, South Africa, 8Cape Medical Imaging Research Unit, Division of Biomedical Engineering, Department of Human Biology, Cape Town, Western Cape, South Africa

T573 Fetal Cortical Plate Segmentation using Fully Convolutional Neural Network with Plane Fusion
  
  Jinwoong Hong1, Gilsoo Park1, Hyuk Jin Yim1, Kiho Im1, Jong-Min Lee1
  
  1Hanyang University, Seoul, Korea, Republic of, 2Boston Children’s Hospital, Harvard Medical School, Boston, MA, United States

T574 Influence of parcellation atlas on quality of classification of neurodegenerative diseases
  
  Michaela Montillet1, Martin Gajdos3
  
  1Multimodal and Functional Neuroimaging Research Group, CEITEC, Masaryk University, Brno, Czech Republic

T575 Cortical parcellation with Convolutional Neural Nets : accuracy over multiple T1 MRI sequences
  
  Benjamin Thyreou1, Yasuyuki Tak2
  
  1IDAC, Tohoku University, Sendai, Japan, 2Department of Radiology and Nuclear Medicine, IDAC, Tohoku University, Sendai, Japan

T576 A novel approach for manual segmentation of the amygdala and hippocampus in neonate MRI
  
  Nikolofar Hashempour1, Jetro Tuulari2, Harri Merisson2, Kristian Lidauer1, Irshi Lusikkonen1, Saanavara Jani Pett11, Riitta Parkkia2, Tuire Lahdesmaki1, Satu Lehtola1, Maria Keskinen1, John Lewis1, Noora Scheinin1, Linnea Karlsson1, Hasse Karlsson1
  
  1FinnBrain Birth Cohort Study, University of Turku, Turku, Finland, 2Finnbrain Birth Cohort Study, University of Turku, Turku, Finland, 3Mallinkrodt Institute of Radiology, Washington University in St. Louis, St. Louis, MO, United States, 4Department of Medical Physics, Turku University Hospital, Turku, Finland, 5Department of Radiology, University and University Hospital of Turku, Turku, Finland, 6Pediatric neurology, University and University Hospital of Turku, Turku, Finland, 7McGill University, Montreal, QC, Canada

T577 Individual whole-brain parcellation reveals individual variability in functional connectivity
  
  Shunsuke Okumura1, Keisuke Nakamuro1, Satoru Hiwa1, Tomoyuki Hirayasu1
  
  1Doshisha University, Kyotanabe-shi, Kyoto, Japan

T578 Deep neural networks for quick MRI brain segmentation with automated QC
  
  Abhijit Guha Roy1, Christian Wachinger1
  
  1AI-Med, LMU Munich, Munich, Germany

T579 STUN: Spatial Transformer U-Net for segmentation of the hippocampus from MR images
  
  Nicola Dinsdale1, Nazario Demit1, Thomas Wassenaar1, Claire Sexton1, Janet Withal1, Arofadi Stathi1, Ana Namburete1, Mark Jenkinson1
  
  1University of Oxford, Oxford, United Kingdom, 2University of Bath, Bath, United Kingdom, 3University of Birmingham, Birmingham, United Kingdom

T580 CBPtools: A python package for multi-modal regional connectivity-based parcellation
  
  Niels Reuter1,2, Sarah Genon1, Shahzad Kharbani Masouleh1, Tobias Kalenscher1, Felix Hoffstaetter1,2, Kaustubh Pat1, Simon B. Eickhoff1
  
  1Institute of Systems Neuroscience, Heinrich-Heine University, Düsseldorf, Germany, 2Institute of Neuroscience and Medicine (INM-7), Research Centre Jülich, Jülich, Germany, 3Institute of Experimental Psychology, Heinrich-Heine University Düsseldorf, Düsseldorf, Germany

T581 Non-negative matrix factorization of hippocampal-cortical resting state functional connectivity
  
  Rothan Patel1,2, Anthony Chen1,2, Sejal Patel1,2, M. Mallor Chakravarty1,3
  
  1Cerebral Imaging Centre, Douglas Mental Health University Institute, Montreal, QC, Canada, 2Department of Biological and Biomedical Engineering, McGill University, Montreal, QC, Canada, 3Department of Neuroscience, McGill University, Montreal, QC, Canada, 4Campbell Family Mental Health Research Institute, Centre for Addiction and Mental Health, Toronto, ON, Canada, 5Institute of Medical Science, University of Toronto, Toronto, ON, Canada, 6Department of Psychiatry, McGill University, Montreal, QC, Canada

T582 Evaluation of T1 Hypointensity and T2 Hyperintensity White Matter Lesion Segmentation Algorithms
  
  Elijah Rockers1, Kelvin Wong1, Quentin Funk1, Jon Xue1, Joseph Masdeu1, Beien Pascual1
  
  1Houston Methodist Research Institute, Houston, TX, United States, 2United Imaging Intelligence, Shanghai, China

T583 Evaluation of Planar and Volumetric Convolutional Neural Networks for Brain Segmentation
  
  Gabriele Valvano1, Nicola Martin1, Andrea Leo1, Gianmarco Santini1, Daniele Lella1, Emiliano Ricciardi1, Dante Chiappin1, Pietro Pietrini1
  
  1IMT School for Advanced Studies Lucca, Lucca, Italy, 2Imaging department, Fondazione Gabriele Monasterio, Massa, Italy, 3Department of Information Engineering, University of Pisa, Pisa, Italy

T584 Evaluating different functional parcellations of the basal ganglia
  
  Carlos Hernandez1,2, Maedhi King1,2, Ian Harding1,2, Jarn Diederichsen1, Richard Ivery1
  
  1Western University, London, Ontario, Canada, 2University of California, Berkeley, Berkeley, CA, United States, 3Monash University, Melbourne, Victoria

T585 A novel method for estimating connectivity-based parcellation of the human brain from diffusion MRI
  
  Ana Coelho1, Henrique Fernandes1, Ricardo Magalhaes1, Pedro Moreira1, Nuno Sousa1
  
  1Life and Health Sciences Research Institute (ICVS) - School of Health Sciences, University of Minho, Braga, Portugal, 2Aarhus University, Aarhus, Denmark

T586 Structural covariance analysis to develop a data-driven voxelwise grey matter volume atlas system
  
  Riya Paul1, Michael Czisch1, Bertram Müller-Myhsok1, Philipp Sämann1
  
  1Max Planck Institute of Psychiatry, Munich, Germany

T587 Detection of White Matter Hyperintensities in T1 without FLAIR
  
  Robert Dahne1, Gabriel Ziegler1, Christian Gaser1
  
  1Jena University Hospital, Jena, Germany, 2DZNE, Otto von Guericke University, Magdeburg, Germany

T588 Evaluation of non-invasive structural and functional MRI-based cortical parcellation
  
  Kelvin Mok1,2, Sethu Boopathy Jegathambal1,2, David Rudko1,2, Amir Shmuel1,2
  
  1McGill University, Montreal, Quebec, Canada, 2Montreal Neurological Institute and Hospital, Montreal, Quebec, Canada
TUESDAY, JUNE 11

Odd numbers: 12:45 – 13:45; Even numbers: 13:45 – 14:45; Poster Reception: 17:00 – 18:00

T590  Ultra High Resolution Segmentation Showing Hippocampal Dentation From Common T1w Images
Lawrence Ver Hoef1,2, Anandh Kilpattu Ramaniharan1, Goutham Selladurai1
1University of Alabama at Birmingham, Birmingham, AL, United States, 2Birmingham VA Medical Center, Birmingham, AL, United States

T591  Human hippocampal subfield variability and mood across one complete reproductive cycle
Caitlin Taylor1, Laura Pritschet1, Evan Layher1, Tyler Santander1, Shuying Yu1, Scott Grafton2, Emily Jacobs2
1Department of Psychological and Brain Sciences, University of California Santa Barbara, Santa Barbara, CA, United States, 2Department of Psychological and Brain Sciences, University of California Santa Barbara, Santa Barbara, CA, United States

T592*  Atlases of cognition with large-scale human brain mapping
Gael Varoquaux1, Yannick Schwartz, Russell Poldrack2, baptiste gouthier1, Danilo Bzdok4, Jean-Baptiste Poline3, Bertrand Thirion4
1Inria, Palaiseau, France, 2Stanford, Palo Alto, CA, United States, 3EPFL, GENEVA, Switzerland, 4RWTH Aachen University, Aachen, Germany

T593  Longitudinal Automatic Segmentation of Hippocampal Subfields (LASHIS) using multi-contrast MRI
Thomas Shaw1, Steffen Bollmann1, Ashley York1, Markus Barth1
1Centre For Advanced Imaging, The University of Queensland, Brisbane, Australia

T594  Efficient MRI segmentation of traumatic brain injury data using active learning
Dominique Duncan1, Roccoel Gamer1, Deniz Erdogmus2
1University of Southern California, Los Angeles, CA, United States, 2Northeastern University, Boston, MA, United States

T595  3D UNet with convolutional block attention module for white matter hyperintensities segmentation
Gilsoon Park1, Jinwoo Hong1, Jin-Ju Yang1, Jong-Min Lee1
1Hanyang University, Seoul, Korea, Republic of

T596  Time-Varying Brain Network Parcellation using TMS-EEG
Molly Lucas1, Yiming Sun1, Wei Wu1, Yu Zhang1, Russell Toll1, Matthew Menezes1, Parker Longwell1, Emmanuel Shippe1, Karen Monuszka1, Hersh Trived1, Kamron Sarhad1, Amit Etkin1
1Stanford School of Medicine, Stanford, CA, United States, 2Stanford University, Stanford, CA, United States, 3Stanford University, Stanford, CA, United States

T597  Individually tailored segmentation method for distorted hypothalamus in craniopharyngioma patient
Miwoo Lee1,2, A Ram Hong1, Jrung Hyun Lee1, Jung Hee Kim1, Yong Hwy Kim1, Hyung Jin Choi2
1Hanyang University, Seoul, Korea, Republic of 2Department of Radiology, National Medical Center, Seoul, South Korea

T598  Network extraction method using hierarchical ICA-based approach: a simultaneous EEG-fMRI study
Takeshi Oogawa1, Hiroki Moriya1, Nobuo Hiroe2, Takashi Yamada1, Motoaki Kawanabe1, Jun-ichiro Hirayama1
1ATR Cognitive Mechanisms Laboratories, Kyoto, Japan, 2ATR Cognitive Mechanisms Laboratories, Kyoto, Japan, 3ATR Neural Information Analysis Laboratories, Kyoto, Japan, 4ATR Computational Neuroscience Laboratories, Kyoto, Japan

T599  The Norepinephrine Transporter Gene and Brain Activity in Attention-Deficit/Hyperactivity Disorder
Chi-Yung Shang1, Hsiang-Yuan Lin2, Susan Shur-Fen Gau1
1National Taiwan University Hospital, Taipei, Taiwan, 2National Taiwan University, Taipei, Taiwan

T600  Functional significance of resting-state fMRI in relation with fixational eye movement
Tetsuya Iidaka1, Tomohiro Kagota1, Hiroyuki Yamamoto1
1Nagoya University, Nagoya, Japan

T601  Task-potency investigations in autism spectrum disorder
Tristen Lodden1, Roseynne Chavlin1, Maarten Mennes1, Jan Buitelaar1,2,3, Christian Beckmann1,4
1Donders Institute for Brain, Cognition and Behavior, Radboud University, Nijmegen, Netherlands, 2Department of Cognitive Neuroscience, Radboud University Medical Center, Nijmegen, Netherlands, 3Karater Child and Adolescent Psychiatry University Centre, Nijmegen, Netherlands, 4Centre for Functional MRI of the Brain (FMRIB), University of Oxford, Oxford, United Kingdom

T602  Disrupted network topology in premenstrual dysphoric disorder is related to childhood maltreatment
Rotem Dor1, Inbal Reuveni2, Laura Canetti1, Marta Weinstock1, Ronen Segmon3, Gadi Goelman1, Omer Bonne1
1The Hebrew University of Jerusalem, Jerusalem, Israel, 2Hadasah Hebrew University Medical Center, Jerusalem, Israel

T603  Musical prodigies have enhanced intrinsic functional connectivity in parieto-frontal brain networks
Megha Sharda1, Michael Weiss1, Isabelle Peretz1
1University of Montreal, Montreal, Quebec, Canada

T604  Age and gender effects on resting-state networks after mild traumatic brain injury
Miyra Bittencourt-Villalpando1, Harm van der Noat2, Edith Liemburg1, Natasha Maurit2, Joukje van der Naalt1
1University Medical Center Groningen, Groningen, Netherlands, 2UMCG, Groningen, Netherlands

T605*  Fractal dimension enables the functional differentiation of resting state networks
Camillo Pacraro1,2,3, Marco Marino1, Liu Quanying5,6, Jessica Samogin7, Franca Tecchio1,8, Carlo Cattane1,9,10, Dante Mantini1,2,9,10
1ISTC-CNR, Rome, Italy, 2S. Anna Institute and Research in Advanced Neurorehabilitation (RAN), Crotone, Italy, 3Department of Information Engineering Università Politecnica delle Marche, Ancona, Italy, 4IRCCS San Camillo Hospital Foundation, Venice, Italy, 5California Institute of Technology, Division of Engineering and Applied Science, Pasadena, CA, United States, 6Research Center for Motor Control and Neuroplastics, KU Leuven, Leuven, Belgium, 7KU Leuven, Heverlee, Belgium, 8Fondazione Policlinico Gemelli IRCCS, Rome, Italy, 9KU Leuven, Leuven, Belgium, 10Functional Neuroimaging Laboratory, IRCCS San Camillo Hospital Foundation, Venice, Italy
T606  Altered functional connectivity of prefrontal cortex in a rat Fetal Alcohol Spectrum Disorder model
Shiyu Tang1, Su Xu1, Jaylin Waddell1, Raul Gualapali1, Sandra Money1
1University of Maryland School of Medicine, Baltimore, MD, United States

T607  Distance-based Functional Criticality in the Human Brain: Intelligence and Emotional Intelligence
Lili Jiang1, Kaini Qiao1, Chunlin Li1
1Institute of Psychology Chinese Academy of Sciences, Beijing, China

T608  Contributions of covert self-driven cognition to resting state dynamic functional connectivity
Javier GonzalezCastillo1, Cesar Caballero-Gaudes2, Natasha Topolski2, Francisco Pereira2, Daniel Handwerker1, Peter Bandettini1
1National Institute of Mental Health, Bethesda, MD, United States, 2Bosque Center on Cognition, Brain and Language, San Sebastian, Spain, 3University of Texas at Houston, Houston, TX, United States, 4NIMH, Bethesda, MD, United States

T609  Using machine learning to predict individual language task activation from resting state fMRI
Yang Wang1, Alexander Coehri2, Chen Niu3, Ziyi Chen1, Andrew Kalinini1, Brenna McDonald1, Kristine Mosier1, Andrew Saykin1
1Medical College of Wisconsin, Milwaukee, WI, United States, 2First Affiliated Hospital of Xi’an Jiaotong University, Xi’an, China, 3The Ohio State University, Columbus, OH, United States, 4Indiana University School of Medicine, Indianapolis, IN, United States

T610  Deconstructing increased network clustering with magnetoencephalography in glioma patients
Shanna Kulik1, Jolanda Derks1, Tanne Numan1, Philip De Witt Hamer1, Arjan Hillebrand1, Martin Klein1, Jeroen Geurts1, Jaap Reijneveld1, Cornelis Stamm1, Moniek Schoonheim1, Linda Dow1
1Amsterdam University Medical Centers, VU University Amsterdam, Netherlands, 2Vrije Universiteit Amsterdam, Amsterdam, Netherlands, 3VU University Medical Center, University of Amsterdam, Amsterdam, Netherlands

T611  Changes in fMRI network dynamic connectivity following 40 Hz visual stimulation
David Bridwell1, Vince Calhoun1
1Mind Research Network, Albuquerque, NM, United States, 2The Mind Research Network University of New Mexico, Albuquerque, NM, United States

T612  Validation of permutation tests comparing fMRI inter-subject correlations between groups
Jussi Tohka1, Frank Pollick2, Juha Pajula3, Arjen Hillebrand1, Maarten Mennes2
1University of Eastern Finland, Kuopio, Finland, 2University of Glasgow, Glasgow, United Kingdom, 3Wellcome Centre for Integrative Neuroimaging, University of Oxford, Oxford, United Kingdom, 4Department of Cognitive Neuroscience, Radboud University Medical Center, Nijmegen, Netherlands, 5Department of Cognitive Radiology, Necker Hospital, AP-HP, Paris, France, 6Institute of Neuroscience and Medicine, Brain & Behaviour (INM-7), Research Centre Jülich, Jülich, Germany

T613  Multiple separable factors influence the reliability of resting-state functional connectivity
Evan Gordon1, Timothy Laumann2, Abraham Snyder3, Caterina Gratton1, Steven Petersen1, Nico Dosenbach1, Steven Nelson1
1VA VISN17 Center of Excellence, Vaco, TX, United States, 2Washington University School of Medicine, St. Louis, MO, United States, 3Northwestern University. Evanston, IL, United States

T614* Ultra-high-order ICA: fine overlapping functional parcellations and spatiotemporal reconfiguration
Armin Iraji1, Zening Fu1, Thomas DeRamus1, Shle Qi1, Srinivas Rachakonda1, Yuhui Du1, Vince Calhoun1
1The Mind Research Network, Albuquerque, NM, United States

T615  Early Life Stress Alters Intrinsicy Amygdala-prefrontal Connectivity – Cross-cultural Validation
Xing Zhou1, Fei Xin1, Congcong Liu1, Lei Xu1, Xiaoxiao Zheng1, Jialin Li1, Meina Fu1, Keshuang Li1, Ayline Maier1, Dirk Scheele2, Rene Hullemann2, Simon Eickhoff3, Keith Kendrick4, Benjamin Becker1
1University of Science and Technology of China, Chengdu, China, 2Department of Psychology and Division of Medical Psychology, University of Bonn, Bonn, Germany, 3Institute of Systems Neuroscience, Medical Faculty, Heinrich Heine University Düsseldorf, Düsseldorf, Germany, 4Institute of Neuroscience and Medicine, Brain & Behaviour (INM-7), Research Centre Jülich, Jülich, Germany

T616  Slow inspiration desynchronizes phase coherence in the human brain
Shen-Mou Hsu1, Chih-Hsin Tseng1, Chao-Hsien Hsieh1, Chang-Wei Hsieh1
1National Taiwan University, Taipei, Taiwan, 2Asia University, Taipei, Taiwan

T617  EEG-fMRI preprocessing methods in children with drug resistant focal epilepsy: a preliminary study
Ludovic Filippini1,2, Monika Eissmann1,2, Thomas Blauwblomme1,2, Jennifer Baisogontier1,2, Valodia Dangoulof-Ros1,2, Jean-Marc Tacchella1,2, Hervé Lemaître1,2, David Grévent1,2, Louise Tyvaert2, Emma Losito1, Ana Saiotvich1,2, Monica Zilbovicius1,2, Rima Nabnout1, Anna Kaminska1, Nathalie Boddart1
1Department of Pediatric Radiology, Necker Hospital, AP-HP, Paris, France, 2IMAGINE Institute, INSERM UMR 1163 and INSERM U1000, Paris, France, 3Paris Descartes University, Sorbonne Paris Cité, Paris, France, 4Department of Clinical Neurophysiology, Necker Hospital, AP-HP, Paris, France, 5Department of Pediatric Neurosurgery, Necker Hospital, AP-HP, Paris, France, 6Neurology Service, Centre Hospitalier Universitaire de Nancy, France, 7Centre for Rare Epilepsies, Department of Pediatric Neurology, Necker Hospital, AP-HP, Paris, France

T618  Resting state network activity predicts occurrence of spontaneous replay
Cameron Higgins1, Yunzhe Liu1, Zeb Kurth-Nelson1, Diego Vidaurre1, Ray Dolan2,4, Timothy Behrens2,4, Mark Woolrich1
1Wellcome Centre for Integrative Neuroimaging, University of Oxford, Oxford, United Kingdom, 2Max Planck UCL Centre for Computational Psychiatry and Ageing Research, University College London, London, United Kingdom, 3DeepMind, London, United Kingdom, 4Wellcome Trust Centre for Neuroimaging, University College London, London, United Kingdom

T619  Inefficient use of shared functional processes in the ADHD brain: analysis across three tasks
Roselyne Chauvin1,2, Marianne Oldehinkel3,1,2, Jan Buitelaar1,2,4, Christian Beckmann2,4, Maarten Mennes2,4
1Department of Cognitive Neuroscience, Radboud University Medical Center, Nijmegen, Netherlands, 2Donders Institute for Brain, Cognition and Behavior, Radboud University, Nijmegen, Netherlands, 3Institute of Cognitive and Clinical Neurosciences and School of Psychological Sciences, Victoria, Australia, 4Department of Clinical Neurophysiology, Necker Hospital, AP-HP, Paris, France, 5Centre for Functional MRI of the Brain (FMRIB), University of Oxford, Oxford, United Kingdom

T620  Test-retest reliability of the rs-fMRI blind HRF retrieval approach
Safie Van Den Bossche1, Guorong Wu2, Stefan Holiga3, Fabio Sambataro4, Alessandro Bertolino1, Juergen Dukart1, Daniele Marinazzo1, Maarten Mennes2,4
1Department of Data Analysis, Faculty of Psychology and Pedagogical Sciences, Ghent University, Ghent, Belgium, 2Key Laboratory of Cognition and Personality, Faculty of Psychology, Southwest University, Chongqing, China, 3Department of Medicine (DAME), University of Udine, Udine, Italy, 4Department Di Scienze Mediche Di Base, Neuroscienze E Organi Di Senso, University of Bari, Bari, Italy, 5Institute of Neuroscience and Medicine, Brain & Behaviour (INM-7), Research Centre Jülich, Düsseldorf, Germany
T621* Parvalbumin interneurons underlie in-vivo brain function and schizophrenia risk
Kevin Anderson1, Meghan Collins1, Rowena Chin1, Tian Ge2, Monica Rosenberg2, Avram Holmes1
1Yale University, New Haven, CT, United States, 2Center for Genomic Medicine, Massachusetts General Hospital, Boston, MA, United States

T622 The Hippocampal Rostro-caudal Gradient: Evidence from Functional Connectivity Measures and ReHo
Gianluca Soetto1, Eraldo Paulesu1, Maurizio Sberna2, Manuela Berlina1
1University Hospital Zurich, Zurich, Switzerland, 2University of Milano-Bicocca, Milan, Italy,

T623 Understanding the function of human amygdala using connectopic mapping
Izabela Przezdziecka1, Koen Haak1, Guillian Fernández2, Christian Beckmann1
1Donders Institute, Nijmegen, Netherlands

T624 Test-Retest Reliability of Resting-State BOLD Signal Variability Measures
Jason Nomi1, Taylor Bolt2, Aaron Heller2, Lucina Uddin3
1University of Miami, Coral Gables, FL, United States, 2Emory University, Atlanta, GA, United States

T625 Functional interactions in hemianopics: a node-based connectivity study of resting fMRI signal
Caterina Pedersini1, Joan Guardia-Olmos2, Marc Montola-Flaquer2, Nicolò Cardobi1, Javier Sanchez-Lopez3, Giorgia Parisi3, Silvia Savazz1,2,4, Carla Marzi4
1Department of Neuroscience, Biomedicine and Movement Sciences, University of Verona, Verona, Italy,
2Department of Social Psychology and Quantitative Psychology, Psychology of Human Development, Barcelona, Spain,
3National Institute of Neuroscience, Neuroscience, Verona, Italy

T626 Cognitive vulnerability to sleep deprivation is associated with two dynamic connectivity states
James Teng1, Ju Lynn Ong2, Amiya Patanaki3, Jessica Tandl1, Michael Chee1, Julian Lim1
1Duke-NUS Medical School, Singapore, Singapore, 2NeuroRWB Technologies, Singapore, Singapore

T627 Topography and behavioral relevance of the global signal in the dynamic resting human brain
Jingwei Li1, Taylor Bolt2, Danilo Bzdok3, Jason Nomi4, B. T. Thomas Yeo1, Lucina Uddin5, R. Nathan Spreng6
1ECE, CIRC, SINAPSE & MNP, National University of Singapore, Singapore, Singapore,
2Department of Biomedical Engineering, Emory University, Atlanta, GA, United States,
3Department of Psychiatry, Psychotherapy, and Psychosomatics, RWTH Aachen University, Aachen, Germany,
4Department of Psychology, University of Miami, Coral Gables, FL, United States,
5Department of Neurology and Neurosurgery, McGill University, Montreal, QC, Canada,
6Department of Psychology and Psychiatry, McGill University, Montreal, QC, Canada

T628 Prism adaptation enhances decoupling between the default mode network and the attentional networks
Meytal Wilf1, Andrea Serino1, Stephanie Clarke1, Sonia Crottoz-Herbette2
1University Hospital Lausanne (CHUV), Lausanne, Switzerland

T629 Long-range phase synchronization of high-gamma activity in human cortex
Gabriele Arruolo1,2, Sheng H Wang3, Nitin Williams1, Hirvonen Jonni1, Marco Fato1, Lina Nobili3, Francesco Cardinale1, Annalisa Rubino1, Alexander Zhigalov1, Satu Palva1,2, Mattias Palva1,2
1University of Genoa, Genoa, Italy, 2University of Helsinki, Helsinki, Finland,
3Claudio Munari Epilepsy Surgery Centre, Niguarda Hospital, Milan, Italy,
4University of Birmingham, Birmingham, United Kingdom,
5University of Glasgow, Glasgow, United Kingdom

T630 Association between physiological processes and time-varying resting-state functional connectivity
Alba Xifra-Porxas5, Michalis Kassianopoulos6, Georgios Mitis7
1McGill University, Montreal, Quebec, Canada

T631 Effects of Infantile Hydrocephalus on Functional Connectivity of Resting State Networks
Ikhlas Hashi1, Estelle Ansermet1, Roy Eagleson2, Sandrine de Ribaupeyre3,4
1Department of Neuroscience, University of Western Ontario, London, Ontario, Canada,
2Clinical Neurological Sciences, University of Western Ontario, London, Ontario, Canada,
3Brain and Mind Institute, University of Western Ontario, London, Ontario, Canada,
4Department of Neuroscience,University of Western Ontario, London, Ontario, Canada,
5Clinical Neurological Sciences, University of Western Ontario, London, Ontario, Canada,
6Brain and Mind Institute, University of Western Ontario, London, Ontario, Canada

T632 Test-Retest Reliability Comparison of Spontaneous Brain Activities between OEF and BOLD Contrasts
Yang Yang1, Yayan Yin2, Jie Lu1, Qihong Zou3, Jia-Hong Gao2
1Center for MRI Research, Peking University, Beijing, China, 2Department of Radiology, Xuanwu Hospital, Capital Medical University, Beijing, China

T633 Positive & negative individual traits are explained by spatio-spectrally distinct MEG brain networks
Robert Becker1, Alexis Hervais-Adelman1
1Department of Psychology, Neurolinguistics, Zurich, Switzerland

T634 Eyes open or eyes closed at rest? How eye state affects functional connectivity
Elsenda Buechek1, Jesus Adrián-Ventura2, Victor Costumera3, Cesar Avila1
1Universitat Jaume I, Castelló de la Plana, Spain, 2Universitat Pompeu Fabra, Barcelona, Spain

T635 Selective-stopping strategies are associated with different resting-state signatures
Yuranny Cabral-Calderon1, Anya Dietrich2, Michael Wibral3, Oliver Tüscher2
1German Resilience Center, University Medical Center Mainz; MEG Unit, Brain Imaging Center Frankfurt, Frankfurt am Main, Germany, 2MEG Unit, Brain Imaging Center, Frankfurt am Main, Germany,
3Department of Psychiatry and Psychotherapy, Johannes Gutenberg University Medical Center, Mainz, Germany

T636 Vigilance-dependent EEG correlates of the fMRI Default Mode Network
Sarah Goodale1, Catie Chang1
1Vanderbilt University, Nashville, TN, United States, 2Vanderbilt University, Nashville, TN, United States

T637 Estradiol shapes resting-state functional connectivity strength over a complete reproductive cycle
Laura Prutsch1, Tyler Santander1, Evan Layher1, Caitlin Taylor1, Shuying Yu1, Michael Miller2, Scott Grafton1, Emily Jacobs1
1Department of Psychological and Brain Sciences, University of California, Santa Barbara, Santa Barbara, California

T638 Age-Related Differences in Brain Functional Connectivity and Associations with Sleep-Activity Cycles
Megan McMahan1, Kimberly Ray2, Derek Pisher3, Laura Gandy2, David Schnyer1
1University of Texas, Austin, TX, United States

T639 Short and Long-term Hypothalamic Response to Sugars and Artificial Sweeteners
James Higgins1, Yiben Yang1, Theodore Angelopoulos2, Stephen Bravo2, James Rippe3, Ji-Ping Wang1, Todd Parrish1
1Northwestern University, Chicago, IL, United States, 2Rippe Lifestyle Institute, Kissimmee, FL, United States,
3Sand Lake Imaging Center, Orlando, FL, United States
TUESDAY, JUNE 11
Odd numbers: 12:45 – 13:45; Even numbers: 13:45 – 14:45; Poster Reception: 17:00 – 18:00

T640 Resting-state functional connectivity of premotor regions differently involved in grasping actions
Luciano Simone1, Luca Forni2, Luca Vigano1, Henrietta Howells1, Andrea Bellaccicca1, Guglielmo Puglisi1, Antonella Leonetti2, Lorenzo Bello4, Gabriella Cerri3
1University of Milan, Milan, Italy, 2University of Milan, Milan, Rozzano, Italy, 3Università degli Studi di Milano, Milan, Italy, 4University of Milan, Milan, Italy

T641 Longitudinal Functional and Behavioral Markers of Stable Individual Characteristics
Adam Eichenbaum1, Dan Lurie1, Jessica Cohen3, Mark D’Esposito1
1University of California, Berkeley, Berkeley, CA, United States, 2University of North Carolina at Chapel Hill, Chapel Hill, NC, United States

T642 Reorganization of the DMN in Information Processing: the role of Precuneus and Posterior Circulate
Pedro da Silva1, Carlo Rondinoni2, Renato Leoni1
1University of São Paulo, Ribeirão Preto, Brazil, 2InBrain Lab - University of Sao Paulo, Ribeirao Preto, Brazil, 3University of São Paulo, Ribeirao Preto, Brazil

T643 Functional resting-state abnormalities in schizophrenia and bipolar disorder patients
Anastasia Benedyk1, Maximilian Lueckel1, Roman Kessler1, Andreas Jansen3
1Department of Psychiatry and Psychotherapy, University of Marburg, Marburg, Germany, 2Laboratory for Multimodal Neuroimaging, University of Marburg, Marburg, Germany, 3Core-Unit Brainimaging, Faculty of Medicine, University of Marburg, Marburg, Germany

T644 Time of day is associated with reductions of BOLD signal amplitude and functional connectivity
Czaba Örba1, Ru Kang1, Jingwei Li1, Michael Chee2, B. T. Thomas Yeo3
1ECE, CIRC, SINAPSE & MNP, National University of Singapore, Singapore, Singapore, 2Centre for Cognitive Neuroscience, Duke-NUS Medical School, Singapore, Singapore, 3Athinoula A. Martinos Center for Biomedical Imaging, Massachusetts General Hospital, Charlestown, MA, United States, 4NUS Graduate School for Integrative Sciences and Engineering, National University of Singapore, Singapore, Singapore

T645 Beyond the test-retest reliability: the impact of the intra- and inter-individual variation
Annachiara Korchmaros1, Joe Wook Cho1, Anibal Heinsoff1, James Haxby2, Michael Milham1, Ting Xu1
1Child Mind Institute, New York, NY, United States, 2Dartmouth College, Hanover, NH, United States

T646 Test-retest reliability of functional connectivity gradients
Seok-Jun Hong1, Ting Xu1, Anthony Mekhanik1, Michael Milham1
1Center for the Developing Brain, Child Mind Institute, New York, NY, United States, 2Center for Biomedical Imaging and Neuromodulation, Nathan Kline Institute, New York, NY, United States

T647 Prediction of cognitive control ability using resting state cortico-subcortical connectivity
Xiao Yang1
1University of Connecticut, Storrs, CT, United States

T648 Dynamics of infraslow global activity in the resting state fMRI
Behzad Yousefi1, Shello Keilholz2
1Georgia Institute of Technology, Atlanta, GA, United States, 2Georgia Institute of Technology and Emory University, Atlanta, GA, United States

T649 Resting state community structure in cocaine dependence
Amardeep Kedia1, Nalin Abrol2, Eduardo Garza-Villarreal3, Vinoo Alluri1
1International Institute of Information Technology, Hyderabad, Telangana, 2Instituto Nacional de Psiquiatria, Mexico City, Mexico

T650 Analysis of the Whole Brain Functional Connectivity as a Neurobiological Basis for Behavioral Scales
Hae-Young Choi1,2, Hyunseok Bahng2, Joohan Kim3, Soowon Jo2, Yoonkyung Choi2,3, Hae-Jeong Park4,5
1Institute of Human Complexity and Systems Science, System Science Center for Brain and Cognition, Seoul, Korea, Republic of, 2Department of Nuclear Medicine and Radiology, and Severeer Biomedical Science Institute, Yonsei University College of Medicine, Seoul, Korea, Republic of, 3Brain Korea 21 PLUS Project for Medical Science, Yonsei University, Seoul, Korea, Republic of, 4Department of Communication, Yonsei University, Seoul, Korea, Republic of, 5Department of Cognitive Science, Yonsei University, Seoul, Korea, Republic of

T651 Dynamic functional network connectivity in healthy older and younger adults
Manesh Giri1, Amber Lockrow1, Roni Setton1, Laetitia Mwilambwe-Tshiloba2, Gary Turner5, Nathan Sprang2
1McGill University, Montreal, Quebec, Canada, 2York University, Toronto, Ontario, Canada

T652 Reinterpreting the P3a to distracting sounds: an index of their arousing properties
Rémy Masson1, Aurélie Bidet-Caulet1
1Lyon Neuroscience Research Center, Bron, France

T653 Population receptive field and attentional field modeling in somatosensory cortex using 7T fMRI
Alexander Puckett1, Saskia Bollmann2, Keerat Junday1, Markus Barth3, Ross Cunnington1
1Queensland Brain Institute, The University of Queensland, Brisbane, QLD, Australia, 2Centre for Advanced Imaging, The University of Queensland, Brisbane, QLD, Australia

T654 Increase of both bottom-up and top-down attentional processes in high dream recallers
Perrine Ruby1, Rémy Masson1, Benoît Chatard1, Laure Bottemanne1, Raphael Vallat1, Aurélie Bidet-Caulet1
1Lyon Neuroscience Research Center, Bron, France

T655 EEG complexity of children with ADHD measured by multiform entropies
Zirui Zhang1, Xiaoli Li2
1Beijing Normal University, Beijing, China, 2Beijing Normal University, Beijing

T656 Development of Top-Down and Bottom-Up attentional balance from childhood to adulthood
Roxane Hoyer1, Hesham ElShafei1, Julie Hemmerlin1, Romain Bouet1, Aurélie Bidet-Caulet1
1Lyon Neuroscience Research Center, Bron, France

T657 Spatiotemporal dynamics of exogenous attention: evidence from human intracerebral recordings
Tar Seidel Malkinson1, Dimitri Bayle2, Alexia Bourgeois2, Katia Lehongre2, Vincent Navarro2, Claude Adam1, Paolo Bartolomeo1
1ICM, Paris, France, 2Université Paris Ouest Nanterre La Défense, France, Nanterre, France, 3University of Geneva, Geneva, Switzerland, 4Centre de Neuro-Imagerie de Recherche (CENIR), ICM, Paris, France, 5ICM and AP-HP, GH Pitie-Salpetriere, Epilepsy Unit, F-75013, Paris, France, 6ICM and Sorbonne Université, UPC, Univ Paris 06, UMRS 1127, Paris, France
TUESDAY, JUNE 11
Odd numbers: 12:45 – 13:45; Even numbers: 13:45 – 14:45; Poster Reception: 17:00 – 18:00

T658 Striatal Dopamine in Attentional Inhibition: Too Much, Too Little, or Just Enough
Grace Whitaker1, Ellen Poliakoff1, Joanna Neill1, Wael El-Deredy1
1University of Valparaiso, Valparaiso, Chile, 2University of Manchester, Manchester, United Kingdom

T659 A combined EEG-fMRI experiment of detection without localisation in change blindness
Catriona Scriver1, Asad Malik1, Michael Lindear1, Etienn Erosch1
1University of Reading, Reading, United Kingdom

T660 Processing Targets and Distractors in Serial Visual Search. An fMRI - Eye Tracking Study
Anja Ischebeck1, Hannah Hiebel1, Joe Miller1, Margit Höller1, Ian Gilchrist1, Christof Körner1
1University of Graz, Graz, Austria, 2Danube University Krems, Krems, Austria, 3University of Bristol, Bristol, United Kingdom

T661 Attention to Action Categories Shifts Semantic Tuning Toward Targets Across the Brain
Mohammad Shahdooz1, Burcu Urgen1, Tolga Çukur1
1Electronic and Electrical Engineering Department, Bilkent University, Ankara, Turkey, 2Psychology Department, Bilkent University, Ankara, Turkey

T662 A new attention node in macaque and human temporal cortex connects to fronto-parietal areas of Psychology, Krakow, Poland, 3University of Chieti, Chieti, Italy, 4University of Padua, Padua, Italy
Laura Marzetti1,3

T663* Prism Adaptation Differentially Modulates Resting-State Functional Connectivity
Selene Schirru1, Michael Freedberg1, Stephen Gotts1, Sarah Shomstein1, Eric Wassermann1
1NINDS, Bethesda, MD, United States, 2George Washington University, Washington DC, United States, 3Henry M. Jackson Foundation for the Advancement of Military Medicine, Bethesda, MD, United States, 4NIH, Bethesda, MD, United States, 5George Washington University, Washington DC, United States

T664 Alpha and alpha-beta phase synchronization in the recruitment of the dorsal attention network
Ante D'Andrea1, Federico Chella1, Tom Marshall1, Vittorio Pizzella1,2, Gian Luca Romani1, Ole Jensen1, Laura Marzetti1,3
1Department of Neuroscience, Imaging and Clinical Sciences, “G. d’Annunzio” University of Chieti, Chieti, Italy, 2Institute of Advanced Biomedical Technologies (ITAB), Chieti, Italy, 3School of Psychology, University of Birmingham, Birmingham, United Kingdom

T665 The effect of single and dual sensory stimuli on positive and negative BOLD responses
Wil Nelson1, Ross Wilson1, Stephen Mayhew1
1University of Birmingham, Birmingham, United Kingdom, 2University of Birmingham, Birmingham, West Midlands

T666 Beta band communication flow within DAN controls attentional processes
Sara Spadone1, Miroslaw Wyczanski1, Stefania Delta Penna1, Maurizio Corbetta1, Paolo Capotosto1
1Department of Neuroscience, Imaging and Clinical Sciences, University G. d’Annunzio, Chieti, Italy, 2Institute of Psychology, Krakow, Poland, 3University of Chieti, Chieti, Italy, 4University of Padua, Padua, Italy

T667 Unexpected impact of upper hemisphere on visual attention indexes: a new good practice for 2Npc users
Anne Manrier1, Roberto DelAqua1, Mattia Dora1, Pierre Jolicoeur1
1Université de Montréal, Montréal, QC, Canada, 2University of Padova, Padova, Italy, 3University of Montréal, Montréal, QC, Canada

T668 Residual correlations reveal top-down selective attention mechanisms in healthy and depressed adults
Aniele Keller1,2, Tal Ba1, John Cosijn1, Akshay Jagadeesh1, Lior Bugatus1, Kalanit Grill-Spector1,3, Leanne Williams3
1Neurosciences Graduate Program, Stanford University, Stanford, CA, United States, 2Department of Psychiatry and Behavioral Sciences, Stanford University, Stanford, CA, United States, 3Bio-Engineering Graduate Program, Stanford University, Stanford, CA, United States, 4Department of Psychology, Stanford University, Stanford, CA, United States, 5Wu Tsai Neurosciences Institute, Stanford University, Stanford, CA, United States

T669 Spatially-Specific Attention Mechanisms Are Sensitive to Competition During Visual Search
Lu-Chun Yeh1, Yi-Yu Yeh2, Bo-Cheng Kuo1
1Department of Psychology, National Taiwan University, Taipei, Taiwan

T670 Timing of brain activity during shifts of visuospatial attention: A bioelectroencephalographic imaging study
Alberto Zani1, Alice Mada Proverbio2
1Institute for the History of Philosophical and Scientific Thought in modern Age of CNR (ISPF-CNR), Milan, Italy, 2University of Milano Bicocca, Milano, Italy

T671 Temporal Variability of Brain Networks Predicts Individual Differences in bistable perception
Yu Mao1, Jiang Qiu1
1Southwest University, Chongqing, China, 2Southwest University, Chongqing, China

T672 Right hemisphere dominance in unconscious visual attention in hemianopic patients
Javier Sanchez-Lopez1, Caterina Pedersini1, Nicola1, Cardo1, Giorgia Parisi1, Silvia Savazzi1, Carlo Marzi1
1University of Verona, Verona, Italy

T673 Dissecting “Spatial Neglect” with the EEG
Fabrizio Doricchi1, Mario Pinto1, Francesco Tamaulilo2
1University of La Sapienza - Fondazione Santa Lucia IRCCS, Rome, Italy, 2University of Santa Lucia IRCCS, Rome, Italy, 3AUXILIA VITA VOLTAERA (Pisa), Volterra, Italy, 4ULMSA, Rome, Italy

T674 Beyond dorsal and ventral: engagement of large-scale networks in update of object-based attention
Katarzyna Jurwicz1, Katarzyna Paluch1, Tomasz Wolak1, Andrzej Wróbel1
1Nencki Institute of Experimental Biology, Polish Academy of Sciences, Warsaw, Poland, 2Institute of Physiology and Pathology of Hearing, Warsaw, Poland, Toruń, Poland

T675 Concurrent TMS-fMRI and MVPA reveals a causal role of right dIPFC in driving selective attention
Jade Jackson1, Eva Feredoes2, Anina Rich3, Michael Linder2, Alexandra Woolgar1,5
1Kings College London, London, United Kingdom, 2University of Reading, Reading, United Kingdom, 3Macquarie University, Sydney, Australia, 4University of Cambridge, Cambridge, United Kingdom, 5Macquarie University, Sydney, Australia

T676 Different rhythm modulations serve different mechanisms during reorienting of visuospatial attention
Sara Spadone1, Viviana Betti1, Carla Sestieri1, Vittorio Pizzella1, Maurizio Corbetta1, Stefania Delta Penna1
1G. d’Annunzio’ University, Chieti, Italy, 2Sapienza University of Rome, Rome, Italy, 3G. d’Annunzio’ University, Chieti, Italy, 4University of Padua, Padua, Italy

T677 An Electrophysiological Study Contrasting Selective Attention vs. Perceptual Expectation
José Petotvelle1, David Lopez-Garcia1, Maria Concepcion Castellanos1, Maria Ruiz1
1University of Granada, Granada, Spain
T678 Use of Attention Networks to Overcome Visual Cortex Deficits in Schizophrenia
Gaurav Patel1, Sophie Arkin2, Daniel Ruiz-Betancourt1, Emery Jamerson2, Juan Sanchez-Peñal1, Daniel Javitt2
1Columbia/NYSPH, New York, NY, United States, 2UCLA, Los Angeles, CA, United States, 3Columbia University, New York, New York, United States, 4Columbia/NYSPH/NKI, New York, NY, United States

T679 Aging affects the association between visual short-term memory capacity and thalamocortical tracts
Aurore Menegoux1, Felix Bäuerlein1, Aliki Vania1, Natan Napriokowski2, Julia Neitzel1, Adriana Ruiz-Raz1, Hermann Müller1, Christian Sorg1, Kathrin Finke3
1Technical University of Munich, Munich, Germany, 2Max Planck Institute of Biochemistry, Munich, Germany, 3Ludwig-Maximilians-Universität München, Munich, Germany, 4German Center for Neurodegenerative Diseases (DZNE), Munich, Germany, 5Universitätssklinikum Jena, Jena, Germany

T680 Extracting connectomes from EEG signals during a visual attention task
Anne Manier1, Jean-Marc Lino1, Pierre Julienne1, 2Université de Montréal, Montréal, QC, Canada, 3École de Technologie Supérieure, Montréal, QC, Canada, 4Université de Montréal, Montréal, QC, Canada

T681 Speed-accuracy trade-off and its relation to top-down attention
Katarzyna Pulačich1, Katarzyna Jurwicz1, Andrzej Wrobel1, 1Nencki Institute of Experimental Biology, Polish Academy of Sciences, Warsaw, Poland

T682 When style matters: low dimensionality in visual exploration dynamics
Andrea Zangrossi1,2, Giorgia Cona1, Miriam Celli1, Marco Zarzetti1, Maurizio Corbetta1,2, 1Department of Neurosciences, University of Padova, Padova, Italy, 2Padova Neuroscience Center (PNC), University of Padova, Padova, Italy, 3University of Padua, Padua, Italy, 4Department of General Psychology, University of Padova, Padova, Italy, 5Department of Neurosciences, University of Padua, Padua, Italy

T683 Phasic alerting effects are associated with iFC in the cingulo-opercular network
Marleen Haupt1, Adriana Ruiz-Raz1, Christian Sorg1, Kathrin Finke3, 1Ludwig-Maximilians-Universität München, Munich, Germany, 2Technical University of Munich, Munich, Germany, 3Ludwig-Maximilians-Universität München, Munich, Germany

T684 Multimodal signatures of selective attention dynamics across the adult lifespan
Julian Kosciołek1, Douglas O’Gournett2, 1Max Planck UCL Centre for Computational Psychiatry & Aging Research, Berlin, Germany, 2Max Planck Institute for Human Development, Berlin, Germany

T685 Effect of 40 Hz tACS of parietal cortex on endogenous spatial attention
Ankita Sengupta1, Sourav Mukherjee1, Sandeep Pandey2, Soumyadeep Naskar3, Sridharan Devarajan1, 1Indian Institute of Science, Bangalore, India, 2Indian Institute of Science Education and Research, Pune, Pune, India

T686 Dynamic computation of feature-based attentional priorities: evidence from fMRI
Armien Lansness1, Ronald Peeters1, Hans Op de Beeck1, Celine Gillo1, 1KU Leuven, Leuven, Belgium, 2UZ Leuven, Leuven, Belgium

T687 On the Plasticity of Functional Connections Between Sensory Cortex and Attention Networks
Mandy Biles1, Leland Fleming1, Matthew Defenderfer1, Wesley Burke1, Kristina Visscher1, 1The University of Alabama at Birmingham, Birmingham, AL, United States

T688 Objects seen as scenes: neural circuitry for attending whole or parts
Marlis Ontivero-Ortega1, Mitchell Valdes-Sosa1, Jorge Iglesias-Fuster2, Agustin Lage-Castellanos1, Jinnan Jinnan Gong3, Cheng Luo4, Ana Maria Castro-Laguardia5, Maria Antonieta Bobs1, Daniele Marinazzo6, Dezhong Yao7, 1Cuban Center for Neuroscience, Havana, Cuba, 2University of Electronic Science and Technology of China, Chengdu, China, 3Department of Data Analysis, Faculty of Psychological and Educational Sciences, University of Ghent, Ghent, Belgium

T689 Retinotopic mapping of attention field in the human brain
Martine Desjardins1, Jean-Marc Lino1, Jean-François Gagnon1, Louis De Baumont1, Pierre Julienne1, 1Université du Québec à Montréal, Montréal, QC, Canada, 2École de Technologie Supérieure, Montréal, QC, Canada, 3Centre for Advanced Research in Sleep Medicine, Hôpital du Sacré-Cœur de Montréal, Montréal, QC, Canada, 4Hôpital du Sacré-Cœur de Montréal / University of Montréal, Montréal, QC, Canada, 5Université de Montréal, Montréal, QC, Canada

T690 Neural Responses in Primary Visual Cortex Following Deafferentation of Retinal Input
Pinar Demiryak1, Matthew Defenderfer1, Mandy Biles2, Leland Fleming2, Paul Stewart2, Dawn DeCarlo2, Kristina Visscher2, 1University of Alabama At Birmingham, Birmingham, AL, United States, 2The University of Alabama at Birmingham, Birmingham, AL, United States, 3University of Alabama at Birmingham, Birmingham, AL, United States, 4University of Alabama at Birmingham, Birmingham, AL, United States

T691 Heterogeneous Catecholaminergic Modulation of Asynchronous LFP Activity in Attention
Vicente Medel1, Samy Castro2, Martin Iran1, Joaquín Valdés1, Brice Follet1, Jean-Philippe Lachaux2, Nicolas Crossley1, Tomas Osandon1, Pontificia Universidad Católica de Chile, Santiago, Chile, 2Universidad de Valparaíso, Valparaíso, Chile, 3Inserm U1018, Lyon, France

T692 Convergent Functional Network Connectivity Changes in Attention Capture and Awareness
Rene Marois1, Hongyang Sun2, Jocelyn Sy1, Hana Eaton2, Doug Godwin2, Padma Raghavan2, 1Vanderbilt University, Nashville, TN, United States

T693 Neural Representation of Visual Features during Optimal and Sub-optimal Attentional States
Kyeongjin Tark1, Won Mok Shim1, 1Center for Neuroscience Imaging Research, Institute for Basic Science, Sunwon, Gyeonggido, Korea, Republic of, 2Biomedical Engineering, Sungkyunkwan University, Suwon, Korea, Republic of

T694 Causal contribution of the right posterior parietal cortex to components of visuospatial attention
Sanjina Banerjee1, Shrey Grover2, Suhas Ganesh3, Ayeshia verman3, Devarajan Srisharan2, 1Indian Institute of Science, Bangalore, Karnataka, India, 2Indian Institute of Science, Bangalore, India

T695 Valenced Smells Cause Transient Emotional States in Resting State
Heather Carlsson1, David Sander2, Sylvain Delplanque3, Christelle Porcherot2, Isabelle Cayeux3, Patrik Vuilleumier1, 1University of Geneva, Geneva, Switzerland, 2Firmenich, S.A., Geneva, Switzerland

T696 An MRI-compatible Headspace Odorant Emitter
Lior Gorodisky1, Tali Weiss1, Ethan Livne1, Noam Sobel1, 1Weizmann Institute of Science, Rehovot, Israel
Odd numbers: 12:45 – 13:45; Even numbers: 13:45 – 14:45; Poster Reception: 17:00 – 18:00

T697 Human Olfaction Without an Olfactory Bulb
Toli Weiss1, Timor Soroka1, Lior Gorodisky1, Thijs Dhillon2, Noam Sobel3
1Weizmann Institute of Science, Rehovot, Israel, 2The Florey Institute of Neuroscience and Mental Health, Melbourne, Australia

T698 Human Non-Olfactory Cognition is Phase-Locked with Inhalation
Ofer Perl1, Aharon Raviv1, Mica Rubinson2, Ami Eisen2, Timor Soroka1, Noaf Mar1, Lavi Secundo1, Noam Sobel3
1Department of Neurobiology, Weizmann Institute of Science, Rehovot, Israel, 2Department of Physics of Complex Systems, Weizmann Institute of Science, Rehovot, Israel

T699 The Resting State Functional Connectivity of the Human Ciaulustrum
Lluviña Rodríguez1, Sarael Alcauter1, Fernando Barrios3
1Universidad Nacional Autónoma de México, Queretaro, Queretaro

T700 Anosognosia for Hemiplegia: a tripartite disconnection syndrome
Valentina Pacella1, Chris Foulon1, Paul Jenkinson2, Sara Bertagnoli3, Renato Avesani4, Valentina Moro5, Alkatereni Fotopoulos5, Michel Thiebaut de Schotten6
1University of Verona, Padova, Italy, 2BCBLAB, Paris, France, 3University of Hertfordshire, Hatfield, United Kingdom, 4University of Verona, Verona, Italy, 5University College London, London, United Kingdom

T701 Effective connectivity in the action representation system during aware and unaware tool processing
Marta Ghi1, Francesca Conca1, Christian Bellebaum1, Daniela Perani2, Marco Tettamanzi2
1Institute of Experimental Psychology, Heinrich Heine University, Düsseldorf, Germany, 2Institute for Advanced Studies IUSS, Pavia, Italy, 3University Vita-Salute San Raffaele, Milano, Italy, 4Centro Interdepartimentale Mente/Cervello, Università degli Studi di Trento, Rovereto, Italy

T702 Lack of relationship between subjective experience and the complexity of the EEG signal
Paweł Orłowski1, Martyna Plomecka2, Marcin Kocik1, Inga Griskova-Bulanova3, Michał Bola1
1Laboratory of Brain Imaging, Neurobiology Center, Nencki Institute of Experimental Biology, Warsaw, Poland, 2Consciousness Lab, Institute of Psychology, Jagiellonian University, Krakow, Poland, 3Institute of Biosciences, Life Sciences Centre, Vilnius University, Vilnius, Lithuania

T703 The symmetric brain networks of agency and prior beliefs. Evidence from fMRI in healthy humans
Giuseppe Zito1,2, Salome Heim3, Kallia Apazoglou4, Roland Wiest1,2, Seima Aybek5
1Support Centre for Advanced Neuroimaging (SCAN), Inselspital, Bern, Switzerland, 2University Institute of Diagnostic and Interventional Neuroradiology, Inselspital, Bern, Switzerland, 3Department of Neurology, Inselspital, Bern, Switzerland, 4Department of Neurosciences, Faculty of Medicine, University of Geneva, Geneva, Switzerland

T704 How brain-network topology shapes neural responses according to Mindfulness disposition?
Jean-Baptiste Billoud1, Ioa Boyer1, Denis Duceux1, Marion Trousseland2
1French Armed Medical Research Institute, Villejuif, France, 2IRBA, Brétigny sur orge cedex, France, 3APHP Kremlin-Bicêtre, Kremlin-Bicêtre, France

T705 Robust EEG-based Cross-Site and Cross-Protocol Prediction of Diagnosis in Disorders of Consciousness
Denis Engemann1, Federico Raimondo2, Jean-Remi King3, Benjamin Rohaut4, Gilles Louppe5, Frédéric Faugeras1, Jitka Annen1, Helena Cassol2, Oliva Gossieres1, Diego Fernandez-Slezak2, Steven Laureys3, Lionel Naccache4, Stanislas Dehaene1, Jacobo SIT5
1INRIA, Paris, France, 2University of Buenos Aires, Buenos Aires, Argentina, 3Facebook AI Research, Paris, France, 4ICM Institute - INSERM, Paris, France, 5University of Liége, Liége, Belgium, 6Brain and Spine Institute (ICM), Paris, Paris, France, 7Coima Science Group, GIQA Consciousness, University and University Hospital of Liége, Liége, Belgium, Liége, Belgium, 8Laboratorio de Inteligencia Artificial Aplicada, Departamento de Computación FCENy, UBA, Buenos Aires, Argentina, 9University of Liége, Liége, Belgium, 10Neurospin, Paris, France, 11INSERM, Paris

T706 Human consciousness is supported by dynamic complex brain signal coordination
Athena Demertzis1, Enzo Tagliazucchi2, Stanislas Dehaene3, Gustavo Deco1, Pablo Bartfalk3, Federico Raimondo4, Charlotte Martoi1, Davinia Fernández-Espejo, Benjamin Rohaut, Henning Voss, Nicholas Schiff, Adrian Owen5,6, Steven Laureys3, Lionel Naccache4, Jacobo SIT5
1University of Liége, Liége, Belgium, 2Physics department - UBA, Buenos Aires, Argentina, 3Cognitive Neuroimaging Unit, CEA, INSERM, Saclay, France, 4Universitat Pompeu Fabra, Barcelona, Spain, 5Instituto de Investigaciones Psicológicas (IIPPS) CONICET, Cordoba, Argentina, 6ICM Institute - INSERM, Paris, France, 7Centre for Human Brain Health, University of Birmingham, Birmingham, United Kingdom, 8Radiology department, Citigroup Biomedical Imaging Center, Weill Cornell Medical College, NY, United States, 9Weill Cornell Medicine, New York, NY, United States, 10The Brain and Mind Institute, Western Interdisciplinary Research Building, London, Ontario, Canada

T707 Body Awareness Results in Characteristic Dynamic Functional Connectivity States
Ana Martinez1, Athena Demertzis2, Clemens Bauer3, Zeus Gracia-Tabuenca4, Sarael Alcauter1, Fernando Barrios1, Noam Sobel5
1Universidad Nacional Autónoma de México, Queretaro, Queretaro, 2University of Liège, Liège, Belgium, 3Massachusetts Institute of Technology, Cambridge, MA, United States

T708 EEG signal diversity reflects capability for behavioral responsiveness during propofol sedation
Michael Bola1, Pawel Orłowski1, Martyna Plomecka2, Artur Marchewka3
1Nencki Institute of Experimental Biology, Warsaw, Poland

T709 Brain mechanisms underlying conscious and unconscious decoding of conditioned expectation for pain
Yiheng Tu1,2, Joel Park1, Sepho Athfors3, Sheraz Khan1, Natalia Egorova1, Jin Cao1, Jian Kong1,2
1Department of Psychiatry, Massachusetts General Hospital and Harvard Medical School, Charlestown, MA, United States, 2Martinos Center for Biomedical Imaging, Massachusetts General Hospital and Harvard Medical School, Charlestown, MA, United States, 3The University of Melbourne, Melbourne, Australia

T710 ERPs and pupilometry reveal brain responses to acoustic contrasts with and without conscious report
Sergio Osorio1,2, Rodrigo Henriquez1,2, Rosario Gajoardo1,2, Brice Follet1,2, Francisco Abowitz1,2
1Laboratory for Cognitive Neuroscience, Pontificia Universidad Católica de Chile, Santiago, Chile, 2Interdisciplinary Center for Neuroscience, Pontificia Universidad Católica de Chile, Santiago, Chile, 3Neurodynamics of Cognition Laboratory, Pontificia Universidad Católica de Chile, Santiago, Chile

T711 TMS-induced Numbsense: Unconscious Touch Perception Without Primary Somatosensory Cortex
Liu Koenig1, Tony R2
1The Graduate Center, The City University of New York, New York, NY, United States

To view full abstract text and ePosters, visit www.aievolution.com/hbm1901
T712 Common spatiotemporal brain dynamics distinguish conscious from various unconscious states
Zirui Huang1, Jun Zhang1, Anthony Hudetz1
1Department of Anesthesiology and Center for Consciousness Science, University of Michigan, Ann Arbor, MI, United States, 2Department of Anesthesiology, Huashan Hospital, Fudan University, Shanghai, China

T713 Functional parcellation of the meditative brain based on the amplitude of low-frequency fluctuation
Tomoki Furue1, Satoru Hiwa1, Tomoyuki Hiroyasu1
1Doshisha University, Kyotanabe-shi, Kyoto, Japan

T714 Intra- and inter-individual variation in the resting- and meditative-state functional connectivity
Yuki Otsuka1, Satoru Hiwa1, Tomoyuki Hiroyasu1
1Doshisha University, Kyotanabe-shi, Kyoto, Japan

T715 An fMRI study on the attentional state induced by breath-counting meditation
Shoko Yamamoto1, Satoru Hiwa1, Tomoyuki Hiroyasu1
1Department of Biomedical Sciences and informatics, Doshisha University, Kyoto, Japan

T716 Fluctuations in fMRI and MEG Informational Measures Relate to Wakeful Arousal and Behaviour
Daniel Boz1, Aleksik Ikkola2, Darren Price3, Sridhararaj Jagannathan1, Thomas Varley1, Emmanuel Stamatakis1, Tristan Bekinschtein1
1University Of Cambridge, Cambridge, United Kingdom, 2Indiana University, Bloomington, IN, United States

T717 Correlates of confidence in the early phase of the BOLD response to backwardly masked visual stimuli
Cilia Jäger1, Sarah Glim1, Cristiana Dimulescu1, Anja Ries1, Christian Sorg1, Afra Wohlshläger1
1Technical University Munich, Munich, Germany, 2Technical University of Munich, Munich, Germany

T718 Is P3b a correlate of consciousness? Event-related potentials to subliminal self-related stimuli
Lucia Doradzilska1, Michal Wojcik1, Marta Poż1, Maria Nowicka1, Anna Nowicka1, Michał Bola1
1Nencki Institute of Experimental Biology, Warsaw, Poland, 2Department of Experimental Psychology, University of Oxford, Oxford, United Kingdom

T719 Decoding across sensory modalities reveals common supramodal signatures of conscious perception
Gaetan Sanchez1, Thomas Hartmann1, Marco Fusco2, Nathan Weiss2
1Lyon Neuroscience Research Center, Lyon, France, 2Salzburg University, Salzburg, Austria

T720 “Dynamics” of Anticorrelations from Vegetative/Unresponsive to Minimally Conscious State
Sara Palermo1, Mario Stirniano1, Mario Cirillo1, Maria Antonietta Scaturo1, Anna Estraneo1, Luigi Trajano1, Francesco Sardanelli2, Michele Papp3
1Department of Psychology - University of Turin, Turin, Italy, 2Postgraduate School in Radiodiagnostics - University of Milan, Milan, Italy, 3MRI Research Center SUN-FISM - University of Campania, Naples, Italy, 4Department of Anesthesiology, Surgery and Emergency - University of Campania, Naples, Italy, 5IRCCS Salvatore Maugeri Foundation - Scientific Institute of Teosei Terme, Teosei Terme, Italy, 6Department of Psychology - University of Campania, Caserta, Italy, 7Department of Biomedical Sciences for Health - University of Milan, Milan, Italy, 8Laboratory of Neuronal Networks - University of Campania, Naples, Italy

T721 Time-delay properties of brain dynamics are linked with the level of consciousness
Jorge Rudos1, Darwin Martinez2, Gabriel Castellanos3, Athena Demertzis4, Andrea Soddu5, Steven Laureys6, Francisco Gómez7
1Universidad Nacional de Colombia, Bogota, Colombia, 2Universidad Central, Bogotá, Colombia, 3Universidad Javeriana, Bogotá, Colombia, 4University of Liege, Liege, Belgium, 5Western University, London, Ontario, Canada, 6University of Liege, Liege, Belgium, 7Universidad Nacional de Colombia, Bogotá, Colombia

T722 Combining TMS, virtual reality and psychophysics to investigate bodily self-consciousness
Matteo Franco1, Leopoldo De Luca2,3,4,5, Giuliana Sorrentino1,2,3,4,5, Nathan Fauve1,2,3,4,5, Michel Bassolino1,2,3,4,5, Olof Blanke1,2,6,7
1École Polytechnique Federale de Lausanne, Lausanne, Switzerland, 2Center for Neuroprosthetics, Geneva, Switzerland, 3Campus SUVA, Sion, Switzerland, 4Brain Mind Institute, Lausanne, Switzerland, 5Laboratory of Cognitive Neuroscience, Geneva, Switzerland, 6Campus SUVA, Geneva, Switzerland, 7Centre d’Économie de La Sorbonne, Paris, France, 8Department of Neurology, Geneva, Switzerland

T723 Inter-individual Variability of Functional Connectivity in Awake and Anesthetized Rhesus Monkeys
Ting Xu1, Derrick Sturgeon2, Julian Ramirez2, Seán Froudast-Walsh3, Daniel Margulies1, Charles Schroeder4, Damien Fair5, Michael mihm6
1On Child Mind Institute, New York, NY, United States, 2Oregon Health and Science University, Portland, OR, United States, 3New York University, New York, NY, United States, 4Institut du Cerveau et delà Moelle Épinière, Pairs, France, 5Norwegian Institute, New York, NY, United States

T724 Modulation of continuous flash suppression (CFS) depth by spatial attention
Juliane Handschack1, Philipp Sterzer2, Guido Hesselmann3
1Charité-Universitätsmedizin Berlin, Berlin, Germany, 2Charité-Universitätsmedizin Berlin, Berlin, Germany, 3Psychologische Hochschule Berlin (PHB), Berlin, Germany

T725 Competitive frontoparietal interactions mediate implicit inferences
Martijn Wokke1, Tony Ro2
1City University of New York, New York, NY, United States, 2University of Cambridge, Cambridge, United Kingdom, 3The Graduate Center, The City University of New York, New York, NY, United States

T726 Differential Frontal Alpha Oscillations Could Reflect Distinct Mechanisms of Loss of Consciousness
Martin Irani1, Andrea Sanchez2, Santiago Arce2, Victor Contreras2, Jose Egaña3, Ignacio Cortinez4, Pablo Sepulveda1, Ranganatha Sitaram4
1Laboratory for Brain Machine Interfaces, Pontificia Universidad Catolica de Chile, Santiago, Chile, 2Department of Anesthesiology, School of Medicine, Pontificia Universidad Catolica, Santiago, Chile, 3Department of Anesthesiology and Reanimation, Faculty of Medicine, Universidad de Chile, Santiago, Chile, 4Department of Anesthesiology, Clínica Alemana, Santiago, Chile

T727 Confirming dissociation during hypnosis without tasks execution
Pablo Vázquez1, Clemens Bauer2, Susan Whitfield-Gabriell2, Fernando Barrios3
1Neurobiology Institute, National Autonomous University of Mexico (UNAM), Querétaro, Mexico, 2Massachusetts Institute of Technology, Cambridge, MA, United States

T728 Neural correlates of the DMT experience
Christopher Timmermann1, Leor Roseman1, David Erritzoe2, Lisa Luan3, Enzo Tagliazucchi4, Sharad Haridas5, Jonathan Martell6, Robert Lecchi1, David Nutt7, Robin Carhart-Harris8
1Imperial College London, London, London, 2University of Buenos Aires, Buenos Aires, Argentina, 3Imperial College London, London, United Kingdom

To view full abstract text and ePosters, visit www.aievolution.com/hbm1901
T729 A hypnotherapist in mind time travel during self-hypnosis. A rs-fMRI case study
Pablo Vázquez1, Clemens Bauer2
1Instituto de Neurobiología, UNAM, Querétaro, Mexico, 2Massachusetts Institute of Technology, Cambridge, MA, United States

T732 Problem-Focused Coping in Thermal Discomfort Stress is Associated with Individual Differences
Kelsy Kawata1, Shohei Yamazaki1, Konan Hirota1, Yumi Hamamoto1, Hajime Oi2, Akita Kanno3, Ryuta Kawashima4, Motoaki Sugiyama1
1Tohoku University, Sendai, Japan, 2Nissan Motor Company, Tokyo, Japan

T733 Interoceptive accuracy and its relation to exteroceptive processing in the insular cortex
Carina Koeppe1, Paul Russer2, Hagen Kitzler3, Thomas Hummel2, Ilona Coy2
1Department of Psychosomatic Medicine and Psychotherapy, Technical University, Dresden, Germany, 2Clinic for Neuroradiology, Technical University, Dresden, Germany, 3Smell & Taste Clinic, Technical University, Dresden, Germany

T734 Internal brain dynamics assessment by heart rate variability
Tara Chand1, Zumrut Sen1, hamidreza Jamalabadi2, Meng Li3, Sarah Alizadeh2, Martin Walter2
1University of Tuebingen, Tuebingen, Germany, 2University of Tuebingen, Tuebingen, Germany, 3Clinical Affective Neuroimaging Laboratory, Tuebingen, Germany

T735 The effects of masking therapy in tinnitus patients: longitudinally altered brain activity
Han Lv1, Pengfei Zhao1, Zhenchang Wang2
1Beijing Friendship Hospital, Capital Medical University, Beijing, China

T736 Deviance detection is the dominant component of auditory contextual processing in the lateral STG
Yohei Ishishita1,2, Naoto Kuni1, Seijiro Shimada1, Kenji Ibayashi1, Mariko Tada2, Kenji Kinbara1, Kensuke Kawai1, Takamori Uera1, Kiyota Kasai2, Nobuhito Saito2
1Department of Neurosurgery, The University of Tokyo Hospital, Tokyo, Japan, 2Department of Neurosurgery, Jichi Medical University, Tochigi, Japan, 3Department of Neuropsychiatry, Graduate School of Medicine, The University of Tokyo, Tokyo, Japan, 4Department of Integrative Physiology, Graduate School of Medicine, University of Yamanashi, Yamanashi, Japan

T737 Human Area MST – a cortical visual motion, ocular motor, or vestibular module?
Theresa Raizer1,2,3, Rio Rühi1,2, Leoni Ophey1,2, Matthias Ert1, Virginia Flanagan1, Peter zu Eulenburg1
1Department of Neurology, Ludwig-Maximilians-University, Munich, Germany, 2German Center for Vertigo and Balance Disorders – IFB, Ludwig-Maximilians-University, Munich, Germany, 3Graduate School of Systemic Neurosciences, Ludwig-Maximilians-University, Munich, Germany

T738 A comparative fMRI study of voice-selective regions in primates
Régis Trapepe1, Clémentine Bodin2, Pascal Belin1
1Institut de Neurosciences de la Timone, Marseille, France

T739 Neural mechanisms of sensory mismatch in virtual reality environment
Jeong Hye Park1, Han Jae Jeon2, Jye-Eyoung Yu3, Sung Kwang Hong4
1Dept. of Otorhinolaryngology-Head and Neck Surgery, Hallym University Medical Center, Anyang-si, Korea, Repub of, 2Dept. of Convergence Software, Hallym University, Chuncheon-si, Korea, Repub of

T740 Changes of hemispheric specialization in schizophrenia patients with auditory verbal hallucinations
Pengfei Tang1, Ling-Li Zeng1, Limin Peng2, Yiming Fan3, Dewen Hu1
1National University of Defense Technology, Changsha, China

T741 EEG theta band phase clustering corresponds to vestibular discrimination of body accelerations
Matthias Ert1, Manuel Klaus1, Thomas Brandt2, Fred Mast3, Marionne Dieterich4
1University Bern, Bern, Switzerland, 2Ludwig-Maximilians-Universität München, Munich, Germany, 3Ludwig-Maximilians-University, Munich, Germany

T742 Cortical and subcortical contributions in the formation of auditory predictions
Athina Tzovara1, Tommaso Fedele1, Johannes Sartorieni1, Jack Lin2, Robert Knight3
1Helen Wills Neuroscience Institute, University of California, Berkeley, Berkeley, CA, United States, 2Higher School of Economics, Moscow, Russian Federation, 3Neurosurgery Department, University Hospital Zurich, Zurich, Switzerland, 4Comprehensive Epilepsy Program, University of California, Irvine, Irvine, United States, 5Helen Wills Neuroscience Institute & Department of Psychology, University of California, Berkeley, Berkeley, CA, United States

T743 Tracking the dynamic functional network interactions during goal-directed auditory tasks with fMRI
Gaoyan Zhang1
1College of Intelligence and Computing, Tianjin University, Tianjin, China

T744 Specific Functional Connectivity with OP3 related to Acoustic Trauma Tinnitus
Chantal Delon Martin1, Anne Kavounoudias1, Chloé Jaroszyński2, Assia Jaillard2, Agnes Job2
1Univ. Grenoble Alpes, Grenoble Institut des Neurosciences, GIN, INSELM, U1216, F-38000 Grenoble, Fran, La Tronche, France, 2Univ. Aix-Marseille, Marseille, France, 3INSERM, Grenoble, France, 4Univ. Grenoble Alpes, Grenoble, France, 5IRBE, Bretigny sur Orge, France

T745 The amount of sensory attenuation is correlated with the power of beta modulation in motor area
Omid Abbasi1, Joachim Gross2
1Univ. Bern, Bern, Switzerland, 2Ludwig-Maximilians- Universität München, Munich, Germany, 3Vertigo and Balance Disorders – IFB, Ludwig-Maximilians-University, Munich, Germany, 4Department of Neurosurgery, Ludwig-Maximilians-University, Munich, Germany

To view full abstract text and ePosters, visit www.aievolution.com/hbm1901
T746  The effect of prematurity on auditory cortical structure in the developing Human Connectome Project
Daniel Cromb1, Tanya Poppe1, Ralica Dimitrova1, Jonathan O’Muircheartaigh1, Lucilio Cordero-Grande1, Anthony Price1, Emer Hughes1, Antonios Makropoulos1, Andreas Schult1, Jo Hajnal1, Stephen Smith1, Daniel Rueckert2, A David Edwards1
1Centre for the Developing Brain, King’s College London, London, United Kingdom, 2Biomedical Image Analysis Group, Imperial College London, London, United Kingdom, 3FMRIB, Wellcome Centre for Integrative Neuroimaging, University of Oxford, Oxford, United Kingdom

T747  An fMRI Study on Patients with Tinnitus and Associated Sensorineural Hearing Loss
Helen Della-Justina1, Graziela Buffon2, Franciane Vargas2, Rafael Moraes2, Arnolfo Carvalho Neto2, Humberto Gamba1
1Federal University of Technology-Parana, Curitiba, Brazil, 2 Cajuru University Hospital, Curitiba, Brazil, 3Federal University of Parana, Curitiba, Brazil

T748  Transient oscillatory entrainment mechanisms in auditory cortex
Emily Coffey1, Isabelle Arseneau-Bruneau2, Xiaochen Zhang1, Sylvain Baillet1, Robert Zatorre3
1Concordia University, Montreal, Quebec, Canada, 2McGill University, Montreal, Quebec, Canada, 3Tsinghua University, Beijing, China, 4McGill University, Montreal, Quebec, Canada, 5Montreal Neurological Institute, Montreal, Quebec, Canada

T749  When temporal prediction eras: ERP responses to delayed action-feedback onset
Ana Pinheiro1, Francisco Gutierrez2, Michael Schwartz3, Sonja Kotz4
1Faculdade de Psicologia, Universidade de Lisboa, Lisbon, Portugal, 2Maastricht University, Maastricht, Netherlands

T750  Altered resting-state connectivity is associated with high-frequency sensorineural hearing loss
Tomasz Wolski1, Agnieszka Pluta1, Katarzyna Ciesla1, Henryk Skarżyński1
1Institute of Physiology and Pathology of Hearing, Warsaw, Poland, 2Faculty of Psychology, Warsaw University, Warsaw, Poland, 3Amir Amedi’s Lab, Hebrew University, Jerusalem, Israel, 4World Hearing Centre, Warsaw, Poland, 5World Hearing Centre, Warsaw, Israel

T751  Connectivity between auditory areas in musicians and non-musicians during fornament-discrimination
Michael Boos1, Stefan Elmer1, Lutz Jäncke1,2
1Division Neuropsychology, Department of Psychology, University of Zurich, Zurich, Switzerland, 2University Research Priority Program (URPP) “Dynamics of Healthy Aging”, University of Zurich, Zurich, Switzerland

T752  Speech-neural coherence reveals top-down reconstructive processes
Sankar Mukherjee1, Alice Tommassi1, Leonardo Badino1, Aldo Pastore1, Alessandra D’Ausilio1
1Istituto Italiano di Tecnologia, Ferrara, Italy

T753  Intracranial electrophysiology of human superior temporal sulcus
Kirill Nourski1, Mitchell Steinschneider2, Ariane Rhone1, Hiroto Kawasaki1, Matthew Howard1
1The University of Iowa, Iowa City, IA, United States, 2Albert Einstein College of Medicine, Bronx, NY, United States

T754  Ain’t no sound loud enough (ANSL) - addressing scanner noise in auditory fMRI experiments
Michael Ernst1, Omer Faruk Gulban1, Michael Notten2, Peer Herholz3
1Core-Facility Brainimaging, Philips University Marburg / University Clinic Marburg, Marburg, Germany, 2Maastricht University, Maastricht, Limburg, 3The Laboratory for Investigative Neurophysiology (The LINE), Department of Radiology, CHUV, Lausanne, Switzerland, 4Montréal Neurological Institute and Hospital, Marburg, Germany

T755  Neural representations of authentic and social laughter predict discrimination performance in MEG
Anne-Lise Saive1, Nicolas Déom1, Gabrielle Toupin1, Arthur Dehgan1, Sinead Chen1, Jens Kreitewolf1, Sophie Scott2, Karim Jerbi1
1Computational and Cognitive Neuroscience Lab, Psychology Department, University of Montreal, Montreal, Quebec, Canada, 2University College London, London, United Kingdom, 3University of Lübeck, Lübeck, Germany, 4University College of London, London, United Kingdom

T756  Spatial Processing in the Auditory Cortex: Optimized for Scene Analysis or Localization?
Martha Shell1, Lars Hausfeld1, Elia Formisano1
1Maastricht University, Maastricht, Netherlands, 2University of Maastricht, Maastricht, Netherlands

T757  An EEG Biomarker for Sound Localization Capacities in Cochlear Implant Users
Giulia Righetti1, Eusebia Schäfer1, Ana-Elena Vedovelli2, Anke Tropitzsch1, Hans-Otto Kernath1, Christoph Braun1, Yiwen Li Hegner1
1University of Tübingen, Tübingen, Germany

Perception: Multisensory and Crossmodal

T758  Direct Structural Connection between Auditory-temporal and Visual-occipital motion selective regions
Ange Gurtubay1, Ceren Battal1, Chiara Maffei2, Mohamed Rezk1, Stefania Mattioni1, Jorge Jovicich1, Olivier Collignon1
1Institute of Research in Psychology (IPSy) and in Neuroscience (IoNS), University of Louvain, Louvain-la-Neuve, Belgium, 2Athinaou A. Martins Center, Massachusetts General Hospital and Harvard Medical School, Charlestown, MA, United States, 3CIMEC (Center for Mind/Brain Sciences), University of Trento, Mattarello (TN), Italy

T759  Phase-locked and non-phase-locked corticomesial coupling evoked by salient sensory events
Giacomo Novembre1, Yifei Guo1, Rory Bufacchi1, Marina Klintar2, John Rothwell1, Giandomenico Fantoni2
1Italian Institute of Technology, Rome, Italy, 2University College London, London, United Kingdom

T760  Attention influences how the brain integrates audiovisual signals into spatial representations
Ambra Ferrari1, Uta Noppeney1
1Computational Neuroscience and Cognitive Robotics Centre, University of Birmingham, Birmingham, United Kingdom

T761  Stickiness perception in different sensory modalities: an fMRI study
Yosup So1, Junsuk Kim1
1Center for Neuroscience Imaging Research, Suwon-si, Gyeonggi-do, South Korea

T762  Identifying human brain regions for haptic-visual congruency processing during stiffness judgments
Juan Liu1, Akiko Callan1, Atsushi Wada1, Hiroshi Ando1
1Concordia University, Montreal, Quebec, Canada, 2McGill University, Montreal, Quebec, Canada, 3Montreal Neurological Institute and Hospital, Marburg, Germany

T763  Neural correlates of multisensory recalibration
Home Park1,2,3, Christoph Kayser1,2,3
1Department for Cognitive Neuroscience, Faculty of Biology, Bielefeld University, Bielefeld, Germany, 2Cognitive Interaction Technology – Center of Excellence, Bielefeld University, Bielefeld, Germany, 3Institute of Neuroscience and Psychology, University of Glasgow, Glasgow, United Kingdom
T764* How input modality and visual experience affect the neural encoding of categorical knowledge
Hofman Mattioni1,2, Mohamed Rezk1, Karen Cuculiza Mendoa2, Ceren Battal1,2, Roberto Bottini1, Markus van Ackere1, Nikolaas Oosterhof1, Olivier Collignon1,2
1Institute of Psychology (IPSY) & Institute of Neuroscience (IoNS)-University of Louvain (UCL), Louvain-la-Neuve, Belgium, 2Cimec, University of Trento, Trento, Italy

T765 Is there alpha and beta attenuation in sensorimotor cortex during perception of graspable objects?
Kerr Bailey1, Saber Sami1, Fraser Smith1
1University of East Anglia, Norwich, United Kingdom

T766 Neurophysiological biomarkers of odor-color synesthesia – an ICA of resting-state fMRI data
Helena Melero1, Emilio Sanz-Morales1, Maria Gil-Correa1, Susana Borromeo1, Norberto Maipica1
1Universidad Rey Juan Carlos, Madrid, Madrid

T767 Causal inference in the multisensory brain
Yinan Cao1, Christopher Summerfield1, Hame Park2, Bruno L. Giordano3, Christoph Kayser2
1University of Oxford, Oxford, United Kingdom, 2Universität Bielefeld, Bielefeld, Germany, 3Centre National de la Recherche Scientifique and Aix-Marseille University, Marseille, France

T768 Decoding auditory space in hMT+/V5 and the planum temporale of the sighted and the blind individuals
Ceren Battal1,2, Mohamed Rezk1,2, Stefania Mattioni1,2, Valeria Occelli1, Roberto Bottini1, Giorgia Bertonati1, Stefano Targheri1, Olivier Collignon1,2
1Institute of Psychology (IPSY) & Institute of Neuroscience (IoNS)-University of Louvain, Louvain-la-Neuve, Belgium, 2Cimec, University of Trento, Trento, Italy

T769 Combined Functional and Structural Mapping of Superior Temporal Sulcus
John Pyles1, Emily Grossman2, Austin Marcus1, Michael Tarr1
1Kings College London, London, United Kingdom

T770 Support vector machine learning predicts subgroups of urological chronic pelvic pain patients
Eric Ichescu1, Scott Peltier1, Jason Kutch2,3, Jennifer Labus3, Katherine Martuccio1,4, Daniel Clauw1,4, Richard Harris1
1University of Michigan, Ann Arbor, MI, United States, 2University of California, Irvine, Irvine, CA, 3University of Southern California (USC), Los Angeles, CA, United States, 4Oduke University, Durham, NC, United States

T771 Are insular gamma-band oscillations related to the activation of the spinothalamic system?
Giulia Liberati1, Maxime Algoet1, Emanuel van den Broek1, Susana Ferroo Santos2, José Geraldo Ribeiro Vaz2, Christian Raptopoulous3, André Mouroux3
1Université catholique de Louvain, Brussels, Belgium, 2Saint Luc University Hospital, Brussels, Belgium

T772 Investigating reliability of pain-related BOLD signal using the intra-class correlation coefficient
Jade Jackson1, Owen O'daly1, Elena Makovac1, Sonia Medina1, Alfonsdo de Lara Rubio1, Stephen McMahan1, Stephen Howard1
1Kings College London, London, United Kingdom

T773 Impact of Neuropathic Pain on Brain Connectivity in Patients with Spinal Cord Injury
Vincent Hyun1,2, Robin Lütolf1, Armin Curt1, Spyros Kollias1, Michèle Hubli1, Lars Michel1
1University of Zurich / Balgrist University Hospital, Zürich, Switzerland, 2ETH Zurich / Balgrist University Hospital, Zürich, Switzerland, 3Balgrist University Hospital, Zurich, Switzerland, 4University Hospital of Zurich, Zurich, Switzerland

T774 Dynamic longitudinal cortical remodeling after peripheral radiosurgery for trigeminal neuralgia
Peter Shih-Ping Hung1,2, Alborz Noorani1,2, Jia Y. Zhang2, Mojgan Hodaei1,2
1University of Toronto, Toronto, Ontario, Canada, 2Krembil Research Institute, Toronto, Ontario, Canada

T775 Pre-treatment cortical thickness predicts long-term outcome to radiosurgery for trigeminal neuralgia
Peter Shih-Ping Hung1,2, Jia Y. Zhang2, Alborz Noorani1,2, Mojgan Hodaei1,2
1University of Toronto, Toronto, Ontario, Canada, 2Krembil Research Institute, Toronto, Ontario, Canada

T776 Disruption of Functional Brain Hubs During Resting and Evoked Pain States in Fibromyalgia
Ishitaq Mawla1, Chelsea Kaplan2, Tony Larkin2, Eric Ichescu1, Vitaly Napadow3, Marco Loggia3, Richard Harris2
1University of Michigan, Ann Arbor, MI, United States, 2University of Michigan, Ann Arbor, United States, 3Martinos Center for Biomedical Imaging, Charles, MA, United States, 4MGH/HST Athinoula A. Martins Center for Biomedical Imaging, Charles, MA, United States, 5Department of Anesthesiology, Perioperative and Pain Medicine, Brigham and Women's Hospital, Boston, MA, United States

T777 Resting state functional connectivity can predict progression of chronic pelvic pain
Sonja Fenske1, Jason Kutch1
1University of Southern California (USC), Los Angeles, CA, United States

T778 High system segregation in resting fMRI predicts effects of top-down bias on pain perception
Christopher O’Grady1, Manyoel Lim4, Amita Goyal1, Mary Lynch1, Steven Beyea4, Javeria Hashmi2
1University of Michigan, Ann Arbor, MI, United States, 2University of Michigan, Ann Arbor, United States, 3Martinos Center for Biomedical Imaging, Charles, MA, United States, 4Dalhousie University, NS, Canada, 5Dalhousie University, NS, Canada, 6Dalhousie University, NS, Canada, 7Dalhousie University, NS, Canada

T779 Blue light activates pulvinar nuclei in congenital idiopathic photophobia: A case report
Athanasios Panaritis1, Danielle Lee2, Katie Silver2, David Borsook3, Eric Moulton2
1New England College of Optometry, Boston, MA, United States, 2Boston Children’s Hospital, Boston, MA, United States

T780 The Heartbeat-Evoked Potential as a Correlate of Cardiac Prediction Errors - a Model-Based EEG Study
Birta Toussaint1, Lilian Weber1, Katharina Wellstein1, Gina Poil2, Yu Yao1, Klaas Stephan2, Frederike Petzschner1
1Translational Neuromodeling Unit, University of Zurich & ETH Zurich, Zurich, Switzerland, 2Wellcome Department of Neuroimaging, University College London, London, London, United Kingdom

T781 Decoupling of resting-state networks following placebo analgesia is related to pain reduction
Isabella Wagner1, Markus Rutgen1, Allain Hummer2, Christian Windischberger2, Claus Lamml
1University of Vienna, Vienna, Austria, 2Medical University of Vienna, Vienna, Austria
The effect of painful laser stimuli on EEG gamma activity in migraine patients and healthy subjects

Hippocampal and trigeminal nerve volume predict outcome of surgery for trigeminal neuralgia

Neurochemical changes associated with the short-term treatment outcome in chronic migraine

Effects of 8-week mindfulness training on BOLD fMRI response during an interoceptive attention task

The effect of painful laser stimuli on EEG gamma activity in migraine patients and healthy subjects

EEG Imaging and Neuroradiology in Pain and Visceral Perception: Pain and Visceral Perception and Attention

Focus of attention modulates the heartbeat evoked potential

Validation of interoceptive attention task

EEG imaging and EIT in patients with cancer pain

Hippocampal and trigeminal nerve volume predict outcome of surgery for trigeminal neuralgia

Prevalence of cancer pain and its impact on quality of life in patients with cancer

Motor system corticospinal reorganization in complex regional pain syndrome type 1 – a case report

Community organization of brain networks and hub disruptions in chronic pain

How pain and avoiding pain drive learning: Two brain systems for pain-avoidance learning?

Brain mechanisms of pain and its modulation in cancer patients

Brain mechanisms of social touch-induced analgesia

Impact of Neuropathic Pain on Brain Structure in Patients with Spinal Cord Injury

Understanding neural mechanisms of temporal dynamics of integrating predictions into pain perception

TN pain relief leads to a bilateral volumetric increase in hippocampal subfields

Brain metabolites relate to pain symptoms and etiology of chronic pancreatitis

Correlation of cold pain thresholds with the GMV in healthy subjects: a VBM study

Motor system corticospinal reorganization in complex regional pain syndrome type 1 – a case report

Community organization of brain networks and hub disruptions in chronic pain

Brain mechanisms of social touch-induced analgesia

Impact of Neuropathic Pain on Brain Structure in Patients with Spinal Cord Injury

Understanding neural mechanisms of temporal dynamics of integrating predictions into pain perception

TN pain relief leads to a bilateral volumetric increase in hippocampal subfields

Brain metabolites relate to pain symptoms and etiology of chronic pancreatitis

Correlation of cold pain thresholds with the GMV in healthy subjects: a VBM study

Motor system corticospinal reorganization in complex regional pain syndrome type 1 – a case report

Community organization of brain networks and hub disruptions in chronic pain

Brain mechanisms of social touch-induced analgesia

Impact of Neuropathic Pain on Brain Structure in Patients with Spinal Cord Injury

Understanding neural mechanisms of temporal dynamics of integrating predictions into pain perception

TN pain relief leads to a bilateral volumetric increase in hippocampal subfields

Brain metabolites relate to pain symptoms and etiology of chronic pancreatitis

Correlation of cold pain thresholds with the GMV in healthy subjects: a VBM study

Motor system corticospinal reorganization in complex regional pain syndrome type 1 – a case report

Community organization of brain networks and hub disruptions in chronic pain

Brain mechanisms of social touch-induced analgesia

Impact of Neuropathic Pain on Brain Structure in Patients with Spinal Cord Injury

Understanding neural mechanisms of temporal dynamics of integrating predictions into pain perception

TN pain relief leads to a bilateral volumetric increase in hippocampal subfields

Brain metabolites relate to pain symptoms and etiology of chronic pancreatitis

Correlation of cold pain thresholds with the GMV in healthy subjects: a VBM study

Motor system corticospinal reorganization in complex regional pain syndrome type 1 – a case report

Community organization of brain networks and hub disruptions in chronic pain

Brain mechanisms of social touch-induced analgesia

Impact of Neuropathic Pain on Brain Structure in Patients with Spinal Cord Injury

Understanding neural mechanisms of temporal dynamics of integrating predictions into pain perception

TN pain relief leads to a bilateral volumetric increase in hippocampal subfields

Brain metabolites relate to pain symptoms and etiology of chronic pancreatitis

Correlation of cold pain thresholds with the GMV in healthy subjects: a VBM study

Motor system corticospinal reorganization in complex regional pain syndrome type 1 – a case report

Community organization of brain networks and hub disruptions in chronic pain

Brain mechanisms of social touch-induced analgesia

Impact of Neuropathic Pain on Brain Structure in Patients with Spinal Cord Injury

Understanding neural mechanisms of temporal dynamics of integrating predictions into pain perception

TN pain relief leads to a bilateral volumetric increase in hippocampal subfields

Brain metabolites relate to pain symptoms and etiology of chronic pancreatitis

Correlation of cold pain thresholds with the GMV in healthy subjects: a VBM study

Motor system corticospinal reorganization in complex regional pain syndrome type 1 – a case report

Community organization of brain networks and hub disruptions in chronic pain

Brain mechanisms of social touch-induced analgesia

Impact of Neuropathic Pain on Brain Structure in Patients with Spinal Cord Injury

Understanding neural mechanisms of temporal dynamics of integrating predictions into pain perception

TN pain relief leads to a bilateral volumetric increase in hippocampal subfields

Brain metabolites relate to pain symptoms and etiology of chronic pancreatitis

Correlation of cold pain thresholds with the GMV in healthy subjects: a VBM study

Motor system corticospinal reorganization in complex regional pain syndrome type 1 – a case report

Community organization of brain networks and hub disruptions in chronic pain

Brain mechanisms of social touch-induced analgesia

Impact of Neuropathic Pain on Brain Structure in Patients with Spinal Cord Injury

Understanding neural mechanisms of temporal dynamics of integrating predictions into pain perception

TN pain relief leads to a bilateral volumetric increase in hippocampal subfields

Brain metabolites relate to pain symptoms and etiology of chronic pancreatitis

Correlation of cold pain thresholds with the GMV in healthy subjects: a VBM study

Motor system corticospinal reorganization in complex regional pain syndrome type 1 – a case report

Community organization of brain networks and hub disruptions in chronic pain

Brain mechanisms of social touch-induced analgesia

Impact of Neuropathic Pain on Brain Structure in Patients with Spinal Cord Injury

Understanding neural mechanisms of temporal dynamics of integrating predictions into pain perception

TN pain relief leads to a bilateral volumetric increase in hippocampal subfields

Brain metabolites relate to pain symptoms and etiology of chronic pancreatitis

Correlation of cold pain thresholds with the GMV in healthy subjects: a VBM study

Motor system corticospinal reorganization in complex regional pain syndrome type 1 – a case report

Community organization of brain networks and hub disruptions in chronic pain

Brain mechanisms of social touch-induced analgesia

Impact of Neuropathic Pain on Brain Structure in Patients with Spinal Cord Injury

Understanding neural mechanisms of temporal dynamics of integrating predictions into pain perception

TN pain relief leads to a bilateral volumetric increase in hippocampal subfields

Brain metabolites relate to pain symptoms and etiology of chronic pancreatitis

Correlation of cold pain thresholds with the GMV in healthy subjects: a VBM study

Motor system corticospinal reorganization in complex regional pain syndrome type 1 – a case report

Community organization of brain networks and hub disruptions in chronic pain

Brain mechanisms of social touch-induced analgesia

Impact of Neuropathic Pain on Brain Structure in Patients with Spinal Cord Injury

Understanding neural mechanisms of temporal dynamics of integrating predictions into pain perception

TN pain relief leads to a bilateral volumetric increase in hippocampal subfields

Brain metabolites relate to pain symptoms and etiology of chronic pancreatitis

Correlation of cold pain thresholds with the GMV in healthy subjects: a VBM study

Motor system corticospinal reorganization in complex regional pain syndrome type 1 – a case report

Community organization of brain networks and hub disruptions in chronic pain

Brain mechanisms of social touch-induced analgesia

Impact of Neuropathic Pain on Brain Structure in Patients with Spinal Cord Injury

Understanding neural mechanisms of temporal dynamics of integrating predictions into pain perception

TN pain relief leads to a bilateral volumetric increase in hippocampal subfields

Brain metabolites relate to pain symptoms and etiology of chronic pancreatitis

Correlation of cold pain thresholds with the GMV in healthy subjects: a VBM study

Motor system corticospinal reorganization in complex regional pain syndrome type 1 – a case report

Community organization of brain networks and hub disruptions in chronic pain

Brain mechanisms of social touch-induced analgesia
T990 Integrity of structural pathways of the brain predicts effects of top-down bias on pain perception
Guillermo Aristi1, Manyoel Lim1, Amita Goyal2, Chris Bowern3, Steven Bevenga4, Mary Lynch5,
Javeria Hashmi1
1Dalhousie University, Halifax, NS, Canada, 2Dalhousie University, NSHA, Halifax, NS, Canada,
3NSHA, IWK, Halifax, NS, Canada, 4Dalhousie University, Halifax, NS, Canada, 5NSHA, Halifax, NS, Canada

T800 Words Hurt: Common and Distinct Neural Substrates Between Physical and Semantic Pain
Eleonora Borelli1, Fausta Luito2, Francesca Benuzzii, Cristina Cacciarini3, Carlo Porro1
1Dept. of Biomedical, Metabolic and Neural Sciences, Univ. of Modena and Reggio Emilia, Modena, Italy,
2Center for Neuroscience and Neurotechnology, Univ. of Modena and Reggio Emilia, Modena, Italy

T801 Gender/Sex specific pharmacotherapy to block transition to chronic back pain
Diane Reckziegel1, Kenta Wokozumi1, Bogdan Petre1, Lejlian Huang2, Pascal Tetreault1, Mariam Ghanai1, Ramji Babakhanli1, Taha Abdullah2, Alexis Bari2, James Griffin2, Marwan Baliki1, Thomas Schnitzler1, Apkar Apkarian1
1Northwestern University, Chicago, IL, United States

T802 Brain representation of nociception is less complex than stimulus independent pain representation
Bogdan Petre1, Lauren Atlas2, Stephan Geuter3, Leoni Koban1, Marina Lopez-Sola5, Anjali Krishnan6,
Mathieu Roy7, Choong-Won Woo8, Tor Wager1
1University of Colorado Boulder, Boulder, CO, United States, 2NIH, Bethesda, MD, United States,
3Johns Hopkins University, Baltimore, MD, United States, 4Inseed fontainebleau & ICM paris, Paris, France,
5Clinical Children’s Hospital, Cincinnati, OH, United States, 6Brooklyn College of the City University of
New York, Brooklyn, NY, United States, 7McGill University, Montreal, Quebec, Canada, 8Center for
Neuroscience Imaging Research, Institute for Basic Science, Suwon, Korea, Republic of

T803 Decreased brain responses to pressure-induced abdominal discomfort in functional dyspepsia
Jieun Kim1, Seulgi Eun1, Seok-Jae Ko1, Jae-Woo Park3, Kyungmo Park1, Jun-Hwan Lee1
1Clinical Medicine Division, Korea Institute of Oriental Medicine, Daejeon, Korea, Republic of,
2Department of Biomedical Engineering, Kyung Hee University, Yongin, Korea, Republic of,
3College of Korean Medicine, Kyung Hee University, Seoul, Korea, Republic of, "Kyung Hee University,
Yongin, Korea, Republic of

T804 Anti-inflammatory reduce interoceptive afferent entrainment of limbic reactivity in Crohn’s Disease
Marcus Gray1, Nick Talley2, Carolyn Mountford3, Gerald Holtmann4
1University of Queensland, Brisbane, Australia, 2University of Newcastle, Newcastle, NSW, Australia,
3QUT, Brisbane, QLD, Australia, 4University of Queensland, Brisbane, QLD, Australia

T805 Data Mining Reveals Discrete Neurobiological Systems That Contribute to Pain Processing
Julio Yanes1, Katherine Bottenhorn2, Taylor Sala3, Michael Riedel4, Angela Laird1, Jennifer Robinson1
1Auburn University, Auburn, AL, United States, 2Florida International University, Miami, FL, United States,
3Department of Physics, Florida International University, Miami, FL, United States

T806 Power-Law Dynamics in Cortical Excitability as Probed by Early Somatosensory Evoked Potentials
Timmon Stephens1, Gunnar Waterstraat2, Stefan Haufe3, Gabriel Curio4,5, Arn Viktorin1, Vadim Nikulin1
1Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, 2International
Max Planck Research School NeuroCom, Leipzig, Germany, 3Neurophysics Group, Department of
Neurology, Charité University Medicine Berlin, Berlin, Germany, 4Machine Learning Group, Technische
Universität Berlin, Berlin, Germany, 5Bernstein Center for Computational Neuroscience, Berlin, Germany,
6MindBrainBody Institute, Berlin School of Mind and Brain, Humboldt University Berlin, Berlin, Germany,
7Center for Cognition and Decision Making, National Research University Higher School of Economics, Moscow, Russian Federation

T807 Age-related differences in the neural correlates of social affective touch
Federica Riva1, Giorgia Silani1, Helena Hartmann1, Claus Lamm1
1University of Vienna, Vienna, Austria

T808 The hierarchical updating of Bayesian belief underpinning tactile learning
Bin Wong1,2, Burkhard Pleger1,2,3
1Department of Neurology, BG University Hospital Bergmannsheil, Ruhr-University Bochum, Bochum,
Germany, 2Collaborative Research Centre 874, Ruhr University Bochum, Bochum, Germany,
3Department of Neurology, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany

T809 Individual single digit fMRI maps in primary somatosensory cortex at 3T: a methods comparison
Till Steinbach1,2, Amanda Koas1, Jens Frahm1, Renate Schweizer1
1Max Planck Institute for Biophysical Chemistry, Gottingen, Germany, 2Leibniz ScienceCampus,
Goettingen, Germany, 3Dept. of Cognitive Neuroscience, Maastricht University, Maastricht, Netherlands

T810 Population Receptive Field Mapping of Whole-Body Tactile Perception and Imagery
Shir Hofstetter1,2, Zohar Tal3, Ran Geva4, Wiebschu Zuideboan5, Serge Dommolin1, Amir Amedi1
1Hebrew University of Jerusalem, Jerusalem, Israel, 2Spinoza Center for Neuroimaging, Amsterdam,
Netherlands, 3Shaar Menashe Hospital, Pardes Hana, Israel

T811 Structural change in primary somatosensory cortex following acupuncture for chronic low back pain
Hyunja Kim1, Ishtiaq Mawla1, Jeungsan Yoon1, Jang-Soo Lee2, Jessica Gerber1,6, Jieun Kim1, Suk Tak
Chan1, Ortiz Ana3, Wason Ajay4, Robert Edwards5, Rondi Golub3, Bruce Rosen1, Vitaly Napadow1,2
1Center for Social and Affective Neuroscience, Linköping University, Linköping, Sweden, 2Center
for Social and Affective Neuroscience, Linköping University, Linköping, 3Center for Social and Affective
Neuroscience, Department of Clinical and, Linköping, Sweden

T812 Distinction of self-produced touch and social touch in healthy participants and ADHD patients
Rebecca Boehm1, Andrea Johansson2, Johan Olsson1
1Center for Social and Affective Neuroscience, Linköping University, Linköping, Sweden, 2Center
for Social and Affective Neuroscience, Linköping University, Linköping, 3Center for Social and Affective
Neuroscience, Department of Clinical and, Linköping, Sweden
T813  Tactile and motor representations of hands with 6 fully developed fingers
Michel Akselrod1, Carsten Mehring1, Luke Bashford2, Mike Mace3, Hansol Choi3, Maximilian Blüher4, Anna Buschhoff4, Tobias Pistohl5, Roy Salomon5, Andre Chey6, Olaf Blank6, Etienne Burdet7, Andrea Serino7
1University Hospital of Lausanne (CHUV), Lausanne, Switzerland, 2Italian Institute of Technology (IIT), Genova, Italy, 3University of Freiburg, Freiburg, Germany, 4Imperial College of Science, London, United Kingdom, 5Bar Ilan University, Ramat Gan, Israel, 6Singapore University Hospital, Singapore, Singapore, 7Federal Institute of Technology of Lausanne (EPFL), Lausanne, Switzerland

T814  Probabilistic maps of the lower limb cortical representation in human brain: An fMRI study
Melissa Bassi1, Yira Ramirez-Garzon1, Sareal Alcacer2, Fernando Barrios2, Erick Posay3
1Universidad Nacional Autónoma de México, juriquilla queretaro, Select a State or Province, 2Universidad Nacional Autónoma de Mexico, Queretaro, Queretaro, México, 3University Nacional Autónoma de México, Juriquilla Queretaro, Mexico

T815  Sub-cortical activity encodes tactile hardness information during active object exploration
Jihyun Kim1, Junsuk Kim1, Jiwon Yoon1, Jang-Yeon Park1, Dongil Chung1, Sung-Phil Kim1
1UNIST, Ulsan, Korea, Republic of, 2Center for Neuroscience Imaging Research, Suwon-si, Gyeonggido, 3Georgia Institute of Technology, Atlanta, GA, United States, 4Center for Neuroscience Imaging Research, Institute for Basic Science, Suwon, Korea, Republic of

T816  Characterizing the population receptive fields of the hand dorsum and palm
Raffaele Tucciarelli1, Elisa Infantii1, Luigi Tamé1, Matthew Longo1
1Birkbeck University of London, Department of Psychological Sciences, United Kingdom, 2University College London, Experimental Psychology, United Kingdom

T817  Somatosensory maps of intraoral surfaces in humans
Davide Boni1, Patrick Haggard1, Fred Dick2
1University College London, London, United Kingdom, 2Birkbeck, University of London, London, United Kingdom

T818*  The “Creatures” of the Human Cortical Somatosensory System
Noa Saadon-Grosman1,2, Yonatan Loevenstein1, Shahar Arzy2
1The Hebrew University of Jerusalem, Jerusalem, Israel, 2The Hadassah Hebrew University Medical Center, Jerusalem, Israel

T822  OCT results corroborate population receptive field maps in patients with retinal disease
Allan Hummer1, Maximilian Pawloff2, Michael Woletz3, Markus Ritter3, Graham Holder3, Ursula Schmidt-Erfurth4, Christian Windischberger5
1Center for Medical Physics and Biomedical Engineering, Medical University of Vienna, Vienna, Austria, 2Department for Ophthalmology and Optometry, Medical University of Vienna, Vienna, Austria, 3Department of Ophthalmology, National University of Singapore, Singapore, Singapore, 4*Moofields Eye Hospital, London, United Kingdom

T823  Neural mechanism of refixation in free viewing: evidence from eye-movement related brain activity
Andrey Nikolaev1, Radha Nila Meghanathan1, Cees van Leeuwen1
1KU Leuven – University of Leuven, Leuven, Belgium

T824  Investigating face processing by combining temporal (EEG) and spatial (fMRI) decoding information
Ilkka Mylkkonen1, Kaisu Olander1, Jussi Numminen2, Viljami Salmela3
1University of Helsinki, Helsinki, Finland, 2Helsinki University Hospital, Helsinki, Finland, 3AMC Centre, Aalto Neuroimaging, Aalto University, Espoo, Finland

T825  Temporal contiguity training does not affect size tolerance for objects in lateral occipital cortex
Chayenne Van Meel1, Hans Op de Breeck1
1KU Leuven, Leuven, Belgium

T826  State anxiety influences P300 and P600 ERP over parietal cortex in the hollow mask illusion
Vasileios lokeimidou1, Nareg Khachatoorian1, Corinna Haenschel1, Thomas Papathomas2,3, Attila Farkas1, Marnos Kyrkakopoulos4,5, Danai Dimas6
1Department of Psychology, School of Arts and Social Sciences, City, University of London, London, United Kingdom, 2Laboratory of Vision Research/Center for Cognitive Science, Rutgers University, New Jersey, United States, 3Department of Biomedical Engineering, Rutgers University, New Jersey, United States, 4National and Specialist Acorn Lodge Inpatient Children Unit, South London & Maudsley NHS Trust, London, United Kingdom, 5Department of Child and Adolescent Psychiatry, Institute of Psychiatry, Psychology and Neuroscience, King’s College London, London, United Kingdom, 6Department of Neuroimaging, Institute of Psychiatry, Psychology and Neuroscience, King’s College London, London, United Kingdom

T827  Corticothalamic Prediction and Attention via Control Systems Analysis
Tara Babiole-Janvier1,2, Peter Robinson1,2
1School of Physics, University of Sydney, Sydney, Australia, 2ARC Centre of Excellence for Integrative Brain Function (CIBF), Sydney, Australia

T828  Tracking Aesthetic Engagement: Behavioral and Brain Responses to Artistic Landscape Videos
Ayse Ilkay Isik1, Edward Vessel1
1Max Planck Institute for Empirical Aesthetics, Frankfurt am Main, Germany

T829  Isolating Perceptual and Conceptual Objects Representations Across Time -- an MEG study
Polyimni Frangou1, Vasilis Karlaftis1, Uzay Emir2, Marta Correia3, Caroline Nettekoven4, Emily Hinson4, Ilkka Mylkkonen1, Kaisu Olander1, Jussi Numminen2, Viljami Salmela3
1University of Trento, Trento, Italy, 2Universität Tubingen, Tubingen, Germany, 3John Hopkins, Baltimore, United States, 4*Max Planck Institute for Human Development, Berlin, Germany

T830  Suppressive occipito-parietal interactions for visual perceptual learning
Polyimni Frangou1, Vasilis Karlaftis1, Uzay Emir2, Marta Correia3, Caroline Nettekoven4, Emily Hinson4, Stephanie Larcombe4, Holly Bridge4, Charlotte Stagg5, Zoe Kourtzi2
1University of Cambridge, Cambridge, United Kingdom, 2Purdue University, West Lafayette, IN, United States, 3MRC Cognition and Brain Sciences Unit, Cambridge, United Kingdom, 4Oxford University, Oxford, United Kingdom
T831 Gamma-Band Correlations in Primary Visual Cortex
Xiaochen Liu1, Paula Sanz-Leon2, Peter Robinson3
1University of Sydney, Sydney, New South Wales, 2QIMR Berghofer, Brisbane, Australia

T832 Neurovascular coupling varies depending on expectation levels in visual areas
Hanna Rooslien1, Szymańka Durant1, Jonas Larsson1
1Royal Holloway University of London, Egham, United Kingdom

T833 Perceptual filling-in of the blind spot is not based on activation of monocular region in V1
Yulia Reving1, Gerrit Maus1
1Nanyang Technological University, Singapore

T834 Digit processing in typically developing kindergartners: Evidence from task-evoked connectivity
Benjamin Conrad1, Gavin Price1
1Vanderbilt University, Nashville, TN, United States

T835 White Matter Plasticity of Visual Artists Revealed by Diffusion Spectrum Imaging
Tai-Yi Hong1,2, Hsin-Yen Yu3, Ching-Ju Yang4, Wei-Chi Li2, Wen-Yih Isaac Tseng4, Li-Fen Chen1,2, Jen-Chuen Hsieh1
1Institute of Brain Science, National Yang Ming University, Taipei, Taiwan, 2Integrated Brain Research Unit, Department of Medical Research, Taipei Veterans General Hospital, Taipei, Taiwan, 3Graduate Institute of Arts and Humanities Education, Taipei National University of the Arts, Taipei, Taiwan, 4Institute of Brain Science, National Yang-Ming University, Taipei, Taiwan, 5Institute of Medical Device and Imaging, National Taiwan University, Taipei, Taiwan, 6Integrated Brain Research Unit, Department of Medical Research, Taipei Veterans General Hospital, Taipei, Taiwan

T836 Representational complexity of perceptual information modulates DMN activity during decision making
Mohamed Seghier1, Mohamed Fahmi2, Oury Monchi2, Claudine Habak1
1Emerald College for Advanced Education, Abu Dhabi, United Arab Emirates, 2University of Calgary, Calgary, Alberta, Canada

T837 Task-dependent functional organizations of the visual ventral stream
Han-Gae Jo1, Thilo Kellermann1, Junji Ito2, Sonja Grün2, Ute Habel1
1RWTH Aachen University, Aachen, Germany, 2Research Center Jülich, Jülich, Germany

T838 Decoding cortical responses to continuous visual stimuli
Michael Woletz1, Allan Hummer1, Martin Tik2, Christian Windischberger1
1Medical University of Vienna, Vienna, Austria

T839 (De)inhibition, the side-effect of adaptation in bistable perception
Alexandre Savoy1, Teresa Sousa1, João Duarte1, Gabriel Costa2, Miguel Castelo-Branco2,3,4
1Coimbra Institute for Biomedical Imaging and Translational Research (CIBIT), Coimbra, Portugal, 2ICNAS, University of Coimbra, Coimbra, Portugal, 3Faculty of Medicine, University of Coimbra, Coimbra, Portugal, 4CNC/IBILI, Coimbra, Portugal

T840 Beyond Predictive Encoding: fMRI pattern decoding reveals active inference in early visual cortex
Selma Uthoff1, Katherine Bryant2, Ivan Toni2, Rogier Mars2
1Donders Institute for Brain, Cognition and Behaviour, Radboud University, Nijmegen, Netherlands, 2Donders Institute for Brain, Cognition, & Behaviour, Nijmegen, Netherlands, 3Donders Institute for Brain, Cognition and Behaviour, Nijmegen, Netherlands, 4University of Oxford, Oxford, United Kingdom

T841 Who is who? Supramodal processing of familiarity
Ana Maria Castro Loguercio1, Jaime Vilar2, Maria Antonieta Bobes1
1Cuban Center for Neuroscience, Havana, Cuba, 2Autonomous University of Granada, Granada, Spain

T842 Ultra-high field fMRI reveals cortical depth specificity for adaptation in the human visual cortex
Elisa Zamboni1, Valentin Kemper2, Nuno Gonçalves1, Ke Jiao1, Rainer Goebel2, Zoe Kortz3
1University of Cambridge, Cambridge, United Kingdom, 2Maastricht University, Maastricht, Netherlands

T843 Object-Based Visual Search in Cerebral Visual Impairment Using a Virtual Reality and EEG Paradigm
Christopher Bennett1, Emma Bollini1, Corinna Bauer1, Laura Dubreuil Val1, Peter Bex2, Lotfi Merabet3
1Massachusetts Eye and Ear, Harvard Medical School, Boston, MA, United States, 2Neuroelectrics Corporation, Boston, MA, United States, 3Northeastern University, Boston, MA, United States

T844 Triple hemifield input to the visual cortex in a patient with chiasmal hypoplasia
Khizar Ahmad1, Alessio Fracasso2, Robert Puźniak1, Andre Gouws3, Renat Yakupov4, Oliver Speck5, Joern Kaufmann5, Franco Pestilli2, Serge Dumoulin6, Antony Morland7, Michael Hoffmann1
1Department of Ophthalmology, Otto-von-Guericke University, Magdeburg, Germany, 2Institute of Neuroscience, University of Glasgow, Glasgow, United Kingdom, 3Department of Psychology, York Neuroimaging Centre, University of York, York, United Kingdom, 4German Center for Neurodegenerative Diseases, Magdeburg, Germany, 5Department of Biomedical Magnetic Resonance, Institute for Physics, Otto-von-Guericke University, Magdeburg, Germany, 6Department of Neurology, Otto-von-Guericke-University, Magdeburg, Germany, 7Department of Psychological and Brain Sciences, Indiana University, Bloomington, IN, United States, 8Spinoza Center for Neuroimaging, Amsterdam, Netherlands

T845 How the human brain represents the strength of prior expectations
Helen Blank1, Christian Büchel1
1Department of Systems Neuroscience, University Medical Center Hamburg-Eppendorf, Hamburg, Germany

T846 Ground activation in object perception: Evidence for inhibitory competition and predictive coding
Laura Cacciagnani1, Rachel Skosypec1, Colin Flowers2, Diana Perez3, Mary Peterson4
1California Polytechnic State University, San Luis Obispo, CA, United States, 2University of Arizona, Tucson, AZ, United States

T847 The dynamics of spontaneous brain activity underlie internally-generated perception in the blind
Avtal Hahamy1,2, Marlene Behrmann2, Rafael Malach3
1Wellcome Centre for Human Neuroimaging, University College London, London, United Kingdom, 2Weizmann institute of Science, Rehovot, Israel, 3Carnegie Mellon University, Pittsburgh, PA, United States, 4Weizmann Institute of Science, Rehovot, Israel

T848 Behavioral and functional connectivity analysis of Kanizsa illusory contour perception
Rio Sugino1, Satoru Hiiwa1, Keisuke Hachisuka2, Fumihiko Murase3, Tomoyuki Hiroyasu2
1Doshisha University, Kyotanabe-shi, Kyoto, Japan, 2Denso Corporation, Kariya-shi, Aichi, Japan

T849 Response to short-term deprivation of the human adult visual cortex measured with 7T BOLD
Paola Bind1, Jan Kurzawski1, Claudia Lunghi1, Laura Biagi2, Michelena Tosetti3, Maria Concetta Morrone4
1Università di Pisa, Dipart-Direzione Area di Medicina, Pisa, PI, 2INFN, Pisa, PI, 3Laboratoire des systèmes perceptifs, Département d'études cognitives, École normale supérieure, PSL, Paris, France, 4IRCCS Stella Maris, Pisa, PI, 5IRCCS Stella Maris and IMAGO Research Center, Pisa, Italy, 6Università di Pisa, Dipart-Direzione Area di Medicina, PISA, PI
T850 Pattern Similarity in Neural Representations for the Inversion Effect of Face and Chinese Character
Chun-Hui Li1, Bo-Cheng Kuo1
1Department of Psychology, National Taiwan University, Taipei, Taiwan

T851 Retinotopic Organization in the Human Cerebellum
Tomas Knapen1, Daniel van Es2, Wietse van der Zwoag2
1Vrije universiteit & Spinoza Centre for Neuroimaging, Amsterdam, Netherlands, 2Vrije Universiteit, Amsterdam, Netherlands, 3Spinoza center, Amsterdam, Netherlands

T852 (Un)crowding modulates recurrent connectivity in the visual cortex
Maja Jastrzebowski1, Vitaly Chicherov1, Bogdan Draganski1, Michael Herzog1
1LPsy, Ecole Polytechnique Federale de Lausanne (EPFL), Lausanne, Switzerland, 2LREN - CHUV, Lausanne, Switzerland

T853 Spontaneous resting-state patterns reflect naturalistic activations in higher-order visual areas
Francesca Strappini1, Meytal Wilf2, Ofer Karpi1, Hagar Goldberg1, Michal Hare1, Edna Haran-Furman2, Tal Golani1, Rafael Malach1
1Weizmann Institute of Science, Rehovot, Israel, 2Weizmann Institute of Science, Rehovot, 3Hebrew University of Jerusalem, Jerusalem, Israel

T854 EEG as an implicit measure for perceptual discrimination, categorization, and generalization
Jaana Overwalle1,2, Sander van de Cruys1,2, Bart Boets1,2, Johan Wagemans1,2
1Brain & Cognition, KU Leuven, Leuven, Belgium, 2Leuven Autism Research (LAuRes), Leuven, Belgium, 3Center of Developmental Psychiatry, KU Leuven, Leuven, Belgium

T855 Awake Macaque Imaging on 7T Human Scanner Platform
Meizhen Qian1, Jiaming Hu1, Pinyi Wang1, Yang Gao1, Xiaotong Zhang1, Anna Roe1
1Interdisciplinary Institute of Neuroscience and Technology, Zhejiang University, Hangzhou, China

T856 Extending pRF models from fMRI to MEG: A stimulus-referred forward model to predict MEG measurements
Akhil Edadan1,2, Eline Kupers3, Noah Benson1, Wietse Zuiderbaan1, Serge O. Dumoulin1,2, Jonathan Meier1
1Department of Experimental Psychology, Utrecht University, Utrecht, Netherlands, 2Spinoza Centre for Neuroimaging, Amsterdam, Netherlands, 3Department of Psychology, New York University, New York, NY, United States, 4Department of Experimental and Applied Psychology, VU University, Amsterdam, Netherlands, 5Center for Neural Science, New York University, New York, NY, United States

T857 Spatial asymmetries in free visual exploration and line bisection tasks—correlation and time-course
Kathrin Chiffi1,2, Lorenzo Diana1,2, Matthias Hartmann1,2,4, Giuseppe Zito1,2, René Müri1,2,3,4, Aleksandra Eberhard-Moscicka5
1Departments of Neurology and BioMedical Research, Inselspital, Bern University Hospital, Bern, Switzerland, 2Department of Neurology, Inselspital, Bern University Hospital, Bern, Switzerland, 3Department of Psychology, New York University, New York, NY, United States, 4Department of Applied and Experimental Psychology, VU University, Amsterdam, Netherlands, 5Center for Neural Science, New York University, New York, NY, United States

T858 The Selectivity of Facial Motion in Human Visual Cortex
Hui Zhang1,2, Zixiang We1, Xueping Wang1, Yunhong Wang1
1Beihang University, Beijing, China, 2National Institute of Mental Health, Bethesda, MD, United States

T859 Enhanced access to human anterior temporal face patch by using dynamic shimming and AC/DC coils
Shahin Nasr1,2, Nick Arango1, Jacob White1, Lawrence Wald3,1, Jason Stockmann2,3
1Harvard Medical School, Boston, MA, United States, 2A. A. Martinos Center for Biomedical Imaging, Massachusetts General Hospital, Charlestown, MA, United States, 3Massachusetts Institute of Technology, Cambridge, MA, United States

T860 Predictive Coding of Obscured Motion with fMRI in Humans
Sanne Schoenmakers1, Johannes Franz1, Alard Roebroeck1
1Maastricht University, Maastricht, Netherlands

T861 Representation of Information in right Fusiform Gyrus for Perceptual Decision
Jiyu Zhan1, Robin Ince2, Nicola van Rijssbergen3, Philippe Schyns1
1Institute of Neuroscience and Psychology, University of Glasgow, Glasgow, United Kingdom, 2University of Glasgow, Glasgow, United Kingdom

T862 Selectivity for individual body parts within body selective visual cortex
Alexander Bratch1, Luca Vizioli1, Essa Yacoub1, Stephen Engel1, Philip Burston1, Daniel Kersten1
1University of Minnesota, Minneapolis, MN, United States

T863 The neural processing of multiple interacting versus non-interacting bodies
Eterne Bassoli1, Liuba Papeo1
1CNRS, Lyon, France

T864 Individual differences in category representation in ventral visual cortex of the congenitally blind
Job van den Hurk1, Mono Rosenkilde2, Hans Op de Beeck1, Kolanit Grill-Spector1, Kevin Weiner1
1Scannexus Ultra-High Field MRI Center, Maastricht, Netherlands, 2Stanford University, Palo Alto, CA, United States, 3KU Leuven, Leuven, Belgium, 4Dept. of Psychology and Wu Tsai Neurosciences Institute, Stanford University, Stanford, CA, United States, 5University of California Berkeley, Berkeley, CA, United States

T865 Multimodal Functional Connectivity Mapping of Brain Regions Involved in Skilled Visual Perception
Robert Longner1,2, Simon B. Eickhoff2,1, Merim Bilalic2,4
1Institute of Systems Neuroscience, Heinrich Heine University Düsseldorf, Düsseldorf, Germany, 2Institute of Neuroscience and Medicine (INM-7), Research Centre Jülich, Jülich, Germany, 3Department of Psychology, University of Northumbria at Newcastle, Newcastle, United Kingdom, 4Department of Neuroradiology, University of Tubingen, Tubingen, Germany

T866 Neural correlates of multiple-items social scene perception: An EEG study
Parvaneh Adibpour1,2, Nicolas Goupil1, Mitra Taghizadeh Sarabi1, Jean-Remy Hochmann1, Liuba Papeo1
1Institute of cognitive sciences-Marc Jeannerod, CNRS, Lyon, France, Lyon, France

T867 Localization of temporal monocular crescent in human primary visual cortex
Shohin Nosrati1,2, Cristen LaPierre2, Christopher Vaughan1, Jason Stockmann1,2, Jonathan Polimeni1,2
1Institute of Neuroscience and Psychology, University of Glasgow, Glasgow, United Kingdom, 2A. A. Martinos Center for Biomedical Imaging, Massachusetts General Hospital, Charlestown, MA, United States, 3Harvard Medical School, Boston, MA, United States, 4A. A. Martinos Center for Biomedical Imaging, Massachusetts General Hospital, Charlestown, MA, United States

T868 Micro-probing the visual cortex: high-resolution mapping of neuronal subpopulations
Joana Carvalho1, Khazar Ahmad1, Azzurra Invernizzi1, Michael Hoffmann2, Remco Renken1, Frans Cornelissen1,2
1University of Groningen, Groningen, Netherlands, 2Visual Processing Laboratory, Department of Ophthalmology, Otto-von-Guericke University, Magdeburg, Germany
T869 Adaptive network connectivity in the human brain
Vasilis Karlaftis1, Joseph Giorgio1, Elisa Zamboni1, Polytimi Frangou1, Reuben Rideaux1, Andrew Welchman1, Zoe Kourtzi1
1University of Cambridge, Cambridge, United Kingdom

T870 Cortical mechanisms of the persistence of visual alpha entrainment
Mónica Otero1,2, Pavel Prada1,2, Alejandro Weinstein3,4, María-José Escobar5,6, Wael El-Deredy5,6
1Universidad Técnica Federico Santa María, Valparaíso, Chile, 2Advanced Center for Electrical and Electronic Engineering, Valparaíso, Chile, 3Universidad de Valparaíso, Valparaíso, Chile, 4Centro de Investigación y Desarrollo en Ingeniería en Salud, Valparaíso, Chile

T871 Deep Neural Network modeling of human face selective columns
Shany Grossman1, Guy Gaviz1, Erin Yeagle2, Michel Harel1, Pierre Mégevand1, David Gropper2, Simon Khurvis3, Jose L Herrera1, Michal Irani1, Ashesh Mehta1, Rafael Malach1
1Weizmann Institute of Science, Rehovot, Israel, 2Feinstein Institute for Medical Research, Manhasset, NY, United States

T872 Aligning subject population responses by reconstructing activity patterns in sensory space
Andrew Morgan1, Lucy Petro1, Lars Muckli1
1University of Glasgow, Glasgow, United Kingdom

T873 Altered Neural Network Dynamics During the Visual Processing in Early Deaf Individuals
Evgenia Bednaya1, Francesco Pavan1, Emiliano Ricciardi1, Pietro Pietrini1, Davide Bottani1
1IMT School for Advanced Studies Lucca, Lucca, Italy, 2Center for Mind/Brain Studies, University of Trento, Rovereto, Italy

T874 Changes in pRFs during perceptual filling-in of an artificial scotoma in humans
Joanna Carvalho1, Remco Renken1, Frans Cornelissen1
1University of Groningen, Groningen, Netherlands

T875 The temporal dynamics of neuronal responses in human visual cortex
Iris Green1, Jinyang Zhou1, Giovanni Cuturi2, Dora Hermes2, Adeen Finkler3, Orrin Devinsky1, Werner Doyle1, Nick Ramsey1, Natalia Petridou4, Jonathan Winawer1
1New York University, New York, NY, United States, 2University of Toronto, Toronto, Ontario, Canada, 3University of Western Ontario, London, Ontario, Canada

T876 Curvature coding in the human ventral stream
Paolo Papale1, Andrea Leo1, Giacomina Handjara1, Luca Cecchetti1, Pietro Pietrini1, Emiliano Ricciardi1
1IMT School for Advanced Studies Lucca, Lucca, Italy

T877 Heritability of Visual Category-Selectivity
Jiahui Guo1, Bradley Duchaine1
1Dartmouth College, Hanover, NH, United States

T878 Similarities between Visual Object Representations in Lateral Occipital Complex
Kayla Ferko1, Anna Blumenthal1, Daria Proklova1, Chris Martin1, Ali Khan1,2, Stefan Kühler1,2
1University of Western Ontario, London, Ontario, Canada, 2Brain and Mind Institute, University of Western Ontario, London, Ontario, Canada, 3University of Toronto, Toronto, Ontario, Canada, 4Department of Medical Biophysics, University of Western Ontario, London, Ontario, Canada, 5Robarts Research Institute, London, Ontario, Canada, 6Department of Psychology, University of Western Ontario, London, Ontario, Canada

T879 Anticipating movement through a virtual environment from activity in V2
Angus Paton1, Yulia Lazanova1, Lucy Petro1, Lars Muckli1
1University of Glasgow, Glasgow, United Kingdom

T880 Representation of Perceptual Organization in Early Visual Cortex
Hao Wu1, Badong Chen1, Zhentao Zuo2, Tiangang Zou2, Yan Zhuo2, Yihong Gong1, Zejian Yuan1, Nanning Zheng2
1Xi’an Jiaotong University, Xi’an, China, 2Institute of Biophysics, Beijing, China

T881 Development and evolution of sulcal morphology in place-selective regions of ventral temporal cortex
Voidehi Nata1, Michael Arcaro2, Michael Barnett1, Jesse Gomez2, Margaret Livingstone3, Kalanit Grill-Spector2, Kevin Weiner1
1University of Texas, Southwestern Medical Center, Dallas, TX, United States, 2Harvard Medical School, Boston, MA, United States, 3University of Pennsylvania, Philadelphia, PA, United States, 4University of California Berkeley, Berkeley, CA, United States, 5Dept. of Psychology and Wu Tsai Neurosciences Institute, Stanford University, Stanford, CA, United States

Sleep and Wakefulness

T882* Selective enhancement of visual perceptual learning by tactile sensation during sleep
Yoshiyuki Onuki1,2, Oti Lakbila-Kamal2, Bo Scheffer1, Eus Van Someren1,2,3,4, Ysbrand Van der Werf1
1Jichil Medical University, Shimotsuke, Japan, 2Netherlands Institute for Neuroscience, Amsterdam, Netherlands, 3VU University and Medical Center, Amsterdam, Netherlands, 4Center for Neurogenomics and Cognitive Research (CNCR), Amsterdam, Netherlands, 5VU University Medical Center, Amsterdam, Netherlands

T883 Circadian phenotype impacts default mode functional connectivity, attention and sleepiness
Elise Facer-Chils1, Bruno Campos2, Benita Middleton3, Debra Skene4, Andrew Bagshaw1
1University of Birmingham, Birmingham, United Kingdom, 2University of Campinas, Campinas, Brazil, 3University of Surrey, Guildford, United Kingdom

T884 Functional connectivity of the motor network varies with circadian phenotype
Elise Facer-Chils1, Bruno Campos2, Benita Middleton3, Debra Skene4, Andrew Bagshaw1
1University of Birmingham, Birmingham, United Kingdom, 2University of Campinas, Campinas, Brazil, 3University of Surrey, Guildford, United Kingdom

T885 Altered Brain Architectures Determined by Dynamic Functional Connectivity after Sleep Deprivation
Changhong Li1, Judith Fronzcek-Poncelet1, Denise Lange1, Eva Hennecke1, Tina Kroß1, Andreas Matschke1, Daniel Aeschbach2,3, Andreas Bauer1,4, Eva-Maria Elmenhorst1,5
1Institute of Neuroscience and Medicine (INM-2), Forschungszentrum Jülich, Jülich, Germany, 2Institute of Aerospace Medicine, German Aerospace Center, Cologne, Germany, 3Division of Sleep Medicine, Harvard Medical School, Sleep Division, Boston, MA, United States, 4Department of Neurology, Medical Faculty, Heinrich-Heine-University Düsseldorf, Düsseldorf, Germany, 5Department of Psychiatry and Psychotherapy, Rheinische Friedrich-Wilhelms-Universität Bonn, Bonn, Germany

T886* PyActigraphy, a comprehensive toolbox for actigraphy data analysis
Grégory Hammoud1, Mathilde Rey1, Michele Deantonio2, Christophe Phillips3, Christina Schmidt2, Vincenzo Muto1
1GIGA-CRC in vivo Imaging, University of Liège, Liège, Belgium, 2Psychology and Neurosciences of Cognition (PsyNCog), Faculty of Psychology, University of Liège, Liège, Belgium

T887 The Functional Connectivity of Attention and Consciousness-Related Network during Human NREM Sleep
Wenrui Zhao1, Yun Tian1, Xu Lei1
1Sleep and Neuroimaging Center, Faculty of Psychology, Southwest University, Chongqing, China
T888 EEG microstates correlate with fMRI during deep sleep
Jing Xu1, Shuqin Zhou1, Guanyuan Zou1, Jiayi Liu1, Zhui Su1, Qihong Zou1, Jia-Hong Gao1
1Shanghai International Studies University, Shanghai, China, 2Peking University, Beijing, China, 3Oxford University, Oxford, United Kingdom

T889 Association between sleep-wake regulation and brain morphology in young and older adults
Michele Deantonii1, Grégoire Hammad2, Micheline Maire3, Mohamed Ali Bahr2, Christian Berthomier4, Christian Cajochen5, Christina Schmidt6
1Université de Liège, Liège, Belgium, 2University of Liège, Liège, Belgium, 3Centre for Chronobiology, Psychiatric Hospital of the University of Basel, Basel, Switzerland, 4PhysiP, Paris, France

T890 Impact of Sleep Restriction and Simulated Microgravity on Speech Perception: An ERP Study
Peter Molfese1, Emily Finn2, Laurentius Huber3, Dylan Nielsen4, David Jangraw5, Peter Bandettini6, Dennis Molfese6
1Concordia University, Montreal, Quebec, 2University of Tübingen, Tübingen, Germany, 3Max Planck Institute for Psychiatry, München, Germany, 4National Institute of Mental Health, Washington, DC, United States, 5National Institute of Mental Health, Bethesda, MD, United States, 6Department of Radiological Sciences, Kaohsiung Medical University, Kaohsiung, Taiwan, 7Graduate Institute of Mind, Brain and Consciousness (GIMBC), Taipei Medical University, Taipei, Taiwan, 8Institute of Neuroscience, National Yang-Ming University, Taipei, Taiwan, 9Institute of Mental Health, Bethesda, MD, United States, 10Centre for Chronobiology, Psychiatric University Hospital Basel, Basel, Switzerland, 11University of Nebraska-Lincoln, Lincoln, NE, United States

T891 Oscillatory networks of REM sleep: a whole-brain characterization using MEG
Emily Coffey1, Lea Himmer2, Monika Schönauer3, Steffen Gais2, Jan Born2, Til Ole Bergmann2
1United States, 2Institute of Science and Technology for Brain-inspired Intelligence, Fudan University, Shanghai, China, 3Graduate Institute of Biomedical Engineering, National Central University, Taoyuan, Taiwan

T892 Poor but Different: Distinct Profiles of Sleep, Behavior and RSFC in Healthy Sleepers
Nicole M. V. Kuel1, Valeria Keber2, Jingwei Li3, B. T. Thomas Yeo3
1National University of Singapore, Singapore, Singapore, 2ECE, CIRC, SINAPSE & MNP, National University of Singapore, Singapore, Singapore, 3Department of Electrical and Computer Engineering, ASTAR-NUS Clinical Imaging Research Centre, Singapore, Singapore

T893 Dynamic Engagement of Cingulo-Opercular Network in Vigilance Task along the Process of Sleep Inertia
Shuo Chen1, Chia-Wei Li2, Yi-Chia Kung2, Ming-Kang Li2, Fan-Chi Hsiao2, Shang-Cheng Chiu2, Chi-Yung Liu2, Chia-Yuen Chen3, Chun-Chuan Chen1, Changwei Wu4
1National Central University, Taoyuan, Taiwan, 2Department of Radiology, Wanfang Hospital, Taipei Medical University, Taipei, Taiwan, 3National Yang-Ming University, Taipei, Taiwan, 4Graduate Institute of Mind, Brain and Consciousness (GIMBC), Taipei Medical University, Taipei, Taiwan, 5Department of Psychology, National Chengchi University, Taipei, Taiwan, 6Department of Radiology, Wan Fang Hospital, Taipei Medical University, Taipei, Taiwan, 7Department of Biomedical Sciences and Technology, National Central University, Taoyuan, Taiwan

T894 Connectivity Instability during NREM Sleep Reflects Altered Properties of Information Integration
Yi-Chia Kung1, Chia-Wei Li2, Shuo Chen1, Chia-Ju Sharon Chen1, Chun-Yi Zac Lo2, Bharat Biswal6, Changwei Wu4, Ching-Po Lin2
1Department of Biomedical Imaging and Radiological Sciences, National Yang-Ming University, Taipei, Taiwan, 2Department of Radiology, Wanfang Hospital, Taipei Medical University, Taipei, Taiwan, 3Graduate Institute of Biomedical Engineering, National Central University, Taoyuan, Taiwan, 4Department of Medical Imaging and Radiological Sciences, Kaohsiung Medical University, Kaohsiung, Taiwan, 5Institute of Science and Technology for Brain-inspired Intelligence, Fudan University, Shanghai, China, 6Department of Biomedical Engineering, New Jersey Institute of Technology, Newark, United States, 7Graduate Institute of Mind, Brain and Consciousness (GIMBC), Taipei Medical University, Taipei, Taiwan, 8Institute of Neuroscience, National Yang-Ming University, Taipei, Taiwan

T895 Inter-individual variability in N2 sleep is associated with cortical morphology
Shuqin Zhou1, Jing Xu1, Qihong Zou1, Jia-Hong Gao1
1Center for MRI Research, Peking University, Beijing, China, 2Shanghai International Studies University, Shanghai, China

T896 Daily Caffeine Consumption Reduces Human Grey Matter in Hippocampus Independent of Sleep Pressure
Yu-Shiang Lin1,2,3, Janine Weibel4,5, Hans-Peter Landolf6, Francesco Santini7,8, Corrado Garbarza2,3, Martin Meyer1,2, Helen Sliwki1,2, Stefan Borgwardt1,2, Christian Cajochen1,2, Carolin Reichert1,3
1Centre for Chronobiology, Psychiatric University Hospital Basel, Basel, Switzerland, 2Institute for Research Platform Molecular and Cognitive Neurosciences, Basel, Switzerland, 3Neuropsychiatry and Brain Imaging, Psychiatric University Hospital Basel Psychi atry, Basel, Switzerland, 4Centre for Chronobiology, Psychiatric University Hospital Basel, Basel, Basel, 5Institute of Pharmacology and Toxicology, University of Zürich, Zürich, Switzerland, 6Sleep & Health Zurich, University Zürich Center of or Interdisciplinary Sleep, University of Zürich, Zürich, Switzerland, 7Radiological Physics, University Hospital Basel, Basel, Switzerland, 8Department of Biomedical Engineering, University of Basel, Basel, Switzerland, 9Neuropsychiatry and Brain Imaging, Psychiatric University Hospital Basel of Psychiatry, Basel, Switzerland, 10Centre for Chronobiology, Psychiatric Hospital of the University of Basel, Basel, Switzerland, 11Department of Basal, Basel, Switzerland, 12Institute of Basel, Translational Research Platform Molecular and Cognitive Neurosciences, Switzerland, Basel, Switzerland

T897 Optimizing prediction models of sleep as confound for large scale resting state fMRI studies
Andre Altmann1, Michael Czisch2, Philipp Samann3
1University College London, London, United Kingdom, 2Max Planck Institute for Psychiatry, München, Germany, 3Max Planck Institute of Psychiatry, Munich, Germany

T898 Relationships between changes in sleep quality and white matter microstructure across adult life
Håkon Grydeland1, Kristine Walhovd2, Donatas Sederevicius3, Anders Fjell4
1University of Oslo, OSLO, Norway, 2University of Oslo, OSLO, Norway, 3University of Oslo, OSLO, Norway, 4University of Oslo, OSLO, Norway
A dual-process exploration of binge drinking: behavioral and electrophysiological evidence
Pierre Maurage1, Séverine Lannoy1, Valérie Dormot1, Joel Billieux1, Meike B. San2, Fabien D'Hoondt2
1Université Catholique de Louvain, Louvain-la-Neuve, Belgium, 2University of Luxembourg, Luxembourg, Luxembourg, 3University of Lille, Lille, France

Resting-state EEG delta predicts neurofeedback treatment long-term response in nicotine addiction
Jed Bu1, Ru Ma1, Yangjun Zhang1, Yan Cheng1, Shihan Sun2, Xiaochu Zhang1
1University of Science and Technology of China, Hefei, China, 2Tianjin Normal University, Tianjin, China

Gray matter volume abnormalities in compulsive sexual behavior, gambling and alcohol use disorder
Małgorzata Draps1, Guilhame Sesqaussè2, Artur Marchewka3, Jacek Mateuszwski3, Agnieszka Duda1, Michał Lew-Starowicz4, Maciej Kopera4, Andrzej Jakubczyk4, Marcin Wojnar4, Mateusz Gola5
1Clinical Neuroscience Research Centre, Lyon, France, 2Laboratory of Brain Imaging, Nencki Institute of Experimental Biology, Warsaw, Poland, 3Lyon Neuroscience Research Centre, Lyon, France, 4Department of Psychiatry and Neurology, Warsaw, Poland, 5Department of Psychiatry, Medical University of Warsaw, Warsaw, Poland

Predicting Adolescent Cannabis Use vs. Binge Drinking Using Random Forests
Philip Speicher1, Bader Chaarani5, Nicholas Allgaier1, Scott Mackey1, Robert Althoff1, Hugh Garavan1
1University of Vermont, Burlington, VT, United States

The difference of brain structural changes induced by heroin and methamphetamine
Yunxia Shen1, Mingwu Lou2, Wenbin Liang3, Xinyun Sun3, Lin Lu4, Yanyi Chen3
1Longgang Central Hospital, Shenzhen, China, 2Longgang Central Hospital, Shenzhen, China, 3Detoxification Hospital of Shenzhen Municipal Public Security Bureau, Shenzhen, China

Cortical surface morphology in long-term cannabis users: A multi-site MRI study
Yann Chye1, Chao Suo1, Valentina Lorenzetti2, Albert Battallà3, Janna Cousijn3, Anna Goudriaan4, Rocío Martín-Santos5, Sarah Whittle6, Nadia Solowi7, Murat Yuçel8
1Monash University, Clayton, Victoria, 2Monash University, Clayton, Australia, 3Australian Catholic University, Melbourne, Australia, 4University Medical Center Utrecht, Utrecht, Netherlands, 5University of Amsterdam, Amsterdam, Netherlands, 6University of Barcelona, Barcelona, Spain, 7The University of Melbourne, Melbourne, Australia, 8University of Wollongong, Wollongong, Australia

Identifying Smokers At Higher Risk For Relapse: A Neuroimaging-based Classification Algorithm
David Frank1, Paul Cinciripini2, Menton Deweese1, Maher Karam-Hage1, George Kypriotakis1, Jason Robinson1, Rachel Yndale1, Damon Vidrine1, Francesco Versace1
1UT MD Anderson Cancer Center, Houston, TX, United States, 2Vanderbilt University, Nashville, TN, United States, 3University of Toronto, Toronto, Ontario, Canada, 4Oklahoma Tobacco Research Center at The University of Oklahoma, Oklahoma City, OK, United States

Convergent evidence from alcohol-dependent humans and rats of progressive white matter alterations
Silvia De Santis1, Patrick Bach2, Laura Pérez-Cervera3, Alejandra Cosa-Linar3, Georg Weil4, Sabine Vollstädt-Klein1, 5Peter Kirsch5, Roberto Ciccocioppo6, Wolfgang Sommer7, Santiago Canals1
1Instituto de Neurociencias de Alicante, Alicante, Spain, 2University of Heidelberg, Mannheim, Germany, 3Central Institute of Mental Health, Mannheim, Germany, 4University of Camerino, Camerino, Italy

Sexual trauma is associated with orbitofrontal network strength in women with stimulant dependence
Tasha Popper1, Vita Droumat1, Inna Arnaudova1, Hortensia Amaro1, David Black1, John Monterosso1
1University of Southern California, Los Angeles, CA, United States, 2University of California Los Angeles, Los Angeles, CA, United States, 3Florida International University, Miami, FL, United States

Anterior and Posterior Cerebral WM Show Different Patterns of Alterations in Young Adult Smokers
Fuchun Lin1, Xu Han2, Yao Wang3, Weina Ding4, Yawen Sun5, Yan Zhou5, Hoo Le5
1Wuhan Institute of Physics and Mathematics, Chinese Academy of Sciences, Wuhan, China, 2Department of Radiology, Renji Hospital, School of Medicine, Shanghai Jiaotong University, Shanghai, China

Altered frontostriatal connectivity related to depression in excessive internet use
Ji-Won Chun1, Jihe Choi1, Min Kyung Hui2, Jin-Young Kim3, Hyun Cho1, Dong Jin Jung4, Jung-Seok Choi5, Doo-Jin Kim6
1Department of Psychiatry, The Catholic University of Korea College of Medicine, Seoul, Korea, 2Department of Psychiatry, The Catholic University of Korea College of Medicine, Seoul, Korea, Republic of, 3Department of Psychiatry, The Catholic University of Korea College of Medicine, Seoul, Korea, Republic of, 4Department of Psychiatry, The Catholic University of Korea College of Medicine, Seoul, Korea, Republic of

Pavlovian-to-instrumental transfer is associated with hazardous alcohol use in young adults
Hoa Chê1,2, Stephen Nebe1,3, Sören Kutuen-Paul1, Maria Garbusov1, Michael Rapp1, Quentin Huys3, Andreas Heinz1, Michael Smolka1
1Technische Universität Dresden, Dresden, Germany, 2University of Zürich, Zürich, Switzerland, 3Charité Berlin, Berlin, Germany, 4Universität Potsdam, Postdam, Germany, 5University College London, London, United Kingdom

Disentangling cue-induced wanting and liking in smokers with parametric fMRI
Amelie Haugg1, Andrei Manoliu2, Ronald Sladky3, Lea Hulka2, Matthias Kirschner1, Annette Bruehl1, Erich Seifritz1, Boris Quednow1, Marcus Herdener1, Frank Scharnowski2
1University of Zurich, Zurich, Switzerland, 2Psychiatric University Hospital Zurich, Zurich, Switzerland, 3University of Vienna, Vienna, Austria

Altered Periaqueduct Gray Connectivity with Default Mode Network in Alcohol Use Disorder
Reza Momenan1, David George2
1NIAAA, NIH, Bethesda, MD, United States

Striatal hyper-activation underlies adolescent vulnerability to substance use: an fMRI meta-analysis
Brenden Tervo-Clemmens1, Alina Quach2, Finnegan Colabro3, Beatriz Lunc4
1University of Pittsburgh, Pittsburgh, PA, United States, 2National Institutes of Health, Bethesda, MD, United States
W016 Sex Differences in the Neural Substrates of Cigarette Craving, Withdrawal, and Relief
Maylen Perez Diaz1, Dara Ghahremani1, Paul Faulkner1, Joseph O’Neill1, Jeffrey Alger2, Edythe London1
1UCLA, Los Angeles, CA, United States, 2University of California, Los Angeles, Los Angeles, CA, United States

W017 Decreased connectivity in the default mode network in heavy drinkers after acute alcohol exposure
Xiaoqing Fang1, Yacila Deza Araujo2, Johannes Petzold2, Philipp Riede3, Maik Spreer4, Michael Marxen1, Ulrich Zimmermann5, Michael Smolka5
1Department of Psychology and Neuroimaging Center, Technische Universität Dresden, Dresden, Germany, 2Department of Psychiatry and Neuroimaging Center, Technische Universität Dresden, Dresden, Germany, 3Semel Institute for Neuroscience and Human Behavior, David Geffen School of Medicine, University of California, Los Angeles, Los Angeles, CA, United States, 4technische universität dresden, dresden, Germany

W018 Focused reductions in dynamic functional connectivity precipitated by nicotine abstinence in smokers
John Fedota1, Thomas Ross1, Tianwen Chen1, Allison Matous1, Michael McKenna1, Juan Castillo1, Betty Jo Salmeron1, Vinod Menon2, Eliot Stein3
1National Institute on Drug Abuse, Baltimore, MD, United States, 2Stanford University, Palo Alto, CA, United States

W019 Brain Mediates Association between Methylation and AUDIT Score: A Longitudinal Study
Jiayu Chen1, Shile Qi1, Zening Fu2, Dongdong Lin2, Jing Sui1, Yuhui Du1, Gunter Schumann2, Vince Calhoun3, Jingyu Liu1
1The Mind Research Network, Albuquerque, NM, United States, 2mind research network, Albuquerque, NM, United States, 3Chinese Academy of Science, Beijing, Select a State or Province, 4Shanxi University, Taiyuan, China, 5KCL, London, United Kingdom

W020 Increased Functional Connectivity between DMN and FPN in Adolescents with Familial History of SUD
Xiaopu He1,2, Diana Rodriguez Moreno1, Tong Li1,2, Huiang Tang1,2, Yoel Czycholl2, Zhishun Wang1,2, Lawrence Amse1,2, George Musa1,2,4, Keddy Chelsack-Postava2, Adam Bisaga1,2, Lupo Geronazzo-Marxen1, Ulrich Zimmermann1, Christina Hovden2,3
1Department of Psychiatry, Columbia University, New York, New York, United States, 2The New York State Psychiatric Institute, New York, NY, United States, 3Harbin Institute of Technology, Harbin, China, 4Department of Epidemiology, Columbia University, New York, NY, United States

W021 Alteration in fronto-limbic connectivity in adolescents with excessive smartphone use
Arom Pyeori1, Ji-Won Chun1, Ji-Hye Choi1, Jin-Young Kim1, Min Kyung Hu1, Hyun Choi1, Dai-Jin Kim1,2
1Department of Psychiatry, St.Mary's Hospital, The Catholic University of Korea College of Medicine, Seoul, Korea, Republic of, 2Department of Biomedicine&Health Sciences, The Catholic University of Korea College of Medicine, Seoul, Korea, Republic of

W022 Reduced resting state functional connectivity of thalamus and sleep impairment in alcohol dependence
Jingjing Liu1, Dahu Yu1, Kai Yuan1
1Xidian University, Xian, Shaanxi, 2Inner Mongolia University of Science and Technology, Baotou, Inner Mongolia

W023 The structural properties of major white matter tracts in young smokers
Wanye Cai1, Dahu Yu1, Kai Yuan1
1Xidian University, Xian, Shaanxi, 2Inner Mongolia University of Science and Technology, Baotou, Inner Mongolia

W024 Classifying and characterizing nicotine use disorder using machine learning and white matter tracts
Meng Zhao1, Dahu Yu2, Kai Yuan1
1Xidian University, Xian, Shaanxi, 2Inner Mongolia University of Science and Technology, Baotou, Inner Mongolia

W025 Functional MRI studies of delayed memory task in problematic smartphone use of adolescence
Jinyoung Kim1, Ji-Won Chun2, Min Kyung hu3, Dai-Jin Kim4
1Seoul St. Mary’s Hospital, Catholic University of Korea, Seoul, Korea, Republic of, 2St. Mary hospital, Seoul, Korea, Republic of, 3Seoul St. Mary’s Hospital, Catholic University of Korea, Seoul, Korea, 4Democratic People’s Republic of, 5Department of Psychiatry, The Catholic University of Korea College of Medicine, Seoul, Korea, Republic of

W026 Identification of imaging biomarkers in Internet Gaming Disorder using random forest classifier
Min Seob Kim1, Da hyun Kim2, Bumseok Jeong3
1KAIST, Daejeon, Korea, Republic of

W027 Altered frontoparietal activation underlying the selective attention in problematic smartphone users
Ji-Wei Choi1, Ji-Won Chun1, Hyun Cho1, Jin-Young Kim1, Dai-Jin Kim1
1Department of Psychiatry, The Catholic University of Korea College of Medicine, Seoul, Korea, Republic of, 2St. Mary hospital, Seoul, Korea, Republic of, 3Department of Psychology, Korea University, Seoul, Korea, Republic of

W028 Over-learning of prediction errors in early relapers with cocaine addiction
Ju-Chi Yu1, Vincenzo Fiore1, Richard Briggs1, Jacquelyn Braun2, Bryon Adinoff3, Xiaoxi Gu4,5,6,7,8
1The University of Texas at Dallas, Dallas, TX, United States, 2Department of Psychiatry, Icahn School of Medicine at Mount Sinai, New York, NY, United States, 3Department of Aging and Geriatric Research, Gainesville, FL, United States, 4Department of Psychiatry, University of Texas Southwestern Medical Center, Dallas, TX, United States, 5VA North Texas Health Care System, Dallas, TX, United States, 6Department of Neuroscience, Icahn School of Medicine at Mount Sinai, New York, NY, United States, 7Friedman Brain Institute, Icahn School of Medicine at Mount Sinai, New York, NY, United States, 8Addiction Institute, Icahn School of Medicine at Mount Sinai, New York, NY, United States

W029 Disparity of Functional Connectome in Methamphetamine Dependence with and without Psychosis Symptoms
Ai-Ling Hsu1, Chia-Wei Li1, Changwei Wu1, Ming-Chyi Huang2, Wing Chan3
1Department of Radiology, Wanfang Hospital, Taipei Medical University, Taipei, Taiwan, 2Graduate Institute of Mind, Brain and Consciousness, Taipei Medical University, Taipei, Taiwan, 3Department of Addiction Sciences, Taipei City Psychiatric Center, Taipei City Hospital, Taipei, Taiwan, 4Department of Radiology, School of Medicine, College of Medicine, Taipei Medical University, Taipei, Taiwan

W030 Enhanced reward seeking in Internet gaming disorder: Evidence form fMRI study
Lingxiao Wang1,2, Qiu L1,2, Xin Liu1,2
1CAS Key Laboratory of Behavioral Science, Institute of Psychology, Beijing, China, 2Department of Psychology, University of Chinese Academy of Sciences, Beijing, China

W031 Structural and functional bases of executive and decision-making deficits in alcohol use disorder
Caterina Galandra1, Chiara Crespi2, Gianpaolo Basso3, Marina Monera1, Ines Giorgi4, Giovanni Vittadini4, Mauro Frascaroli4, Paolo Poggi5, Nicola Canessa6
1CAS Maugeri, Pavia, Italy, 2IUSS Pavia, Pavia, Italy, 3University of Milano-Bicocca, Milan, Italy, 4IRCCS ICS Maugeri, Pavia, Italy, 5IRCCS Fondazione Salvatore Maugeri Pavia, Pavia, Italy, 6University School for Advanced Studies IUSS, Pavia, Italy

WEDNESDAY, JUNE 12
Odd numbers: 12:45 – 13:45; Even numbers: 13:45 – 14:45; Poster Reception: 18:15 – 19:15
ROMA
W032 Sex-dependent role of dopamine receptor D2 during adolescent development
Rachel Schroeder1, Marissa Laws2, Shady El Damaty2, Veronica Mucciaroni3, Benson Stevens4, Valery Darcey2, Emma Rose5, Diana Fishbein6, John VanMeter7
1Behavioral Neuroscience Program, University of Illinois at Chicago, Chicago, Illinois, United States
2Center for Functional and Molecular Imaging, Georgetown University, Washington, DC, United States
3Center for Functional and Molecular Imaging, Georgetown University, Washington, DC, United States
4Georgetown University, Washington, DC, United States
5The Pennsylvania State University, University Park, PA, United States

W033 Longitudinal Changes in Dorsal Attention Network in Patients With Gambling Disorder
Deokjong Lee1, Junghoon Lee2, Kee Namkoong3, Young-Chul Jung4
1 Ilsan hospital, National health insurance, Goyang, Korea, Republic of
2Department of Psychiatry, Yonsei University College of Medicine, Seoul, Korea, Republic of

W034 Methamphetamine-associated Psychosis is Associated with Decreased Frontal Perfusion
Chia-Wei Li1, Ai-Ling Hsu2, Changwei Wu3, Ming-Chyi Huang4, Wing Chan5
1Department of Radiology, Wan Fang Hospital, Taipei Medical University, New Taipei, Taiwan
2Department of Radiology, National Yang-Ming University Hospital, Taipei, Taiwan
3Graduate Institute of Mind, Brain and Consciousness (GIMBC), Taipei Medical University, Taipei, Taiwan
4Department of Addiction Sciences, Taipei City Psychiatric Center, Taipei City Hospital, Taipei, Taiwan
5Department of Radiology, School of Medicine, College of Medicine, Taipei Medical University, Taipei, Taiwan

W035 Prenatal exposure to maternal cigarette smoking and structure of the human corpus callosum
Lassi Bjornholm1, Juha Nikkinen2, Vesla Kiviineni3, Solja Niemelä4, Mark Drokesmith5, John Evans5, G. Bruce Pike6, Louis Riche7, Zdenka Pausova8, Juha Veijola9, Tomás Paus10
1University of Oulu, Oulu, Finland
2Department of Radiology & MIPT/MRC, Oulu University Hospital, Oulu, Finland
3Oulu Functional Neuroimaging, MIPT/MRC, Oulu University Hospital, Oulu, Finland
4University of Turku, Turku, Finland
5Cardiff University, Cardiff, United Kingdom
6University of Calgary, Calgary, Alberta, Canada
7Université du Québec à Chicoutimi, Chicoutimi, Canada
8The Hospital for Sick Children, University of Toronto, Toronto, Ontario, Canada
9University of Toronto & Bioavance Research Institute, Toronto, Ontario, Canada

W036 Neural Subcomponents of Response Inhibition in ADHD and Alcohol Use Disorder
Sarah Gerhardt1, Mathias Luderer2, Rohlta Nuryeva3, Georg Meyer zu Schwabedissen4, Johanna Seidt5, Olaf Hennig6, Barbara Alm7, Wolfgang Sommer8,9
1Department of Addictive Behaviour and Addiction Medicine, CIMH, Mannheim, Germany
2Department of Psychiatry, Psychosomatic Medicine and Psychotherapy, University Hospital Frankfurt, Frankfurt, Germany
3Children’s Center, Klinikum Frankfurt Oder, Frankfurt (Oder), Germany
4Department of Psychiatry and Psychotherapy, CIMH, Mannheim, Germany
5Institute of Psychopharmacology, CIMH, Mannheim, Germany
6Department of Child and Adolescent Psychiatry, University of Mainz, Mainz, Germany

W037 Nicotine alters intra-and inter-regional resting-state fMRI of the vmPFC and hippocampus
Lauren Hill-Brown1, Michael Tobia2, Angela Laird3, Betty Jo Salmeron1, Thomas Ross1, Elliot Stein1, Matthew Sutherland2
1Department of Psychology, Florida International University, Miami, FL, United States
2Department of Physics, Florida International University, Miami, FL, United States
3Neuromaging Research Branch, National Institute on Drug Abuse, Baltimore, MD, United States

W038 Altered ventromedial prefrontal cortex response underlying co-occurring alcoholism and early trauma
Dongqi Seo1, Cheryl Lacadie2, Rajita Sinha1
1Department of Psychiatry, Yale University, New Haven, CT, United States
2Department of Radiology, Yale University, New Haven, CT, United States
W047 Cue-reactivity to odor and visual cannabis stimuli
Natalia Kleinhaus1, Julia Siegert1, Gabriella Greco1, Matthew Blake1, Mary Larimer2
1University of Washington, Seattle, WA, United States, 2University of Washington, Seattle, WA, United States

W048 Psychophysiological and Speech Correlates of Incubation of Cue-induced Cocaine Craving
Muhammad Parvez1, Carla Agurto2, Raquel Nore2, Mary Pietrowicz2, Pias Malaker1, Nelly Alia-Klein1, Guillermo Cecchi3, Rita Goldstein1
1Icahn School of Medicine at Mount Sinai, New York, NY, United States, 2T.J. Watson IBM Research Laboratory, Yorktown Heights, NY, United States, 3IBM T.J. Watson Research Center, Yorktown Heights, NY, United States

Alzheimer’s Disease and Other Dementias

W049 Structural correlation networks of hippocampal subfields: hubs changes in Alzheimer’s disease
Alessia Saraceni1, Aldo Quattrone1
1Neuroscience Research Center, University Magna Graecia, Catanzaro, Italy

W050 The orientational distortion changes of white matter in Alzheimer’s disease
Haichao Zhao1, Jian Cheng1, Jiayang Jiang1, Perminder Sachdev1, Peter Bassett2, Wei Wen2, Tao Liu2
1School of Biological Science and Medical Engineering, Beihang University, Beijing, China, 2Beijing Advanced Innovation Center for Big Data-Based Precision Medicine, Beihang University, Beijing, China

W051 Illuminating Alzheimer’s disease through functional, structural and metabolic neuroimaging
Gregory Peters Founshtein1, Tahel Naveh1, Liran Domachevsky1, Amos Korczyn2, David Groshar2, Shahar Arzy1
1The Hadassah Hebrew University Medical Center, Jerusalem, Israel, 2Department of Nuclear Medicine, Assuta Medical Center, Tel-Aviv, Israel

W052 Predicting novel definitions of neurodegenerative disease from CSF protein levels and genotype
Eli Combrell1, John Robinson1, Virginia Lee1, John Trojanowski1, Danielle Bassett1
1University of Pennsylvania, Philadelphia, PA, United States

W053 Dynamic Brain Functional Connectivity in presymptomatic Frontotemporal Dementia: a GENFI study
Enrico Premi1, Vincenzo Calhoun2, Matteo Diano3, Stefano Gazzina4, Mauro Cossiddu5, Antonella Alberici6, Silvana Archetti7, Donata Paternici7, Roberto Gasparotti8, John van Swieten9, Daniela Galimberti10, Raquel Sanchez-Valle11, Robert Laforce Jr12, Ferrin Moreno13, Matthys Synofzik14, Caroline Graff15, Mario Maselli16, Maria Tartaglia17, James Rowe18, Rik Vandenberghe19, Elizabeth Finger20, Fabrizio Tagliavini20, Alexandre de Mendoncáz21, Isabel Santana22, Chris Butler23, Simon Ducharme24, Alex Gerhard25, Adrian Danek26, Johannes Levin27, Markus Otto27, Giovanni Frisoni28, Stefano Cappa28, Sandro Sorbi29, Alessandro Padovani30, Jonathan Rohrer31, Barbara Borroni32
1Centre for Neurodegenerative Disorders, Neurology Unit, University of Brescia, Brescia, BS, 2The Mind Research Network University of New Mexico, Albuquerque, NM, United States, 3Department of Psychology, Psychology, University of Turin, Turin, Italy, 4Centre for Neurodegenerative Disorders, Neurology Unit, Brescia, Italy, 5Centre for Neurodegenerative Disorders, Neurology Unit, Brescia, Italy, 6Biotechnology Laboratory, Department of Pathophysiology and Transplantation, IRCCS Ospedale Maggiore Policlinico, Milan, Italy, 7Department of Neurology, Hospital Clinic, Institut d’Investigacions Biomèdiques, Barcelona, Spain, 8Clinique Interdisciplinaire de Mémoire, Département des Sciences Neurologiques, CHU de Québec, Québec, Canada, 9Department of Neurology, Hospital Universitario Donostia, San Sebastián, Spain, 10Department of Cognitive Neurology, Center for Neurology and Hertie-Institute for Clinical Brain Rese, Düsseldorf, Germany, 11Karolinska Institutet, Department NVS, Center for Alzheimer Research, Division of Neurogenetics, Solna, Sweden, 12LC Campbell Cognitive Neurology Research Unit, Sunnybrook Research Institute, Toronto, Italy, 13Toronto Western Hospital, Tanz Centre for Research in Neurodegenerative Disease, Toronto, Ontario, Canada, 14Department of Clinical Neuropsychi, University of Cambridge, Cambridge, United Kingdom, 15Laboratory for Cognitive Neurology, Department of Neurosciences, KU Leuven, Leuven, Belgium, 16Department of Clinical Neurological Sciences, University of Western Ontario, London, Ontario, Canada, 17Fondazione Istituto di Ricovero e Cura a Carattere Scientifico Istituto Neurologico Carlo Besta, Milan, Italy, 18Faculty of Medicine, University of Lisbon, Lisbon, Portugal, 19Neurology Department, Centro Hospitalar e Universitário de Coimbra, Coimbra, Portugal, 20Department of Clinical Neurology, University of Oxford, Oxford, United Kingdom, 21Department of Neurology and Neurursurgery, McGill University, Montreal, Quebec, Canada, 22Institute of Brain, Behaviour and Mental Health, The University of Manchester, Manchester, United Kingdom, 23Neurologische Klinik und Poliklinik, Ludwig-Maximilians-Universität, Munich, Germany, 24Department of Neurology, University Hospital Ulm, Ulm, Germany, 25Memory Clinic and LNAVIE-Laboratory of Neuroimaging of Aging, Geneva, Switzerland, 26IRCCS Istituto Centro San Giovanni di Dio Fatebenefratelli, Brescia, Italy, 27Department of Neuroscience, Psychology, Drug Research and Child Health, University of Florence, Florence, Italy, 28Dementia Research Centre, UCL Institute of Neurology, London, United Kingdom, 29Centre for Neurodegenerative Disorders, Neurology Unit, University of Brescia, Brescia, Italy

W054 Electroencephalographic (EEG) Network Measures in Primary Progressive Aphasia and Apraxia of Speech
Rene Utianski1, John Caviness2, Hugo Botho2, Gregory Worrell2, Joseph Duffy3, Heather Clark2, Mary Machulda1, Jennifer Whitwell1, Keith Josephs1
1Mayo Clinic, Rochester, MN, United States, 2Mayo Clinic, Scottsdale, AZ, United States
W056 Detection of Alzheimer’s disease using paragraph vectors of spoken samples
Gang Lyu1, Kim-Han Thung2, Dinggang Shen3,4
1Changshu Institute of Technology, Changshu, China, 2Department of Radiology and BRIC, The University of North Carolina at Chapel Hill, Chapel Hill, NC, United States

W057 Salience network atrophy links neuron-type specific degeneration to loss of empathy in FTD
Fabrizio Fasano1, John Evans2, Cyril Charron2, Greg Parker2, Derek Jones2, Claudia Metzler-Baddeley2,3,4
1Siemens Healthcare Ltd, Frimley, Camberley, United Kingdom, 2Cardiff University, Cardiff, Wales, United Kingdom

W058 Does obesity cause neuroglia early changes? A causal insight into Alzheimer’s Disease risk factors
Patrizia Andrea Chieso1,2,3, Marion Houtk1,4, Andrea Vergallo1,2,3,4, Enrica Covedo1,2,4, Simone Lista1,2,4, Marie Claude Potier1, Henriek Zetterberg6,7,8,9,10,11,12, Kaj Blennow1,12, Eugene Vanmechelen11, Ann De Vos1,2, Bruno Dubois3,1,1, Harold Hampel1,2,3,4,5,6
1JAXA Research Fund & Sorbonne University Chair, Paris, France, 2Sorbonne University, GRC n° 21, Alzheimer Precision Medicine (APM), AP-H, Pitie-Salpetriere Hospital, Boulevard de l’hôpital, F-75013, Paris, France, 3Brain & Spine Institute (ICM), INSERM U 1127, CNRS UMR 7225, Boulevard de l’hôpital, F-75013, Paris, France, 4Institute of Memory and Alzheimer’s Disease (IM2A), Department of Neurology, Pitie-Salpetriere Hospital, AP-H, Boulevard de l’hôpital, F-75013, Paris, France, 5Sorbonne University, GRC n° 21, Alzheimer Precision Medicine (APM), AP-H, Pitie-Salpetriere Hospital, Paris, France, 6AXA Research Fund & Sorbonne University Chair, Paris, France, 7Paris, France, 8Sorbonne Universités, UPMC Univ Paris 06, CNRS, INSERM, Laboratoire d’Imagerie Biomédicale, F-75013, Paris, France, 9Institute of Neuroscience and Physiology, The Sahlgrenska Academy at the University of Gothenburg, Mölndal, Sweden, 10Clinical Neurodementia Laboratory, Sahlgrenska University Hospital, Mölndal, Sweden, 11Department of Molecular Neuroscience, UCL Institute of Neurology, Queen Square, London, United Kingdom, 12UK Dementia Research Institute, London, United Kingdom

W059* Comparison between Alzheimer’s & Lewy body disease–related atrophy patterns across the disease span
Seun Jeon1, Byoung Seok Ye2, Alan Evans3
1Montreal Neurological Institute, McGill University, Montreal, Quebec, Canada, 2Department of Neurology, Yongsei University College of Medicine, Seoul, Republic of Korea

W060 Multi-modal Factor Exploration of Atrophy, Cognitive and Tau Heterogeneity in Alzheimer’s Disease
Nanbo Sun1, Jianzhong Chen1, Elizabeth Mormino1, Mert Sabuncu1, B. T. Thomas Yeo1
1ECE, CIRC, SINAPSE & MNP, National University of Singapore, Singapore, Singapore, 2School of Medicine, Stanford University, Stanford, CA, United States, 3School of Electrical and Computer Engineering, Cornell University, Ithaca, NY, United States

W061 Effect of Age and APOE on Hippocampal Subfields in Cognitively Normal Subjects (N=1168, single site)
Greg Operto1, Jordi Huguet1, Carles Falcón2,3, José Luis Molinuevo1,4,5, Juan Domingo Gispert1,2
1BarcelonaBeta Brain Research Center, Barcelona, Spain, 2Centro de Investigación Biomédica en Red de Biointerfaz, Biomateriales y Nanomedicina (CIBER-BBN), Zaragoza, Spain, 3Institut d’Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Barcelona, Spain, 4CIBER Fragilidad y Envejecimiento Saludable (CIBERFES), Madrid, Spain

W062 Structural Covariance Networks among Normal, High Risk, and Cognitively Impaired Older Individuals
Neda Rashidi-Ranjbar1,2, Sanjeev Kumar3, Benoît H. Mulssant1, Nathan Hermann1, Linda Mah3, Alois C. J. Flink1, Corine E. Fischer1, Bruce G. Pollock1,2, Tarek K. Rajji1,3, Aristotle Voukios2,4 on behalf of the PACT-MD Study Group2
1Institute of Medical Science, Faculty of Medicine, University of Toronto, Toronto, Ontario, Canada, 2Centre for Addiction and Mental Health, Toronto, Ontario, Canada, 3Centre for Addiction and Mental Health, Department of Psychiatry, University of Toronto, Toronto, Ontario, Canada, 4Sunnybrook Health Sciences Centre, Department of Psychiatry, University of Toronto, Toronto, Ontario, Canada, 5Baycrest Health Sciences, Rotman Research Institute, Department of Psychiatry, University of Toronto, Toronto, Ontario, Canada, 6University Health Network, Department of Psychiatry, University of Toronto, Toronto, Ontario, Canada, 7Keenan Research Centre for Biomedical Research, St. Michael’s Hospital, Toronto, Ontario, Canada

W063 Parietal cortex contributions to episodic memory dysfunction in neurodegenerative syndromes
Siddharth Ramanan1, Lars Marstaller2, John Hodges2, Olivier Piguet1, Muireann Irish1
1University of Sydney, Sydney, Australia, 2Swansea University, Swansea, United Kingdom

W064 Distinct tract covariance changes in single-domain and multiple-domain mild cognitive impairment
Tao-Han Hung1, Yu-Ling Chang2, Yong-Chin Hsu2, Pin-Yu Chen3,4, Wen-Yih Isaac Tseng5,6
1Institute of Medical Device and Imaging, National Taiwan University College of Medicine, Taipei, Taiwan, 2Department of Psychology, National Taiwan University, Taipei, Taiwan, 3AcroViz Technology Inc., Taipei, Taiwan, 4Molecular Imaging Center, National Taiwan University, Taipei, Taiwan

W065 Looking beyond atrophy: cortical mean diffusivity in Alzheimer’s disease
Eduard Villaplana1, Victor Montal1, Jordi Pegueroles1, Rafael Blesa1, Alberto Ued1, Juan Fortea1
1Memory Unit, Department of Neurology, Hospital de la Santa Creu i Sant pau- IIB Sant Pau, Barcelona, Spain

W066 The Influence of Amyloid-β Deposition on Mild Cognitive Impairment Patients’ Brain Structure
Dai Xiangwei1, Zhang Junying1, Zhanjun Zhang2
1Beijing Normal University, Beijing, China

W067 Neuronal hyperactivity for disorientation in early stages of Alzheimer’s disease
Amnon Dafni-Merom1, Gregory Peters-Founshtein1, Shlomzion Kahana-Merhavi1, Shahar Arzy2
1Hadassah Hebrew University Medical Center, Jerusalem, Israel, 2Hadassah Hebrew University Medical Center, Jerusalem, Israel

W068 Individualized Structural Connectome for Diagnostic & Prognostic Prediction for Alzheimer’s Disease
Yun Wang1, Chenxiao Xu2, Seojoo Lee1, Yaokov Stern1, Hyoung Seop Kim3, Shinjae Yoo4, Jonathan Posner1, Joock Cha1
1Columbia University, New York, NY, United States, 2The State University of New York at Stony Brook, New York, NY, United States, 3National Health Insurance Service Ilsan Hospital, Ilsan, Korea, Republic of, 4Brookhaven National Laboratory, Upton, NY, United States
Distance Disintegration Delineates the Brain Connectivity Failure of Alzheimer’s Disease

Multimodal neuroimaging assessment of individualised disease trajectories in dementia

Amyloid and cerebrovascular burden divergently impact brain functional network changes over time

Polymorphism in MAGI2 gene modifies the effect of amyloid β on neurodegeneration

Behavioural symptoms of dementia and functional connectivity changes. A network-based study

Changes in gray matter volume after bilateral salpingo-oophorectomy prior to natural menopause

Longitudinal changes in microstructure and functional connectivity in a rat model of Alzheimer’s disease

Functional connectivity associated with tau levels in aging, Alzheimer’s, and small-vessel disease

EEG Phase Synchrony Characteristics of Alzheimer’s Disease

Neuroimaging and multimodal assessment of individualised trajectories in Alzheimer’s disease

Alzheimer’s disease and small vessel disease have distinct effects on the white matter network

Polymorphism in MAGI2 gene modifies the effect of amyloid β on neurodegeneration

Behavioural symptoms of dementia and functional connectivity changes. A network-based study

Changes in gray matter volume after bilateral salpingo-oophorectomy prior to natural menopause

Functional connectivity associated with tau levels in aging, Alzheimer’s, and small-vessel disease

Neuroimaging and multimodal assessment of individualised trajectories in Alzheimer’s disease

Alzheimer’s disease and small vessel disease have distinct effects on the white matter network

Polymorphism in MAGI2 gene modifies the effect of amyloid β on neurodegeneration

Behavioural symptoms of dementia and functional connectivity changes. A network-based study

Changes in gray matter volume after bilateral salpingo-oophorectomy prior to natural menopause

Functional connectivity associated with tau levels in aging, Alzheimer’s, and small-vessel disease

Neuroimaging and multimodal assessment of individualised trajectories in Alzheimer’s disease
W086 Sleep-disordered Breathing and Alzheimer’s disease; A Voxel-based Morphometry and BrainAGE study
Esmaeil Mohammadzadeh1, Bahram Mohajer1, Nooshin Abbas1, Habibollah Khazaei2, Mojtaba Zarei3, Simon B. Eckhoff1, Ivana Roszenzewiç1, Ricardo Osorio1, Claudia Eckhoff1, Masoud Tahmasian1
1Tehran University of Medical Sciences, Tehran, Iran, Islamic Republic of, 2Sleep Disorders Research Center, Kermanshah University of Medical Sciences, Kermanshah, Iran, Islamic Republic of, 3Shahid Beheshti University, Tehran, Iran, Islamic Republic of, 4Forschungszentrum Jülich, Jülich, Germany, 5Sleep and Brain Plasticity Centre, Department of Neuroimaging, IOPPN, King’s College London, London, United Kingdom, 6NYU School of Medicine, New York, NY, United States, 7Heinrich-Heine-University, Duesseldorf, Germany, 8Shahid Beheshti University, Tehran, Iran, Islamic Republic of

W087 Longitudinal Changes of Volumes and Complexity of Subcortical Regions in Five Cognitive Subgroups
Hao Liu1, Jiyoung Jiang1, Tao Liu1, Nicola Kochan1, Henry Brodaty1, Perminder Sachdev2, Wei Wen3
BUAA, Beijing, China, 1University of New South Wales, Randwick, NSW, 2Beijing University, Beijing, China, 1The University of New South Wales, Sydney, Australia, 2Centre for Healthy Brain Ageing, School of Psychiatry, University of New South Wales, Randwick, Australia, 3Centre for Healthy Brain Ageing, School of Psychology, University of New South Wales, Sydney, NSW, Australia

W088 Classification of Alzheimer’s disease, Mild Cognitive Impairment and healthy adults with EEG and MRI
Francesca Farina1, Derya Emek-Savaş2, Laura Rueda-Delgado, Rory Boyle1, Görsev Yener1, Robert Wheelan1
1Trinity College Institute of Neuroscience, Trinity College Dublin, Dublin, Ireland, 2Department of Psychology, Faculty of Letters, Dokuz Eylül University, Izmir, Turkey, 3Department of Neurology, Dokuz Eylül University Medical School, Izmir, Turkey

W089* A BIN1 genetic risk variant is associated with higher tau and worse memory independent of amyloid
Nicolai Franzmeier1, Julia Neitzel1, Anna Rubinski2, Michael Ewers1
1Institute for Stroke and Dementia Research, Munich, Germany, 2Institute for Stroke and Dementia Research, Munich, Bayern

W090 MRI-based frontotemporal dementia probability scores: a longitudinal presymptomatic biomarker study
Rogier Feijs1, Mark Bouts2, Frank de Vos3, Tijn Schouten3, Jessica Panman3, Lize Jiskoot3, Elise Dopper4, Jeroen van der Grond4, John van Swieten4, Serge Rombouts4
1Department of Radiology, Leiden University Medical Center, Leiden, Netherlands, 2Institute of Psychology, Leiden University, Leiden, Netherlands, 3Department of Neurology, Leiden University Medical Center, Rotterdam, Netherlands

W091 Functional connectivity alterations in the noradrenergic system in late-life major depression
Inés Del Cerro1,2, Virginia Soria3,4,5, Ignacio Martínez-Zalacaín1,2,3, Ángel Gonzalez-Bayón3,4,5, Mikel Urretavizcay3,4,5, Carlos Aguilera3,4,5, Ramón Reñé1,2, José Manuel Menchón1,2,3,4,5, Carles Soria-Mas4,5
1Bellvitge Biomedical Research Institute - IDIBELL, L’Hospitalet de Llobregat, Spain, 2Psychiatry Service, Bellvitge University Hospital, L’Hospitalet de Llobregat, Spain, 3Department of Clinical Sciences, Bellvitge Campus, University of Barcelona, Barcelona, Spain, 4CIBER Mental Health (CIBERSAM), Carlos III Health Institute (ISCIII), Barcelona, Spain, 5Diagnostic and Treatment of Dementia Unit, Bellvitge University Hospital, L’Hospitalet de Llobregat, Spain, 6Imaging Diagnostic Institute - IDI, L’Hospitalet de Llobregat, Spain, 7Department of Psychobiology and Methodology in Health Sciences, Universitat Autònoma de Barcelona, Barcelona, Spain

W092 White matter tract integrity and functional connectivity disruption in mild cognitive impairment
David López Sanz1, Juan Verdejo1, Pablo Cuesta1, Noelia Serrano1, Jaisalmer de Frutos1, Ricardo Bruna1, Maria Eugenia López3, Federico Ramirez4, Fernando Maestu1, Laura Rueda-Delgado1, Sascha Koch1,2
1Laboratory of Cognitive and Computational Neuroscience, Pozuelo de Alarcón, Spain, 2Institute for Stroke and Dementia Research, Munich, Germany

W093 A data-driven staging of in-vivo tau deposition is consistent with Braak’s post-mortem staging
Leon Aksman1, Daniel Alexander1, Frederik Barkhof2, Andre Altmann3
1University College London, London, United Kingdom, 2Amsterdam University Medical Centre, Amsterdam, Noord-Holland

W094 Multimodal PET/MRI Study of Connectivity in Cognitively Impaired Patients with Parkinson’s disease
Ercio Silvestri1,2,3, Maro Castellaro1,4, Alessandro Palmibit1,2, Roberto Biundo1,2, Eleonora Fiorenzato1,2, Diego Cecchin1,2, Alessandra Bertoldo1,2
1Department of Information Engineering, University of Padova, Padova, Italy, 2Padova Neuroscience Center, University of Padova, Padova, Italy, 3Department of Neuroscience, University of Padova, Padova, Italy, 4IRCCS Sant’Anna Hospital, Venice, Italy, 5Department of Nuclear Medicine, University of Padova, Padova, Italy

W095 Symptom-onset prediction in genetic frontotemporal dementia with multimodal MRI-based classification
Rogier Feijs1, Mark Bouts2, Frank de Vos3, Tijn Schouten3, Jessica Panman3, Lize Jiskoot3, Elise Dopper4, Jeroen van der Grond4, John van Swieten4, Serge Rombouts4
1Department of Radiology, Leiden University Medical Center, Leiden, Netherlands, 2Institute of Psychology, Leiden University, Leiden, Netherlands, 3Department of Neurology, Erasmus Medical Center, Rotterdam, Netherlands

W096 Abnormal Dynamic Functional Connectivity in Alzheimer’s Disease
Yue Gu1, Ying Lin1, Liangliang Huang2, Zhengjia Dai3
1Department of Psychology, Sun Yat-sen University, Guangzhou, China

W097 High Tau-PET in absence of beta-amyloid deposition is associated with FDTV-PET hypermetabolism
Anna Rubinski1, Nicolai Franzmeier1, Julia Neitzel2, Michael Ewers2
1Institute for Stroke and Dementia Research, Munich, Germany, 2Institute for Stroke and Dementia Research, Munich, Munich, Germany

W098 Disentangling Alzheimer’s disease and cognitive frailty: A paired associates oddball task in MEG
Ercio Silvestri1,2,3, David Nesbitt1,2, Rebecca Beresford1, Rik Henson3, Cam-CAN4, James Rowe1,2
1Cambridge Centre for Frontotemporal Dementia and Related Disorders, University of Cambridge, Cambridge, United Kingdom, 2MRC Cognition and Brain Sciences Unit, University of Cambridge, Cambridge, United Kingdom

W099 Left frontal connectivity attenuates the negative effect of tau pathology on memory performance
Julia Neitzel1,2, Anna Rubinski1, Nicolai Franzmeier1, Michael Ewers2
1Institute for Stroke and Dementia Research, Munich, Germany, 2German Center for Neurodegenerative Diseases (DZNE), Munich, Germany

W100 Neuroplasticity correlates of MRI imaging biomarkers in primary tauopathies
Salvatore Sapienza1, Jesse Brown1, 2Department of Psychology, Leiden University, Leiden, Netherlands, 3Department of Neurology, Erasmus Medical Center, Rotterdam, Netherlands
1Department of Radiology, Leiden University Medical Center, Leiden, Netherlands, 2Institute of Psychology, Leiden University, Leiden, Netherlands, 3Department of Neurology, Erasmus Medical Center, Rotterdam, Netherlands

To view full abstract text and ePosters, visit wwe5.aievolution.com/hbm1901
W101 How Alzheimer Disease affects brain networks during memory encoding?

SCOTT PELTIER1, SEAN MA1, HENRY PAULSON1, BRUNO GIORDANI1, BENJAMIN HAMPSTEAD1,2
1Department of Anesthesiology, Charité – Universitätsmedizin Berlin, Berlin, Germany, 2Institute of Biometry and Clinical Epidemiology, Charité - Universitätsmedizin Berlin, Berlin, Germany

W102 Functional signature of conversion in patients with Mild Cognitive Impairment

STEFANO DEI PIZZI, MIRIAM PUZZI, STEFANO L SENSIS1,2
1Department of Neuroscience, Imaging and Clinical Sciences, “G. d’Annunzio” University, Chieti, Italy, 2Departments of Neurology and Pharmacology, Institute for Memory Impairments and Neurological Disorders, University of California-Irvine, Irvine, CA, United States

W103 Decreased Default Mode Network Connectivity in Patients with Postoperative Cognitive Dysfunction

NORMAN ZACHARIAS1, WOLF-RÜDIGER BROCKHAUS1, FRIEDRICH BORCHERS1, SAYA SPEIDEL1, FLORIAN LAMMERS1, SOPHIE PIPER1, CLAUDIA SPIES1, GEORG WINTERER1
1Department of Anesthesiology, Charité – Universitätsmedizin Berlin, Berlin, Germany, 2Institute of Biometry and Clinical Epidemiology, Charité - Universitätsmedizin Berlin, Berlin, Germany

W104 Predicting memory impairment using resting-state brain connectomes in older adults

SCOTT PELTIER, SEAN MA, HENRY PAULSON, BRUNO GIORDANI, BENJAMIN HAMPSTEAD1,2
1Department of Anesthesiology, Charité – Universitätsmedizin Berlin, Berlin, Germany, 2Institute of Biometry and Clinical Epidemiology, Charité - Universitätsmedizin Berlin, Berlin, Germany

W105 Tract-specific white matter change associated with multiple cognitive domains in Mild Cognitive Impairment: a magnetoencephalography study

PIERPAOLO SORRENTO1, ANNA LARDONE2, ROSARIA RUCCO2, FRANCESCAS JACINI1, FABIO BASILE2, EMANUELA TROSI LOPEZ1, MARCO AZIOLI1, CARLO CAVALLERE1, VALENTINO MANZO1, ANNA CAROTENUTO1, ALESSANDRA IAVARONE1, CARMINE GRANATA1, GIUSEPPE RIVA1, ARJAN HILLEBRAND1, GIUSEPPE SORRENTO1
1University of Naples Parthenope, Naples, Italy, 2University of Naples Parthenope, Naples, Italy, 3University of Naples Parthenope, Naples, Italy, 4University of Naples Parthenope, Naples, Italy, 5A National University of Naples, Naples, Italy, 6National University of Naples, Naples, Italy, 7National University of Naples, Naples, Italy, 8National University of Naples, Naples, Italy, 9Université du Maine, Le Mans, France, 10University of Naples Parthenope, Naples, Italy, 11University of Naples Parthenope, Naples, Italy

W106 Topological changes in temporal lobes in Mild Cognitive Impairment: a magnetoencephalography study

PIERPAOLO SORRENTO1, ANNA LARDONE2, ROSARIA RUCCO2, FRANCESCAS JACINI1, FABIO BASILE2, EMANUELA TROSI LOPEZ1, MARCO AZIOLI1, CARLO CAVALLERE1, VALENTINO MANZO1, ANNA CAROTENUTO1, ALESSANDRA IAVARONE1, CARMINE GRANATA1, GIUSEPPE RIVA1, ARJAN HILLEBRAND1, GIUSEPPE SORRENTO1
1University of Naples Parthenope, Naples, Italy, 2University of Naples Parthenope, Naples, Italy, 3University of Naples Parthenope, Naples, Italy, 4University of Naples Parthenope, Naples, Italy, 5A National University of Naples, Naples, Italy, 6National University of Naples, Naples, Italy, 7National University of Naples, Naples, Italy, 8National University of Naples, Naples, Italy, 9Université du Maine, Le Mans, France, 10University of Naples Parthenope, Naples, Italy, 11University of Naples Parthenope, Naples, Italy

W107 Sulcal morphology as a predictor of conversion from MCI to AD in ADNI

FABRIZIO PIZZAGALLI1, SOPHIA THOMPPOUSOULOS2, GUILLAUME AUZZIAS2, JEAN-FRANCOIS MANGIN2, DENIS RIVIERE2, PETER KUCHEV2, PAUL THOMPSON2, NEDA JAHRASHAD2
1Imaging Genetics Center, Stevens Neuroimaging & Informatics Institute, Keck, USC, Marina Del Rey, CA, United States, 2Institute of Neurosciences of la Timone, Aix-Marseille University, Marseille, France, 3NeuroSpin-CEA (Commissariat à l’Énergie Atomique et aux Energies Alternatives), GIF-sur-Yvette, France, 4NeuroSpin-CEA (Commissariat à l’Énergie Atomique et aux Energies Alternatives), GIF-sur-Yvette, France, 5University of Maryland, Baltimore, MD, United States

W108 Transcriptional Pattern behind Functional Connectivity Change of BNM in Different Dementia States

PENG REN1, WENYANG ZHOU1, PINGPING WANG1, ALAKO ACHARYA1, SIYANG LI1, QINGHUA JIANG1, XIA LIANG1
1Harbin Institute of Technology, Harbin, China

W109 Targeting hippocampal hyperactivity with real-time fMRI neurofeedback in mild cognitive impairment

KATHARINA WEHRMANN1, KATHARINA KLINK1, CAROLE WAGONN1, STEFAN KLÖPPEL1, JESSICA PETER1
1University of Bern, Bern, Switzerland

W110 Amygdala volumes correlate with non-emotional memory retrieval in older women but not men

YANG JIANG1, EMILY WONG1, LUCAS BROSTER1, HOIQING HUANG1, MINGZHAO DING1
1University of Kentucky, Lexington, KY, United States, 2University of California, San Francisco, CA, United States, 3Univ. of Pittsburgh, Pittsburgh, PA, United States, 4Univ. of Florida, Gainesville, FL, United States

W111 Impact of the APOE-ε4 risk variant for AD on the functional architecture of the resting brain

RAFFAELE CARCIOGIA1, JOSÉ LUIS MALINUEVO1,2, GREG OPERTO1, CARLES FALCÓN4, JUAN DOMINGO GISPER4
1BarcelonaBeta Brain Research Center, Barcelona, Spain, 2Institut d’Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Barcelona, Spain, 3Barcelona, Spain, 4CIBER Fragilidad y Envejecimiento Saludable (CIBERFES), Madrid, Spain, 5Centro de Investigación Biomédica en Red de Bioingeniería, Biomateriales y Nanomedicina (CIBER-BBN), Madrid, Spain

W112 Dysfunctional brain dynamics and their origin in Lewy body dementia

JULIA SCHUMACHER1, LIU PERAZZ1, MICHAEL FIBANK1, ALAN THOMAS1, MARCUS KAISER2, PETER GALLAGHER2, JOHN O’BRIEN1, ANDREW BLAMIRE1, JOHN-PAUL TAYLOR1
1Institute of Neuroscience, Newcastle University, Newcastle upon Tyne, United Kingdom, 2School of Computing Newcastle University, Newcastle, United Kingdom, 3Department of Psychiatry, University of Cambridge School of Medicine, Cambridge, United Kingdom, 4Institute of Cellular Medicine & Newcastle Magnetic Resonance Centre, Newcastle upon Tyne, United Kingdom

W113 Predicting future cognitive decline of memory clinic patients using multimodal MRI

FRANK DE VOS1,2, TJÍN SCHOUTEN1,3, MARK BOUTS1,3, RAGIER FEIS1,3, MARK DE ROOI1,3, JEROEN VAN DER GROND2,3, SERGE ROMBOUS1,3
1Leiden University Medical Center, Leiden, Netherlands, 2Leiden University Medical Center, Leiden, Netherlands, 3Leiden Institute for Brain and Cognition, Leiden, Netherlands, 4Leiden University Medical Center, Leiden, Netherlands, 5LUMC, Leiden, Netherlands

W114 Network Diffusion Model Predicts the Progression of Brain Atrophy in Alzheimer’s Disease

YUCHEN LI1, PENG J1, JIAQIA ZHAO1, YI-CHIA KUNG2, PEI-NING WANG3,4, CHING-PO LIN1,2,5, CHUN-YI ZAC LO1,2,3,1
1Institute of Science and Technology for Brain-inspired Intelligence, Fudan University, Shanghai, China, 2Department of Biomedical Imaging and Radiological Sciences, National Yang-Ming University, Taipei, Taiwan, 3Department of Neurology, National Yang-Ming University School of Medicine, Taipei, Taiwan, 4Department of Neurology, Taipei Veterans General Hospital, Taipei, Taiwan, 5Brain Connectivity Laboratory, Institute of Neuroscience, National Yang-Ming University, Taipei, Taiwan
W115 Characterization of a « Temporoparietal Junction » Subtype of Alzheimer’s Disease
François Meyer1, Marie Wehenken2, Christophe Phillips3, Pierre Geurts4, Christine Bastin5, Eric Salmon2
1University of Liege, Cyclotern Research Centre, Liege, Belgium, 2GIGA in silico medicine, University of Liege, Liege, Belgium, 3University of Liege, Liege, Belgium, 4Department of Electrical Engineering and Computer Science, University of Liege, Liege, Belgium

W116 Alzheimer’s disease subtypes, a longitudinal perspective
Konstantinos Poulovskis1, Joana Braga Pereira2, Daniel Ferreira Padilha3, Eric Westmar4
1Karolinska Institute, Division of Clinical Geriatrics, Stockholm, Sweden, 2Karolinska Institute, Stockholm, Sweden

W117 Grey Matter Age Prediction as a Biomarker for Risk of Dementia: A Population-based Study
Johnny Wang1, Maria Knöö2, Alexei Tiulpin3, Florian Dubost4, Meike Vernooij5, Heibad Adams6, Mohammad Ikram7, Wiro Niessen7, Gennady Roshchupkin8
1Department of Medical Informatics, Erasmus MC, Rotterdam, Netherlands, 2Department of Epidemiology, Erasmus University Medical Center Rotterdam, Rotterdam, Netherlands, 3Research Unit of Medical Imaging, Physics and Technology, University of Oulu, Oulu, Finland, 4Department of Epidemiology, Erasmus University Medical Center Rotterdam, Rotterdam, Netherlands, 5Department of Epidemiology, Erasmus University Medical Center Rotterdam, Rotterdam, the Netherlands, 6Departments of Epidemiology, Erasmus MC University Medical Centre, Rotterdam, Netherlands, 7Department of Radiology, Erasmus MC: University Medical Center Rotterdam, Rotterdam, Rotterdam, South Holland

W118 The cortical neuroanatomy in relation to specific neuropsychological deficits in AD spectrum
Yu Hyun Park1, Jun Pyo Kim1, Seong Beom Park1, Young Ju Kim1, Duk L. Na1, Song Won Seo2
1Samsung Medical Center, Seoul, Korea, Republic of

W119 A Multimics Approach to Heterogeneity in Alzheimer’s Disease: Focused Review and Roadmap
Amanpreet Badhwar1, G. Peggy McFaul2, Shraddha Sapkota3, Sandra Block4, Howard Cherntok5, Simon Duchesne6, Mario Maselli7, Liang Li8, Roger Dixon9, Pierre Bellec10
1CRIUGM, University of Montreal, Montreal, Quebec, Canada, 2Department of Psychology, University of Alberta, Edmonton, Alberta, Canada, 3Hurvitz Brain Sciences Research Program, Sunnybrook Research Institute, University of Toronto, Toronto, Ontario, Canada, 4Sunnybrook Health Sciences, Toronto, ON, Canada, 5Rotman Research Institute, University of Toronto, Toronto, Ontario, Canada, 6Centre CERVO, Quebec City Mental Health Institute, Université Laval, Quebec City, Canada, 7Department of Medicine, Sunnybrook Health Sciences Centre, University of Toronto, Toronto, Ontario, Canada, 8Department of Chemistry, University of Alberta, Edmonton, Alberta, Canada

W120 Local metabolism impairments modify topological FC in Alzheimer disease: A PET/ MR study
Masoud Tahmasian1, Somayeh Maleki-Balajoo2, Farzaneh Rahmani3, Reza Kohsrowabadi4, Chun Meng5, Timo Grimm6, Valentin Riedl7, Alexander Drzewga8, Mojtaba Zare9, Christian Sorg10
1Institute of Medical Science and Technology, Shahid Beheshti University, Tehran, Iran, Islamic Republic of, 2Institute of Medical Science and Technology, Shahid Beheshti University, Tehran, Iran, 3Department of Nuclear Medicine, University Hospital Cologne, Cologne, Germany, 4Department of Nuclear Medicine, University Hospital Cologne, Cologne, Germany, 5Department of Neuoradiology, Technical University of Munich, Munich, Germany, 6Department of Electrical Engineering and Computer Science, University of Liege, Liege, Belgium, 7University of Liege, Liege, Belgium, 8Department of Electrical Engineering and Computer Science, University of Liege, Liege, Belgium

W121 RsEEG functional cortical source connectivity in patients with MCI due to Alzheimer’s and Lewy body
Roberta Lizio1, Claudio Babiloni1, Claudio Del Perico2, Giuseppe Nocci3, Andrea Sorcelli4, Susanna Loppé5, Raffaele Ferri6, Maria Teresa Pascarelli7, Aldo Dario8, Francesco Fani9, Francesco Orsi10, Carla Buttinelli11, Franco Gliubile12, Raffaella Franciotti13, Peter Fuhr14, Ute Gschwandtner15, Gerhard Ransmayr16, Garn Heinrich17, Lucia Fraioli18, Michela Pievani19, Fabrizia D’Antonio20, Carlo De Lena21, Bahar Güntekin22, Lütfü Hanoğlu23, Gorsev Yener24, Derya Emek-Savas25, Antonio Ivano Triggiani26, John-Paul Taylor27, Maria Francesca De Pandis28, Fabrizio Stocchi29, Dag Aarsland30, Flavio Mariano Nobili31, Giovanni Frisoni32, Laura Bonanni33
1Department of Physiopathology and Pharmacology “Vittoria Erspamer”, Sapienza University of Rome, Rome, Italy, 2IRCCS SDN, Naples, Italy, 3Oasi Research Institute - IRCCS, Troina, Troina, Troina, Italy, 4University of Genoa and IRCCS AOU S Martino-IST, Genoa, Italy, 5University of Genoa, Genoa, Italy, 6Sapienza University of Rome, Rome, Italy, 7Department of Neurosciences, Sapienza University of Rome, Rome, Italy, 8Dep. Neuroscience, Mental Health and Sensory Organs, Sapienza University of Rome, Rome, Italy, 9Department of Neuroscience Imaging and Clinical Sciences and CESI, University G d’Annunzio di Chieti, Chieti, Italy, 10Universitatspital Basel, Basel, Switzerland, 11Johannes Kepler University, Linz, Austria, 12AIT Austrian Institute of Technology GmbH, Vienna, Austria, Vienna, Austria, 13Hospital San Raffaele di Cassino, Cassino, Italy, 14IRCCS Istituto San Giovanni di Dio Fatebenefratelli, Brescia, Italy, 15Dep. Neurology and Psychiatry, Sapienza University of Rome, Rome, 16Istanbul Medipol University, Istanbul, Turkey, 17Department of Neurology, Dokuz Eylül University Medical School, Izmir, Turkey, 18Department of Psychology, Faculty of Letters, Dokuz Eylül University, Izmir, Turkey, 19Department of Clinical and Experimental Medicine, University of Foggia, Foggia, Italy, 20Institute of Neuroscience, Newcastle University, Newcastle upon Tyne, United Kingdom, 21IRCCS San Raffaele Pisana, Rome, 22Department of Old Age Psychiatry, King’s College University, London, United Kingdom, 23IRCCS Ospedale Policlinico San Martino, Genova, Italy, Genova, Italy, 24Memory Clinic and LANVIE-Laboratory of Neuroimaging of Aging, Geneva, Switzerland, 25University G d’Annunzio di Chieti-Pescara, Chieti, Italy

W122 Is atrophy in DMN regions related to abnormalities of resting state cortical sources in ADD?
Marina Blümer1, Filippo Carducci2, Antonio Ivano Triggiani3, Giuseppe Noce4, Marco Rizzo5, Roberta Lizio6, Claudio Babiloni7
1Sapienza University of Rome, Rome, Italy, 2Department of Clinical and Experimental Medicine, University of Foggia, Foggia, Italy, 3IRCCS SDN, Naples, Italy, 4Center for Neuroplasticity and Pain, The Faculty of Medicine, Aalborg University, Aalborg, Denmark

W123 Metabolic validation of the TgF344-AD rat model of Alzheimer’s disease: a longitudinal study
Emma Muñoz-Moreno1, Rui Simões2, Raul Tudefa3, Guadalupe Soria4
1IDIBAPS, Barcelona, Spain, 2Champalimaud Foundation, Lisbon, Portugal, 3CIBER-BBN, Group of Biomedical Image of the University of Barcelona, Barcelona, Spain

W124 Functional Brain Connectome Associated with Atrophy and Hypometabolism in Posterior Cortical Atrophy
Camilla Cividini1, Raffaelea Migliaccio2, Silvia Bascia3, Maxime Montembeault4, Marie Odile Habert5, Aurelie Kas6, Federica Agosta7, Massimo Filippi8
1San Raffaele Scientific Institute and Vita-Salute San Raffaele University, Milan, Italy, 2Inserm U127, Institut du cerveau et de la moelle épinière (ICM), Paris, France, 3LIB, Inserm U146, Université Pierre et Marie Curie, Paris 6, Paris, France, 4San Raffaele Scientific Institute, Vita-Salute San Raffaele University, Milan, Italy
A Multi-modal Deep Learning Framework for the Prediction of Neurodegeneration
Simeon Spasojević, Luca Passamonti, Andrea Duggento, Pietro Lio, Nicola Toschi
1Mr. Cambridge, Cambridgeshire, 2Department of Clinical Neurosciences, University of Cambridge, Cambridge, United Kingdom, 3Department of Biomedicine and prevention, University of Rome, Rome, VT, United States, 4Department of Computer Science and Technology, University of Cambridge, Cambridge, United Kingdom, 5Martinos Center for Biomedical Imaging (MGH) and Harvard Medical School, Boston, MA, United States

Connectivity and Cognition in African Americans and Caucasians with Dementia
Maria Misra, Jennifer Howell, William Hu, Jessica A. Turner
1Georgia State University, Marietta, GA, United States, 2Emory University, Atlanta, GA, United States, 3Department of Psychology, Georgia State University, Atlanta, GA, United States

Spatio-temporal protein dynamics across brain networks: application to Alzheimer’s disease
Sara Garbano, Marco Lorenzi
1INRIA, Sophia Antipolis, France

Baseline Amyloid (18F-AV-45 PET) Distributions by Consensus Diagnosis from the ADDS Consortium
David Keator, Julie Price, William Kreis, Michael Yassa, Michael Phelan, Eric Dorari, Christy Hom, Dana Nguyen, Florence Lari, Margaret Pulsvik, Diana Rosas, Sharon Krinski-McHale, Nicole Schrupp, Wayne Silverman, Ira Lott
1University of California, Irvine, Irvine, CA, United States, 2Massachusetts General Hospital Harvard Hospital, Boston, MA, United States, 3Columbia University, New York, NY, United States, 4New York State Institute for Basic Research in Developmental Disabilities, New York, NY, United States

GABA and Gtx levels in patients with early-stage AD and CBS: Initial results from the ActIGIA study
Boris Popozov, Boris Rauchmann, Daniel Keesser, Selim Gürsel, Stefano Milani, Matthias Brendel, Carla Palleis, Johannes Levin, Günter Höglfinger, Christian Haass, Georg Oelltschnner, Birgit Ertl-Wagner, Sophia Stöcklein, Robert Perneckzy
1Department of Radiology, Ludwig-Maximilians University, Munich, Germany, 2Department of Psychiatry and Psychotherapy, Ludwig-Maximilians University, Munich, Germany, 3Department of Nuclear Medicine, University Hospital, Ludwig-Maximilians-Universität, Munich, Germany, 4Department of Neurology, Ludwig-Maximilians-University, Munich, Germany, 5Neurologische Klinik und Poliklinik, Ludwig-Maximilians-Universitats, Munich, Germany, 6Department of Neurology, Technical University of Munich, Munich, Germany, 7German Center for Neurodegenerative Diseases (DZNE), Munich, Germany, 8The Russell H. Morgan Department of Radiology and Radiological Science, Johns Hopkins University Sch, Baltimore, MD, United States

Cardiorespiratory Fitness is Associated with Hippocampal Cognitive Reserve in Amnestic MCI
Tamar Eisenstein, Gailt Yogeov-Seligman, Elissa Ast, Nir Gilad, Haggai Sharon, Talma Hendler, Yuliya Lerner
1Sagol Brain Institute Tel-Aviv, Tel-Aviv Sourasky Medical Center, Tel Aviv, Israel, 2Department of Neurology, Tel-Aviv Sourasky Medical Center, Tel Aviv, Israel, 3Sagol Brain Institute Tel-Aviv, Tel-Aviv Sourasky Medical Center, Tel-Aviv, Israel

Impaired fMRI response in sub-hippocampal structures: how prior knowledge impairs memory in AD
Pierre-Yves Jomini, Quentin Duché, Elise Bannier, Isabelle Corouge, Jean-Christophe Ferré, Serge Belliard, Emmanuel Barbeau, Christian Barillot
1Brain and Cognition Research Center, CNRS UMR 5549, Université de Toulouse Paul Sabatier, Toulouse, France, 2Univ Rennes, Inria, CNRS, Inserm, IRISA, EMPENN ERL U1228, F-35000, Rennes, France, 3Neurology Department, Pontchaillou University Hospital, Rennes, France, 4Neuropsychology and Imaging of Human Memory Research Unit, Normandy University-Pfalz Research University-INSERM U1077, Caen University Hospital, Caen, France

Machine Learning Based Automated Staging of 18F-Florbetaben PET images Background
Jun Pyo Kim, Jeonghun Kim, Yeshin Kim, Seung Whan Moon, Hyjun Park, Soo Yoo, Hee Jin Kim, Duk L. Na, Song Won Seo
1Samsung Medical Center, Seoul, Korea, Republic of, 2Korea University, Seoul, Korea, Republic of, 3Kangwon National University Hospital, Chuncheon, Korea, 4Yonsei University, Seoul, Korea, Republic of

The trajectory of neuropathology reveals subtypes of Alzheimer’s disease — a data-driven approach
Katrin Andraschko, Alexandra Reichenbach
1Medical Informatics, Institute of Computer Science, Heilbronn University, Heilbronn, Germany

Different atrophy signatures for AD and FTD are associated with different CSF biomarker profiles
Mariana Ruiz-Peris, Roser Sala-Llonch, Neus Falgàs, Albert Lladó, Mircea Balasa, Sergio Borrega, Anna Antonell, Kaj Blennow, Henrik Zetterberg, Nuria Bargallo, Raquel Sanchez-Veliz
1Department of Biomedicine. University of Barcelona, Barcelona, Spain, 2Neurology Department, Hospital Clinic, Institut d’Investigacions Biomèdiques, Barcelona, Spain, 3Institute of Neuroscience and Physiology, The Sahlgrenska Academy at the University of Gothenburg, Mölndal, Sweden

Comparison of Neurodegeneration and Amyloid Deposition Summary Measures in Predicting Cognition
Aylin Dincer, Brian Gordon, Andrei Vlassenko, Shaneu Flores, Adedamola Adeokun, John Morris, Tamnie Benzinger
1Washington University School of Medicine, St. Louis, MO, United States

Associations between cerebral blood flow and structural and functional brain imaging measures in MCI
Chan-Mi Kim, Rachel Alvarado, Kimberly Stephens, Hsiao-Ying Yew, Dany Wang, Elizabeth Lenzitz, David Szot
1MGH/MIT/HMS Athinoulia A. Martinos Center for Biomedical Imaging, Charlestown, MA, United States, 2Department of Radiology, Athinoulia A. Martinos Center for Biomedical Imaging, Massachusetts General, Charlestown, MA, United States, 3Department of Neurology, University of Southern California, Los Angeles, CA, United States, 4Department of Psychiatry, Harvard Medical School, Boston, MA, United States, 5VA Boston Healthcare System, Boston, MA, United States

MRI texture analysis of the hippocampus in healthy controls and patients with MCI or AD
Julia Reinhart, Bram Stieljes, Sabine Krumm, Andreas Monsch, Christoph Stippich, Maria Blatow
1University of Zürich and University Hospital Zurich, Department of Neuroradiology, Zurich, Switzerland, 2University of Basel and University of Basel Hospital, Department of Radiology, Basel, Switzerland, 3Basel University and Felix Platter University Medicine of Aging, Basel, Switzerland, 4Department of Radiology, University Hospital Basel, University of Basel, Basel, Switzerland
W138  Relationship between Emotion Regulation Strategy and Neuroimaging Biomarkers of Alzheimer's Disease
Linda Math1, Mirjam Mulder-Heijstra2, Aliya Ali2, Frankie Chan3, Darren Liang2, Susan Vandermaars4, Nicolai Paul Verhoef5, Nathan Hermann5, J. Jean Chen6  
1Baycrest Health Sciences, Rotman Research Institute, Department of Psychiatry, University of Toronto, Toronto, Ontario, Canada, 2Rotman Research Institute, Baycrest, Toronto, Ontario, Canada, 3Rotman Research Institute, Baycrest, Toronto, Ontario, Canada, 4Baycrest Health Sciences, Toronto, Ontario, Canada, 5University of Toronto, Toronto, Ontario, Canada, 6Sunnybrook Health Sciences, Toronto, Ontario, Canada, 7Medical Biophysics, University of Toronto, Toronto, Ontario, Canada

W139  Abnormal modular structure in the Alzheimer's brain
Lei Guo1, HaoTeng Tang2, Qi Wang1, Heng Huang1, Dajiang Zhu1, Olusola Ajilore1, Paul Thompson1, Alex Leow2, Liang Zhan1  
1University of Pittsburgh, Pittsburgh, PA, United States, 2University of Pittsburgh, Pittsburgh, United States, 3Michigan State University, East Lansing, MI, United States, 4Electrical and Computer Engineering, University of Pittsburgh, Pittsburgh, PA, United States, 5University of Texas at Arlington, Arlington, TX, United States, 6University of Illinois at Chicago, Chicago, IL, United States, 7Imaging Genetics Center, Stevens Neuroimaging & Informatics Institute, Keck, USC, Marina del Rey, CA, United States

W140  Sub regional hippocampal atrophy, cognitive decline and its associations to Tau-PET pathology in AD
Boris-Stephan Rauchmann1, Matthias Brende2, Shailaja Mekala2, Julia Sauerbeck1, Selim Gürse1, Daniel Keese2, Robert Peńeczky2  
1LMU Munich, Munich, Bayern, 2Department of Nuclear Medicine, University Hospital, Ludwig-Maximilians-Universität, Munich, Germany, 3Department of Psychiatry and Psychotherapy, Ludwig-Maximilians University, Munich, Germany, 4German

W141  Asymmetry in hippocampal texture predicts conversion to AD independent of amyloid status
Jessica Kirkland Caldwell1, Akshay Pai1, Silvia Ingala2, Louise Sørensen3, Mads Nielsen3, Jaeson Kaylegian1, Sarah Banks4, Jeffrey Cummings5  
1Cleveland Clinic Lou Ruvo Center for Brain Health, Las Vegas, NV, 2Rotman Research Institute, Baycrest, Toronto, Ontario, Canada, 3Department of Nuclear Medicine, University Hospital, Ludwig-Maximilians-Universität, Munich, Germany, 4University of Texas at Arlington, Arlington, TX, United States, 5Imaging Genetics Center, Stevens Neuroimaging & Informatics Institute, Keck, USC, Marina del Rey, CA, United States

W142  The incidence of dementia in relation to cognitive reserve, brain reserve and cognition
Sander Lamballais1, Jendé Zijlmans1, Meike Vernooij1, Mohammad Ikram1, Annemarie Luik1, Mohammad Ikram1, Sarah Banks4, Jeffrey Cummings5  
1Erasmus MC University Medical Center Rotterdam, Rotterdam, Netherlands, 2Erasmus MC University Medical Center Rotterdam, Rotterdam, Netherlands

W143  Relationship of verbal memory to default mode network volume differs by sex and amyloid status
Jessica Kirkland Caldwell1, Xiaowei Zhuang2, Aaron Ritter1, Kartik Sahin2, Virendra Mishra3, Jeffrey Cummings1, Sarah Banks4, Dietmar Cordes5  
1Cleveland Clinic Lou Ruvo Center for Brain Health, Las Vegas, NV, 2Cerebriu A/S, Biomediq A/S, University of Copenhagen, Copenhagen, Denmark, 3University of Texas at Arlington, Arlington, TX, United States, 4University of Texas at Austin, Austin, TX, United States, 5Imaging Genetics Center, Stevens Neuroimaging & Informatics Institute, Keck, USC, Marina del Rey, CA, United States

W144  Labeled Cortical Distance Mapping Reveals Temporal Lobe Morphometry in Primary Progressive Aphasia
Erin Meier1, Jennifer Crinion2, Shannon Cebron3, Margaret Chow4, Andrea Faria2, Argye Hills1, Tikol Ratnamather1,2,3  
1Johns Hopkins University School of Medicine, Baltimore, MD, United States, 2University College London, London, United Kingdom, 3Johns Hopkins University, Baltimore, MD, United States

W145  Sex moderates amyloid and ApoE4 effect on prefrontal/default mode network resting state connectivity
Jessica Kirkland Caldwell1, Xiaowei Zhuang2, Mackenzie Leavitt3, Jeffrey Cummings1, Dietmar Cordes5  
1Cleveland Clinic Lou Ruvo Center for Brain Health, Las Vegas, NV, United States, 2Cleveland Clinic, Las Vegas, NV, United States, 3Cleveland Clinic Lou Ruvo Center for Brain Health, Las Vegas, NV, United States, 4University of Texas at Arlington, Arlington, TX, United States, 5Imaging Genetics Center, Stevens Neuroimaging & Informatics Institute, Keck, USC, Marina del Rey, CA, United States

W146  Differences in Patterns of White Matter Hyperintensities in Neurodegeneration and Healthy Aging
Mohsa Dadori1, Louis Collins1  
1McGill University, Montreal, Quebec, Canada

W147  Brain network dynamics in older age cognitive frailty and dementia - a MEG resting-state study
David Nesbitt2, Roni Tiron3, Darren Price1, James Rowel1, Richard Henson4  
2MRC Cognition and Brain Sciences Unit, University of Cambridge, Cambridge, United Kingdom, 3Cambridge Centre for Frontotemporal Dementia and Related Disorders, University of Cambridge, Cambridge, United Kingdom, 4University of Cambridge, Cambridge, UK

W148  Associating Alzheimer's disease risk genes with the Default Mode Network
Vanessa Grove1, Leighton Folkes1, Simon Moxon1, Saber Sami1  
1University of East Anglia, Norwich, United Kingdom

W149  Estimating Alzheimer’s Risk from Memory Performance: A Behavioural Partial Least Squares Analysis
Sheida Rajaouni1, Elsa Yu1, Sricharana Rojagopalo1, Stamataula Pasvanis1, John Breitner1, M. Natasha Rajah2, PREVENT-AD Research Group3  
1McGill University, Montreal, Quebec, Canada, 2Douglas Hospital Institute, Montreal, Quebec, Canada, 3Douglas Mental Health University Institute, Montreal, Quebec, Canada, 4McGill University, Montreal, Quebec, Canada, 5McGill University, Montreal, QC, Canada

W150  Comparing Harmonization Approaches across ADNI3 Diffusion MRI Protocols
Artemis Tzavaliagkos-Petrulou1, Talia Nir1, Sophia Thomopoulos2, Robert Reid2, Matt Bernstein3, Bret Borowski4, Clifford Jack5, Michael Weiner6, Neda Jahanshad7, Paul Thompson7  
1Imaging Genetics Center, Stevens Neuroimaging & Informatics Institute, Keck, USC, Marina Del Rey, CA, United States, 2Imaging Genetics Center, Stevens Neuroimaging & Informatics Institute, Keck, USC, Marina del Rey, CA, United States, 3Department of Information Technology, Mayo Clinic and Foundation, Rochester, NV, United States, 4Department of Radiology, Mayo Clinic and Foundation, Rochester, NY, United States, 5Department of Radiology, Mayo Clinic and Foundation, Rochester, MN, United States, 6Mayo Clinic Rochester, ON, United States, 7Imaging Genetics Center, Stevens Neuroimaging & Informatics Institute, Keck, USC, Marina del Rey, CA, United States

W151  Structural and functional changes of the insula across the frontotemporal dementia spectrum
Daniel Roquet1,2,3, Marion Sourn1, John Hodges2,3,5, Daniel Roquet1,2,3, Muireann Irish1,2,3  
1School of Psychology, the University of Sydney, Sydney, NSW, Australia, 2Brain and Mind Centre, the University of Sydney, Sydney, NSW, Australia, 3Australian Research Council Centre of Excellence in Cognition and its Disorders, Sydney, NSW, Australia, 4School of Aerospace, Mechanical and Mechatronic Engineering, The University of Sydney, Sydney, NSW, Australia, 5Sydney Medical School, the University of Sydney, Sydney, NSW, Australia

W152  Functional connectivity in older age cognitive frailty and dementia - a MEG resting-state study
David Nesbitt2, Ece Kocagoncu1, Richard Henson4, James Rowel1  
2MRC Cognition and Brain Sciences Unit, University of Cambridge, Cambridge, United Kingdom, 3Cambridge Centre for Frontotemporal Dementia and Related Disorders, University of Cambridge, Cambridge, United Kingdom
**W153 Multimodal Prediction of Progression to Alzheimer's Disease**  
Anees Abrof, Zening Fu, Vince Calhoun  
1The Mind Research Network, Albuquerque, NM, United States

**W154 Prediction of 7-year longitudinal changes from subjective cognitive decline to MCI**  
Ling Yue, Dan Hu, Han Zhang, Junhao Wen, Ye Wu, Tao Wang, Dinggang Shen, Shifu Xiao  
1Shanghai Mental Health Center, School of Medicine, Shanghai Jiao Tong University, Shanghai, Other  
2Department of Radiology and BiRC, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States  
3ARAMIS Lab, ICM, INSERM U127, CNRS UMR 7225, Sorbonne University, Inria, Paris, France, Paris, France

**W155 Tracking individual trajectories of joint structural and dynamic functional connectivity in dementia**  
Marion Souty, Daniel Roquet, Cheng Liang, Olivier Piguet, Fernando Calamante, Ramon Landin-Romero  
1School of Aerospace, Mechanical and Mechatronic Engineering, The University of Sydney, Sydney, Australia  
2Brain and Mind Centre, the University of Sydney, Sydney, Australia  
3Australian Research Council Centre of Excellence in Cognition and its Disorders, Sydney, Australia  
4Sydney Imaging, The University of Sydney, Sydney, Australia  
5Florey Department of Neuroscience and Mental Health, The University of Melbourne, Melbourne, Australia

**W156 Deep Residual Learning for Binary and Multi-Class Diagnostic/Prognostic Classification**  
Anees Abrof, Vince Calhoun  
1The Mind Research Network, Albuquerque, NM, United States

**W157 Longitudinal cortical changes underlying speech production deficits in primary progressive aphasia**  
Cheng Liang, Kirrie Ballard, Penelope Monroe, Cristian Leyton, Olivier Piguet, Ramon Landin-Romero  
1The University of Sydney, Sydney, Australia  
2Massachusetts General Hospital and Harvard Medical School, Boston, MA, United States

**W158 A different type of primary progressive aphasia; a case report of dysprosody and word deafness**  
Mika Konishi, Hajime Tabuchi, Kyoko Mashima, Masaru Mimura  
1School of Aerospace, Mechanical and Mechatronic Engineering, The University of Sydney, Sydney, Australia  
2Brain and Mind Centre, the University of Sydney, Sydney, Australia  
3Department of Radiology and BiRC, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States  
4ARAMIS Lab, ICM, INSERM U127, CNRS UMR 7225, Sorbonne University, Inria, Paris, France, Paris, France

**W159 Tracking individual trajectories of joint structural and dynamic functional connectivity in dementia**  
Marion Souty, Daniel Roquet, Cheng Liang, Olivier Piguet, Fernando Calamante, Ramon Landin-Romero  
1School of Aerospace, Mechanical and Mechatronic Engineering, The University of Sydney, Sydney, Australia  
2Brain and Mind Centre, the University of Sydney, Sydney, Australia  
3Australian Research Council Centre of Excellence in Cognition and its Disorders, Sydney, Australia  
4Sydney Imaging, The University of Sydney, Sydney, Australia  
5Florey Department of Neuroscience and Mental Health, The University of Melbourne, Melbourne, Australia

**W160 Altered structural covariance networks in Alzheimer’s dementia with small vessel disease**  
Seok-Jun Hong, Neda Bernasconi, Andrea Bernasconi  
1Shanghai Mental Health Center, School of Medicine, Shanghai Jiao Tong University, Shanghai, Other  
2Department of Radiology and BiRC, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States  
3ARAMIS Lab, ICM, INSERM U127, CNRS UMR 7225, Sorbonne University, Inria, Paris, France, Paris, France

**W161 Data-driven MRI Biotyping of Epileptogenic Malformations of Cortical Development**  
Hyo Lee, Ravnvoor Gill, Fatemeh Fadadi, Seok-Jun Hong, Neda Bernasconi, Andrea Bernasconi  
1Montreal Neurological Institute, McGill University, Montreal, Quebec, Canada

**W162 Hierarchical Organization of The Cerebral Cortex is Disrupted in Temporal Lobe Epilepsy**  
Fatemeh Fadadi, Hyo Lee, Benoit Caldarou, Ravnvoor Gill, Boris Bernhardt, Seok-Jun Hong, Andrea Bernasconi, Neda Bernasconi  
1Montreal Neurological Institute, McGill University, Montreal, Quebec, Canada

**W163 Predicting Surgical Outcome in Temporal Lobe Epilepsy Patients Using Machine Learning**  
Ben Sinclair, Varduhi Cahiili, Charles Malpas, Andrew Kaye, Rod Hicks, Terence O’Brien  
1Monash University, Melbourne, Australia  
2University of Melbourne, Melbourne, Australia

**W164 Imaging protocol and data processing stream for VNS fMRI at 3T for stimulation parameter adjustments**  
Jerry Szofraski, Jane Allendorfer, Jason Begnaud, Amy Keith  
1University of Alabama at Birmingham, Birmingham, AL, United States  
2LivoNova, Houston, TX, United States

**W165 Changes in the functional Language Connectome after Temporal Lobe Resection**  
Kari-Heinz Nenning, Pamela Thompson, Mahinda Yogarajah, Andrew McEvoy, Victor Schmidbauer, Michelle Schwarz, Gudrun Geisel, Karin Trimmel, Gregor Kasprian, Matthias Koepp, Georg Lange, John Duncan, Silvia Bonelli  
1Medical University of Vienna, Vienna, Austria  
2University College London, London, United Kingdom  
3National Hospital for Neurology and Neurosurgery, London, United Kingdom

**W166 Comparison of Manual and Automated Tractography in Patients with Refractory Temporal Lobe Epilepsy**  
Barbara Kreilkamp, Lucy Lisanti, G. Russell Glenn, Udo Wiesmann, Kumar Das, Anthony Marson, Simon Keller  
1University of Liverpool, Liverpool, United Kingdom  
2Royal Society, London, United Kingdom  
3University of South Carolina, Charleston, SC, United States  
4The Walton Centre NHS Foundation Trust, Liverpool, United Kingdom

**W167 Widespread Alterations in Functional Connectome Embedding Following Temporal Lobe Epilepsy Surgery**  
Sara Lariviére, Yifei Weng, Reinder Van Doel, Zhenghe Wang, Andrea Bernasconi, Neda Bernasconi, Zhiqiang Zhang, Boris Bernhardt  
1McConnell Brain Imaging Centre, Montreal Neurological Institute, McGill University, Montreal, Quebec, Canada  
2Department of Medical Imaging, Jilin Hospital, Medical School of Nanjing University, Nanjing, China  
3Department of Radiology, Jilin Drum Tower Hospital, The Affiliated Hospital of Nanjing University, Nanjing, China

**W168* Distance-Enriched Functional Connectomics in Drug-Resistant Temporal Lobe Epilepsy**  
Sara Lariviére, Yifei Weng, Reinder Van Doel, Zhenghe Wang, Andrea Bernasconi, Neda Bernasconi, Zhiqiang Zhang, Boris Bernhardt  
1McConnell Brain Imaging Centre, Montreal Neurological Institute, McGill University, Montreal, Quebec, Canada  
2Department of Medical Imaging, Jilin Hospital, Medical School of Nanjing University, Nanjing, China  
3Department of Radiology, Jilin Drum Tower Hospital, The Affiliated Hospital of Nanjing University, Nanjing, China

**W169 Localizing value on sublobar scale of statistical SPECT analysis in intractable TLE: ISAS vs SISCOM**  
Jeong-sik Kim, Seung-bong Hong  
1Samsung Medical Center, Seoul, Korea, Republic of

---

**Epilepsy**
W170  Distinct laterality of tract alteration in left and right subtypes of mesial temporal lobe epilepsy  
Hu Hsi-Yuan1, Chen Chang-Lei, Shih Yao-Chi2,2, Liou Hong-Huei2,2, Yang-Chin Hsu3, Wen-Yih Isaac Tseng2,2  
1Institute of Medical Device and Imaging, National Taiwan University College of Medicine, Taipei, 
Taiwan; 2Institute of Biomedical Engineering, National Taiwan University, Taipei, Taiwan; 3Department of 
Neurology, National Taiwan University Hospital and College of Medicine, Taipei, Taiwan.  

W171  Characterizing the optimal control energy trajectory in temporal lobe epilepsy  
Xiaosong He1, Jennifer Stiso1, Jason Kim1, Zhixin Liu1, Eli Cornblath1, Tommaso Menar1, Fabio Pasqualetti2, Michael Sperling3, Joseph Tracy1, Danielle Bassett1  
1University of Pennsylvania, Philadelphia, PA, United States; 2University of California, Riverside, Riverside, 
CA, United States; 3Thomas Jefferson University, Philadelphia, PA, United States.  

W172  Contralateral functional connectivity changes after temporal lobe epilepsy surgery  
Victoria Morgan1, Baxter Rogers1, Hernan Gonzalez2, Sarah Goodale2, Dario Englot1  
1Vanderbilt University Medical Center, Nashville, TN, United States; 2Vanderbilt University, Nashville, 
TN, United States.  

W173  Deep learning DWI connectome improves detection of language network alteration in epilepsy children  
Justin Jeong1, Min-Hee Lee1, Csaba Juhasz1, Eishi Asano1  
1Pediatrics and Neurology, Wayne State University, Detroit, MI, United States; 2Pediatrics, Wayne 
State University, Detroit, MI, United States.  

W174  Identification of eloquent cortical areas using ECoG in patients with drug resistant epilepsy  
Mario E. Archila-Melendez1, Giancarlo Valente1, Rob Rouhl1, Erik Gommer1, Mario E. Archila-Melendez1, 
Giancarlo Valente1, Rob Rouhl1, Erik Gommer1, 1AcroViz Technology Inc., Taipei, Taiwan; 2Molecular Imaging 
Center, National Taiwan University, Taipei, Taiwan.  

W175  Multimodal imaging in focal epilepsy: cases with no BOLD response in standard EEG-fMRI analysis  
Victoria Morgan1, Baxter Rogers1, Hernan Gonzalez2, Sarah Goodale2, Dario Englot1  
1Vanderbilt University Medical Center, Nashville, TN, United States; 2Vanderbilt University, Nashville, 
TN, United States.  

W176  Enhanced Fast-VESTAL to Locate Interictal Epileptic Discharges in Patients with Epilepsy  
Jane Allendorfer1, E. Martino Bebin1, Tyler Gastor1, Leslie Grayson1, Kathleen Hernando1, James 
Houston1, Jerzy Szafarlski1  
1University of Alabama at Birmingham, Birmingham, AL, United States.  

W177  *NR4A1 Associated Multimodal Neuroimaging Patterns Impaired in Mesial Temporal Lobe Epilepsy  
Dongmei Zhi, Wan Yeu Wu, Bo Xiao, Rongtao Jiang2, Shile Qi, Lili Lung1, Jing Sun1,2,5  
1Institute of Automation, Chinese Academy of Sciences, Beijing, China; 2University of Chinese 
Academy of Sciences, Beijing, China; 3Department of Neurology, Xiangya Hospital, Central South 
University, Changsha, China; 4The Mind Research Network, Albuquerque, NM, United States; 5CAS 
Centre for Excellence in Brain Science and Intelligence Technology, Institute of Automation, Chinese 
Academy of Sciences, Beijing, China.  

W178  Feasibility of using machine-learning to guide sEEG implantation in focal epilepsy  
Sophie Adler1, Konrad Wagstfy2, Birgit Pimpel1, Sara Lorir1, Kiran Seunarine1, Roxana Gunny1, Rachel 
Thomton1, J Helen Cross1, Torsten Baldeweg1, Martin Tisdall3  
1Great Ormond Street ICH, UCL, London, United Kingdom; 2University of Cambridge, Cambridge, 
United Kingdom; 3Great Ormond Street Hospital, London, United Kingdom.  

W179  Accelerated Brain Aging in Temporal Lobe Epilepsy  
Gyujoon Hwang1, Bruce Hermann1, Veena Nair1, Jedidiah Mathis2, Cole Cook2, Neelima Tellipragada2, 
Charlene Rivero-Bonet1, Rosaleena Mohanty1, Gengan Koh1, Dace Almane1, Courtney Forsyth2, 
Andrew Nencka2, Elizabeth Feiloni1, Aaron Struck1, Rasmus Birn3, Rama Magon2, Lisa Conant2, Colin 
Humphries2, Manoj Raghav2, Edgar DeYoe3, Barbara Bendlin2, Vivek Prabhakaran2, Jeffrey Binder2, 
Elizabeth Meyeran2  
1University of Wisconsin-Madison, Madison, WI, United States; 2Medical College of Wisconsin, 
Milwaukee, WI, United States.  

W180  Cannabidiol-induced changes in attention fMRI activation in treatment-resistant epilepsy  
Jane Allendorfer1, E. Martino Bebin1, Tyler Gastor1, Leslie Grayson1, Kathleen Hernando1, James 
Houston1, Jerzy Szafarlski1  
1University of Alabama at Birmingham, Birmingham, AL, United States.  

W181  Sleep EEG in Children with Focal Epilepsy: Disruptions in Slow Wave Activity and Topography  
Maria Eriksson1,2, Bigna Bolsterli3, J Helen Cross1,2, Torsten Baldeweg1,2, Samantha Chan2  
1UCL Great Ormond Street Institute of Child Health, London, United Kingdom; 2Great Ormond 
Street Hospital for Children, London, United Kingdom; 3University Children’s Hospital Zurich, Zurich, 
Switzerland.  

W182  BOLD Response to Interictal Epileptiform Discharges Helps Predict Surgical Outcome in Focal Epilepsy  
William Wilson1,2,3, Negar Mohammadi1,2,2, Daniel Pittman4,3, Victoria Mosher2,4, Poolo Federico5.6.2,2  
1Department of Neuroscience, University of Calgary, Calgary, Alberta, Canada; 2Hotchkiss Brain 
Institute, Calgary, Alberta, Canada; 3Seaman Family MR Research Centre, Calgary, Alberta, Canada; 
4Hotchkiss Brain Institute, Calgary, Alberta, Canada; 5Department of Radiology, University of Calgary, 
Calgary, Alberta, Canada; 6Department of Clinical Neurosciences, University of Calgary, Calgary, 
Alberta, Canada.  

W183  Epilepsy Connectome Project: Neural Correlates of Personality Traits in Temporal Lobe Epilepsy  
Charlene Rivera-Bonet1, Bruce Hermann2, Cole Cook2, Courtney Forsyth2, Gyujoon Hwang3, Kevin 
Dabb3, Veena Nai2, Jedidiah Mathis2, Linda Allen2, Dace Almane1, Rasmus Birn3, Lisa Conant2, Edgar 
DeYoe3, Elizabeth Feiloni1, Colin Humphries2, Rama Magon2, Andrew Nencka2, Onyekachi Nwoke1, 
Manoj Raghav2, Aaron Struck1, Neelima Tellipragada2, Vivek Prabhakaran2, Jeffrey Binder2, 
Elizabeth Meyeran2  
1University of Wisconsin-Madison, Madison, WI, United States; 2University of Wisconsin-Madison, 
Madison, WI, United States; 3Medical College of Wisconsin, Milwaukee, WI, United States; 
4Medical College of Wisconsin, Milwaukee, WI, United States.  

W184  Hippocampal functional connectivity associations with cognitive skills in temporal lobe epilepsy  
Alfonso Fajardo-Valde2, Raúl Rodríguez-Cruces1, Luis Cona1  
1Instituto de Neurobiología, UNAM, Campus Juriquilla, Querétaro, México; 2Instituto de 
Neurobiología, UNAM, Campus Juriquilla, Querétaro, México.  

W185  Altered respiratory pulsatility in epilepsy patients brain  
Janne Kanamar1, Hanna Ansakorpi1, Niko Huotari1, Heta Helakari1, Lauri Raitama1, Ville Raatikainen1, 
Jussi Kantola1, Vesa Korhonen3, Vesa Kiviniemi3  
1University of Oulu, Oulu, Finland; 2Oulu University Hospital, Oulu, Finland.
W186 Brain connectivity with or without epileptic spikes: a simultaneous scalp and intracranial EEG study
Margherita Carboni2, Renaud Marquis1, Laurent Spinelli1, Giannina Iannotti1,2,3, Bernd Vorderwülbecke4, Gianpaolo Toccano1, Maria Rubega3, David Pascucci1, Shahar Momjian3, Sebastien Tourbier1, Gis Ploem2, Patric Hagmann4, Karl Schaller1, Christoph Michel1, Margitta Seeck1, Pieter Van Mierlo1, Serge Vulliemoz2
1EEG and Epilepsy Unit, University Hospital of Geneva, Geneva, Switzerland, 2Functional Brain Mapping Lab, Department of Fundamental Neurosciences, University of Geneva, Geneva, Switzerland, 3Department of Neurosurgery, University Hospital of Geneva and Faculty of Medicine, Geneva, Switzerland, 4Department of Epilepsy, Center Berlin-Brandenburg, Department of Neurology, Charité – Universitätsmedizin Berlin, Berlin, Germany, 5Unit of sleep medicine and Epilepsy C. Mondino National Neurological Institute, Pavia, Italy, 6Perceptual Networks Group, Department of Psychology, University of Fribourg, Fribourg, Switzerland, 7Department of Radiology, University Hospital of Lausanne, Lausanne, Switzerland, 8Medical Image and Signal Processing Group, Department of Electronics and Information Systems, Ghent, Ghent, Belgium

W187 EEG-connectivity informed by EEG-fMRI-connectivity in epilepsy with and without spikes
Giannina Iannotti1,2,3, Margherita Carboni2, Sebastien Tourbier1, Maria Rubega3, Gianpaolo Toccano1, Bernd Vorderwülbecke4, Pieter Van Mierlo1, Patric Hagmann4, Margitta Seeck1, Karl Schaller1, Christoph Michel1, Serge Vulliemoz2
1Functional Brain Mapping Lab, Department of Fundamental Neurosciences, University of Geneva, Geneva, Switzerland, 2EEG and Epilepsy Unit, University Hospital of Geneva, Geneva, Switzerland, 3Department of Neurosurgery, University Hospital of Geneva and Faculty of Medicine, Geneva, Switzerland, 4Department of Radiology, University Hospital of Lausanne, Lausanne, Switzerland, 5Unit of sleep medicine and Epilepsy C. Mondino National Neurological Institute, Pavia, Italy, 6Epilepsy-Center Berlin-Brandenburg, Department of Neurology, Charité – Universitätsmedizin Berlin, Berlin, Germany, 7Medical Image and Signal Processing Group, Department of Electronics and Information Systems, Ghent, Ghent, Belgium

W188 Hypothalamus resting state functional connectivity in childhood narcolepsy type-1
Daniela Ballotta1, Fabio Pizzoi2,3, Anna Elisabetta Vaudano1, Francesca Benussi1,4, Francesco Talani4,5, Giuseppe Piazzesi1,2, Stefano Meletti2,3
1Neurology Unit, OCSAE Hospital, AOU Modena, Modena, Italy, 2Department of Biomedical and Neuroradiom Sciences, University of Bologna, Bologna, Italy, 3IRCCS Istituto delle Scienze Neurologiche, AUSL of Bologna, Bologna, Italy, 4Department of Biomedical, Metabolic, and Neural Sciences, University of Modena and Reggio, Modena, Italy, 5Center for Neuroscience and Neurotechnology, University of Modena and Reggio Emilia, Modena, Italy

W189 Hemodynamic Response Function Modelling from Generalized Spike-wave Discharges Event Related Data
Nikodem Hryniewicz1, Rafał Rola1, Marcin Siryczuk2, Ewa Piątkowska-Janko1, Bartosz Kossowski1, Piotr Bogorodzki1,2
1Nalecz Institute of Biocybernetics and Biomedical Engineering, Polish Academy of Sciences PAS, Warsaw, Poland, 2Neurology Department of The Military Institute of Aviation Medicine, Warsaw, Poland, 3The Institute of Radioelectronics and Multimedia Technology, WUT, Warsaw University of Technology, Warsaw, Poland

W190 Integration of multi-shell diffusion imaging derived metrics in tractography reconstructions
Joana Guida1,2, Luis Lacerda1, Alexandre Andrade1, Hugo Ferreira1, Chris Clark2
1Institute of Biomedical Engineering and Biophysics (IBEB), Faculty of Sciences, University of Lisbon, Lisbon, Portugal, 2Developmental Imaging and Biophysics Section, UCL Great Ormond Street Institute of Child Health, London, United Kingdom

W191 Hemodynamic correlates of emotion regulation in left-sided temporal lobe epilepsy
Anissa Benzi1, Valentina Krenz1, Anna Dolf1, Merisa Ferat2, Martin Wegryn2, Friedrich Woerermann1, Christian Bien3,4, Johanna Kissler1, Kirsten Labudda2
1Gesellschaft für Epilepsieforschung, Bielefeld, Germany, 2Hamburg University, Hamburg, Germany, 3Bielefeld University, Bielefeld, Germany, 4Münster University, Münster, Germany, 5Épilepsie Centre Bethel, Bielefeld, Germany

W192 Reduced network connectivity in brains of STX1B mutation carriers is correlated with gene expression
Justus Marck1,2, Christina Stief1,3, Andre Altmann3, Regina Reynolds4, Mino Ryten5, Stefan Wolking1,6, Rikke Møller6, Trine Hammer6, Adham Elshahabi7, Erika Wagner4,8, Silke Klammer-Ethofer9, Christoph Braun5,6, Holger Lerche5, Niels Focke10
1Hertie Institute of Clinical Brain Research, University of Tübingen, Tübingen, Germany, 2University Clinic Göttingen, Göttingen, Germany, 3University College London, London, United Kingdom, 4Department of Neurodegenerative Disease, UCL Institute of Neurology, London, United Kingdom, 5Department of Neurology and Epileptology, Hertie Institute of Clinical Brain Research, Tübingen, Germany, 6Department of Epilepsy Genetics, Danish Epilepsy Centre Danalund, Danalund, Denmark, 7Hertie Institute of Clinical Brain Research, University of Tübingen, Tübingen, Germany, 8Department of Neurology and Epileptology, Hertie Institute of Clinical Brain Research, Tübingen, Germany, 9University of Tübingen, Tübingen, Germany, 10Clinic of Clinical Neurophysiology, Georg-August University of Göttingen, Göttingen, Germany

W193 High frequency oscillations and seizures share neural substrates: evidence from multi-unit activity
Tommaso Fedele1, Johannes Niediek1, Peter Hilfiker1, Kristina König1, Lennart Stieglitz1, Florian Mormann1,2, Johannes Sarnthein4
1Higher School of Economics, Moscow, Russian Federation, 2Edmond and Lily Safra Center for Brain Sciences, Hebrew University Jerusalem, Israel, 3Swiss Epilepsy Centre, Zurich, Switzerland, 4University of Tübingen, Tübingen, Germany, 5Department of Epileptology, University of Bonn, Bonn, Germany

W194 A new method for investigating hippocampal integrity
Samantha Audrain1,2, Iva Brune1,2, Mary Pat McAndrews3,4
1University of Toronto, Toronto, Ontario, Canada, 2Krembil Brain Institute, University Health Network, Toronto, Ontario, Canada, 3Rotman Research Institute, Baycrest, Toronto, Ontario, Canada, 4Krembil Brain Institute, University Health Network, Toronto, Ontario, Canada, 5University of Toronto, Toronto, Ontario, Canada

W195 Mesoscopic reorganization of fMRI connectivity in patients with temporal lobe epilepsy
Shuntaro Sasa1, Joshua Pankratz1, Aaron Struck1, Kevin Dabbs1, Gyujoon Hwang1, Jedidiah Mathis2, Samantha Audrain1,2, Iva Brune1,2, Mary Pat McAndrews3,4
1University of Toronto, Toronto, Ontario, Canada, 2Krembil Brain Institute, University Health Network, Toronto, Ontario, Canada, 3Rotman Research Institute, Baycrest, Toronto, Ontario, Canada, 4Krembil Brain Institute, University Health Network, Toronto, Ontario, Canada

W196 EEG topography analysis as a biomarker of epilepsy
Vincent Rochas1, Pia De Stefano1, Serge Vulliemoz2, Margitta Seeck1
1EEG and Epilepsy Unit, University Hospital of Geneva, Geneva, Switzerland

W197 Local and whole-brain functional connectivity based on scalp EEG as a marker of epileptogenic zone
Rodek Mareček1, Martin Lamoš1, Michal Mikl1, Ivan Rektor1
1CEITEC, Masaryk University, Brno, Czech Republic
W200  Pediatric Longitudinal Cortical Thickness Pipeline Maps Atrophy in Rasmussen’s Encephalitis
Frank Provenzano1, Tristan Sanders
1Columbia University, New York, NY, United States

W201  Functional reorganization after surgical hemispherotomy for intractable epilepsy
Atenna Demertz1, Thomas Blauwblomme2,3, Jean-Marc Tacchela1, Marie Bourgeois1, Daniele Mannazz1, Frederik Van De Steen1, Nigell Colenbier1, Nathalie Baddert1,4, Lionel Naccache1, Rima Nabbout1,2
1GIGA Consciousness, GIGA Research Institute, University of Liège, Liège, Belgium, 2Department of Pediatric Neurosurgery, Hôpital Necker, Paris, France, 3Université Paris Descartes, Sorbonne Paris Cité, Paris, France, 4Institut Imagine, Paris, France, 5INSERM U 1163, Team Image for Imagine, Paris, France, 6Department of Data Analysis, Faculty of Psychological and Educational Sciences, University of Ghent, Ghent, Belgium, 7Department of Pediatric Radiology, Hôpital Necker, Paris, France, 8INSERM, U 1127, F-75013, Paris, France, 9Institut du Cerveau et de la Moelle épinière, Hôpital Pitié-Salpêtrière, Paris, France, 10Department of Pediatric Neurology Hôpital Necker, Paris, France

W202  White matter involvement in Mild Mesial Temporal Lobe Epilepsy: a cohort MRI study
Maria Eugenia Caligari1, Angelo Labate2, Antonio Gambardella2
1Neuroscience Research Center, Department of Medical and Surgical Sciences, University Magna Graecia, Catanzaro, Italy, 2Institute of Neurology, Department of Medical and Surgical Sciences, University Magna Graecia, Catanzaro, Italy

W203  Differences between pre-operative and post-operative connectivity in patients with focal epilepsy
Elium Shamshiri1, Margherita Carboni2,3, Eric Menetre4, Giannarita Iannotti1,4, Sebastien Tourbier1,2, Margitta Seeck1, Shaham Momjain1,2, Karl Schaller2, Patrick Hagmann5, Serge Vulliemoz1
1EEG and Epilepsy Unit, University Hospital of Geneva, Geneva, Switzerland, 2EEG and Epilepsy Unit, University Hospital of Geneva, Geneva, Switzerland, 3Functional Brain Mapping Lab, Department of Fundamental Neurosciences, Geneva, Switzerland, 4Department of Neurosurgery, University Hospital of Geneva and Faculty of Medicine, Geneva, Switzerland, 5Department of Radiology, University Hospital of Lausanne, Lausanne, Vaud

W204  EEG topography is altered by hidden epileptic activity: a simultaneous scalp-intracranial EEG study
Renaud Marquis1, Margherita Carboni1, Laurent Spinelli1, Denis Brunet2, Shaham Momjain1, Karl Schaller2, Pieter Van Mierlo1, Christoph Michel1, Margitta Seeck1, Serge Vulliemoz1
1EEG and Epilepsy Unit, University Hospital of Geneva, Geneva, Switzerland, 2University of Geneva, Geneva, Switzerland, 3University of Geneva, Geneva, Switzerland, 4Department of Neurosurgery, University Hospital of Geneva and Faculty of Medicine, Geneva, Switzerland, 5Medical Image and Signal Processing Group, Department of Electronics and Information Systems, Ghent, Ghent, Belgium, 6Functional Brain Mapping Lab, Department of Fundamental Neurosciences, University of Geneva, Geneva, 7Université de Genève, Geneva, Switzerland, 8Center for Biomedical Imaging, Geneva, Switzerland

W205  Conditional generative adversarial networks support the detection of focal cortical dysplasias
Bastian David1, Sailesh Conjeti2, Fabiane Schuch2, Bernd Weber2, Elke Hattingen3, Christian Elger2, Martin Reuter4, Theodor Rüber4,5,6
1Department of Epileptology, University of Bonn Medical Center, Bonn, Germany, 2Department of Neuropediatric Diseases (DZNE), Bonn, Germany, 3Department of Neuroradiology, Goethe University Frankfurt, Frankfurt am Main, Germany, 4Martinos Center for Biomedical Imaging, Radiology, MGH / Harvard Medical School, Boston, MA, United States, 5Epilepsy Center Frankfurt Rhine-Main, Department of Neurology, Goethe University Frankfurt, Frankfurt am Main, Germany, 6Center for Personalized Translational Epilepsy Research (CePTER), Goethe-University Frankfurt, Frankfurt am Main, Germany

W206  Fixel-based analysis reveals antibody-specific white matter alterations in limbic encephalitis
Tobias Bauer1, Bastian David1, Leon Ernst2, Bernd Weber2, Martin Reuter3,4, Elke Hattingen3, Christian Elger2, Theodor Rüber4,5,6
1Department of Epileptology, University of Bonn Medical Center, Bonn, Germany, 2German Center for Neurodegenerative Diseases (DZNE), Bonn, Germany, 3Martinos Center for Biomedical Imaging, Radiology, MGH / Harvard Medical School, Boston, MA, United States, 4Department of Neuroradiology, Goethe University Frankfurt, Frankfurt am Main, Germany, 5Epilepsy Center Frankfurt Rhine-Main, Department of Neurology, Goethe University Frankfurt, Frankfurt am Main, Germany, 6Center for Personalized Translational Epilepsy Research (CePTER), Goethe-University Frankfurt, Frankfurt am Main, Germany

W207  Volumetry of hippocampal subfields reflects serostatus in patients with limbic encephalitis
Leon Ernst1, Bastian David1, Jennifer Gaubatz1, Irene Dominguez-Narciso1, Bernd Weber2, Albert Becker3, Martin Reuter4, Elke Hattingen3, Christian Elger2, Theodor Rüber4,5,6
1Department of Epileptology, University of Bonn Medical Center, Bonn, Germany, 2Department of Neuropathology, University of Bonn Medical Center, Bonn, Germany, 3German Center for Neurodegenerative Diseases (DZNE), Bonn, Germany, 4Martinos Center for Biomedical Imaging, Radiology, MGH / Harvard Medical School, Boston, MA, United States, 5Epilepsy Center Frankfurt Rhine-Main, Department of Neurology, Goethe University Frankfurt, Frankfurt am Main, Germany, 6Center for Personalized Translational Epilepsy Research (CePTER), Goethe-University Frankfurt, Frankfurt am Main, Germany

W208  Brainstem atrophy in focal epilepsy destabilizes brainstem-cortex interactions: A path towards SUDEP?
Susanne Mueller1, Robert Knowlton1, Kenneth Laxer2
1UCSF, San Francisco, CA, United States, 2California Pacific Medical Center, San Francisco, CA, United States
W248 Brain atrophy in Parkinson's disease with polysomnography-confirmed REM sleep behavior disorder
Moio Gautier1, Shady Rahayel2, Ron Postuma1, Jacques Montplaisir1, Carrier Julie1, Oury Monchi3, David Remillard-Pelchat1, Pierre-Alexandre Bourgoin1, Michel Panisset4, Sylvain Chouinard5, Sven Joubert6, Jean-François Gagnon6
1Centre for Advanced Research in Sleep Medicine, Hôpital du Sacré-Cœur de Montréal, Montréal, Canada, 2University of Calgary, Calgary, Alberta, Canada, 3Unité des troubles du sommeil et du comportement somnologique, Centre Hospitalier de l'Université de Montréal, Montréal, Canada, 4Research Centre, Institut universitaire de gériatrie de Montréal, Montréal, Canada

W249 Alteration of functional brain networks in very early-stage, drug naïve Parkinson's disease
Karthik Sreenivasan1, Virendra Mishra2, Xiaowei Zhuang2, Zhengshi Yang3, Dietmar Cordes3, Ryan Walsh4
1Cleveland Clinic Lou Ruvo Center for Brain Health, Las Vegas, NV, United States, 2University of Queensland Centre for Clinical Research, Herston, Queensland, Australia, 3School of Psychology, University of Manchester, Manchester, United Kingdom, 4University of Sydney, Sydney, Australia

W250 Memory-guided saccade deficits correlate with structural neurodegeneration in Huntington's disease
Israel Vaca-Palomares1, Donald Brien2, Brian Coe3, Douglas Munoz2, Juan Fernandez-Ruiz4
1Universidad Nacional Autónoma de México, Ciudad de México, Mexico, 2Queen's University, Kingston, Canada, 3Universidad de Valparaíso, Valparaíso, Chile, 4University of Queensland Centre for Clinical Research, Herston, Queensland, Australia

W251 Identifying altered resting state network in Parkinson's disease with mild cognitive impairment
Ji Hyeon Yang1, Katie McMahon2, David Copland3, Gerard Byrne1, Leander Mitchell4, John O’Sullivan5, Nadeeka Dissanayaka6
1University of Queensland Centre for Clinical Research, Herston, Queensland, Australia, 2Research Centre, Institut universitaire de gériatrie de Montréal, Montréal, Canada, 3University of Manchester, Manchester, United Kingdom, 4University of Sydney, Sydney, Australia, 5University of New England, Armidale, Australia

W252 Altered resting-state switching dynamics in Parkinsons disease
Alon Astudillo1, Patricia Orío1, Sonja Kotz2, Simone Dalla Bella2, Nelson Trujillo-Barreto2, Wael El-Deredy2
1University of Queensland Centre for Clinical Research, Herston, QLD, Australia, 2Herston Imaging Research Facility and School of Clinical Sciences, Queensland University of Technology, Brisbane, Australia, 3University of Queensland Centre for Clinical Research, Herston, Queensland, Australia, 4School of Medicine, University of Queensland, Herston, QLD, Australia, 5School of Psychology, University of Queensland, St Lucia, QLD, Australia, 6Department of Neurology, Royal Brisbane & Women’s Hospital, Herston, QLD, Australia

W253 Freezing of Gait in Parkinsons disease is a Derangement of Network Dynamics
Andrea Canessa1, Chiara Palmasino1, Nicola Pocki2, Claudia Pacchetti3, Gianni Pezzoli4, Jens Volkmann5, Ioannis Isaias3
1University of Genova, Genova, Italy, 2Politecnica di Milano, Milano, Italy, 3University Hospital and Julius-Maximilian-University, Wuerzburg, Germany, 4National Neurological Institute Foundation “C. Mondino” IRCCS, Pavia, Italy, 5Centre Parkinson ASSG V. Pini-CFO, Milano, Italy, 6University Hospital Wuerzburg, Wuerzburg, Germany

W254 DTI measures to track cognitive decline in Parkinson's disease with MCI and Dementia
Emel Erdogdu1,2, Ali Kicik3, Dilek Arslan4, Sevim Cengiz5, Sedat Bükê6, Zeynep Tufekcigil7, Esin Oztürk-Islık8, Basar Bilgic9, Hamet Hanagassi10, Aziz Ulug11, Canan Basar-Eroglu12, Tamer Demiralp12
1Institute of Psychology and Cognition Research, University of Bremen, Bremen, Germany, 2Hulusi Behçet Life Sciences Research Laboratory, Istanbul University, Istanbul, Turkey, 3Aziz Sancar Institute of Experimental Medicine, Department of Neuroscience, Istanbul University, Istanbul, Turkey, 4Institute of Biomedical Engineering, Boğaziçi University, Istanbul, Turkey, 5Department of Neurology, Istanbul Faculty of Medicine, Istanbul University, Istanbul, Turkey, 6CorTechs Labs, San Diego, CA, United States

W255 Common and specific subregional pathology in the striatum for Schizophrenia and Parkinson's disease
Xiaoqin Liu1,2,3, Simon B. Eickhoff1,2, Felix Hoffstaetter2, Svenja Caspers4,5, Kathrin Reetz6,7, Julia Heller8,9, Claudia R. Eickhoff1,2, Julian Caspers3,4, Christian Mathys2,3, André Aleman1,2, Renaud Jardri10, Valentin Riedl11, Iris Sommer12, Kaustubh Patil13
1Heinrich Heine University Düsseldorf, Düsseldorf, Germany, 2Institute of Neuroscience and Medicine (INM-7, Brain and Behaviour), Research Centre Jülich, Jülich, Germany, 3Institute of Neuroscience and Medicine (INM-1, Structural and Functional Organization of the Brain), Research Centre Jülich, Jülich, Germany, 4Institute for Anatomy I, Medical Faculty, Heinrich Heine University Düsseldorf, Düsseldorf, Germany, 5Imaging in Neurodegenerative Diseases Department of Neurology, RWTH Aachen University, Aachen, Germany, 6JARA-BRAIN Institute Molecular Neuroscience and Neuroimaging, Forschungszentrum Jülich, RWTH Aachen University, Aachen, Germany, 7Department of Neurology, RWTH Aachen University, Aachen, Germany, 8Institute of Clinical Neuroscience and Medical Psychology, Medical Faculty, University of Düsseldorf, Düsseldorf, Germany, 9Department of Diagnostic and Interventional Radiology, Medical Faculty, University of Düsseldorf, Düsseldorf, Germany, 10Institute of Radiology and Neuroradiology, Evangelisches Krankenhaus, University of Oldenburg, Oldenburg, Germany, 11Department of Neuroscience, University Medical Center Groningen, University of Groningen, Groningen, Netherlands, 12Division of Psychiatry, University of Lille, CNRS UMR9193, SCALab & CHU Lille, Fontan Hospital, CURE platform, Lille, France, 13Department of Neuroradiology, Nuclear Medicine and Neuroimaging Center, Technische Universität München, München, Germany, 14Department of Neuroscience, University Medical Center Groningen, Groningen, Netherlands

W256 “Dying-back” Degeneration Leads to Cortical Thinning in Pure Hereditary Spastic Paraplegia
Francisco Navas-Sánchez1, Yasser Alemán-Gómez1, Agustín Lage-Castellanos2, Juan Guzmán-de-Villoria3, Pilar Fernández-García4, Julio Romero5, Irene Catalino6, Laura Lillo7, José Muñoz-Blanco8, Andrés Ordoñez-Ugalde9, Beatriz Quintáns9, Julio Pardo10, Mario-Jesús Sobrido11, Francisco Grandas12, Manel Desco12
1Fundación para la Investigación Biomédica del Hospital Gregorio Marañón, Quijorna, Madrid, Spain, 2University Hospital La Habaña, Cuba, 3Department of Neuroepidemiology, Centre for Neurosciences of Cuba, La Habana, Cuba, 4Servicio de Radiodiagnóstico, Hospital General Universitario Gregorio Marañón, Madrid, Spain, 5Servicio de Neurología, Hospital General Universitario Gregorio Marañón, Madrid, Spain, 6Instituto de Investigación Sanitaria, Santiago de Compostela, Spain, 7Departamento de Neurología, Hospital Clínico Universitario de Santiago de Compostela, Santiago de Compostela, Spain, 8Fundación Pública Gallega de Medicina Xenómica, Santiago de Compostela, Spain, 9Fundación Centro Nacional de Investigaciones Cardiovasculares Carlos III, Madrid, Spain, 10Department of Neurology, Hospital Universitario de Canarias, Puerto de la Cruz, Santa Cruz de Tenerife, Spain, 11Department of Neurology, Hospital Universitario de Bellvitge, L'Hospitalet de Llobregat, Barcelona, Spain, 12Department of Neurology, Hospital Universitario de Canarias, Puerto de la Cruz, Santa Cruz de Tenerife, Spain
W257 Cortical activity time locked to oscillatory events in the STN of Parkinson patients
Matthias Sure1, Jan Vesper1, Alfonso Schnitzler1,2, Esther Florin1
1Institute of Clinical Neuroscience and Medical Psychology, Heinrich-Heine-University Düsseldorf, Düsseldorf, Germany, 2Department of Functional Neurosurgery and Stereotaxy, University Hospital Düsseldorf, Düsseldorf, Germany, 3Department of Neurology, University Hospital Düsseldorf, Düsseldorf, Germany

W258 Gender differences in Parkinson’s disease: a neuroimaging investigation
Nooshin Abbasi1, Christina Tremblay1, Alain Dagher1
1Montreal Neurological Institute, McGill University, Montreal, Quebec

W259 Neurobiological subtypes in the Parkinson’s disease
Philippe Driessen1,2, Erdem Varol3,4, Aristides Sotras5,6, Christos Davatzikos7, Kathrin Reetz7, Julia Heller1, Christian Mathys8,9, Julian Caspers8,9, Claudia R. Eickhoff10, B. T. Thomas Yeo10, Felix Hofstätter1, Simon B. Eickhoff10, Klaus Ruff11
1Institute of Neuroscience and Medicine (INM-7), Research Centre Jülich, Jülich, Germany, 2Center for Biomedical Image Computing and Analytics, University of Pennsylvania Philadelphia, Philadelphia, PA, United States, 3Mallinckrodt Institute of Radiology, Washington University in St. Louis, St. Louis, MO, United States, 4Department for Neurology, University Hospital Aachen, Aachen, Germany, 5Institute of Radiology and Neuroradiology, Evangelisches Krankenhaus, University of Oldenburg, Oldenburg, Germany, 6Department of Diagnostic and Interventional Radiology, University Hospital Düsseldorf, Düsseldorf, Germany, 7Institute of Clinical Neuroscience and Medical Psychology, Heinrich-Heine University Düsseldorf, Düsseldorf, Germany, 8Clinical Imaging Research Centre, National University of Singapore, Singapore, Singapore, 9Institute of Systems Neuroscience, Heinrich Heine University Düsseldorf, Düsseldorf, Germany

W260 Disentangling myelinated neural correlates of apathy domains in Huntington’s disease
Audrey De Paepel1,2, Clara Garcia-Gorro1,2, Saul Martín-Horta3,4, Jesus Perez3,4, Jaime Kulskevska4,5, Nadia Rodriguez-Dechicha1, Irene Vaquer1, Susana Subirá1, Matilde Calopa2, Estefanía Muñoz2,3,10, Pilar Santacruz1, Jesús Ruiz-Idiago1,12,13, Celia Moreco1, Ruth de Diego-Baloguer1,4,5,16, Estela Camara1,2
1IDIBELL (Institut d’Investigació Biomèdica de Bellvitge), Cognition and Brain Plasticity Unit, Barcelona, Spain, 2Department of Cognition, Development and Educational Psychology, Universitat de Barcelona, Barcelona, Spain, 3Biomedical Research Institute Sant Pau (IIB-Sant Pau), Hospital de la Santa Creu i Sant Pau, Barcelona, Spain, 4European Huntington’s Disease Network, Ulm, Germany, 5Institut de Salut Carlos III, CIBERNED (Center for Networked Biomedical Research on Neurodegenerative Diseases), Madrid, Spain, 6Hestia Duran e Reynals, Hospital Duran e Reynals, Barcelona, Spain, 7Universitat Autonoma de Barcelona Facultat de Medicina, Department of Clinical and Health Psychology, Barcelona, Spain, 8Hospital Universitari de Bellvitge, Movement Disorders Unit, Neurology Service, Barcelona, Spain, 9Hospital Clinic, Movement Disorders Unit, Neurology Service, Barcelona, Spain, 10IDIBAPS (Institut d’Investigacions Biomèdiques August Pi i Sunyer), Barcelona, Spain, 11Facultat de Medicina, Universitat de Barcelona, Barcelona, Spain, 12Universitat Autonoma de Barcelona Facultat de Medicina, Department of Psychiatry & Forensic Medicine, Barcelona, Spain, 13Hospital Mare de Deu de la Merce, Barcelona, Spain, 14Department of Cognition, Development and Educational Psychology, Universitat de Barcelona, Barcelona, Spain, 15Institucio Catalana de Recerca i Estudis Avancats, Barcelona, Spain, 16Institute of Neurosciences, University of Belgrade, Belgrade, Serbia

W261 The substantia nigra pars compacta in Parkinson’s disease: a diffusion tensor imaging study
Jose Pineda Pardo1,2, David Mata-Marín1, Lydia Vela1, Fernando Alonso1, Jose Obeso1, Ignacio Obeso2,3
1hmCINAC, Mostoles, Madrid, 2CINAC, Mostoles, Spain

W262 Using machine-learning methods for identification of multi-modal predictors of dementia in Parkinson
Loubna Mekki Berrad12,1, Arthur Degan1, Jessie De Roy2,3, Ronald B Postuma4, Jean-Francois Gagnon1,2,6,1, Karim Jerbi1,2,5, 6CoCo Lab, Psychology Department, Université de Montréal, Montréal, Canada, 7Centre d’Études Avancées en Médecine du Sommeil, Hôtel du Sacré-Coeur de Montréal, Montréal, Canada, 8Psychology Department, Université du Québec à Montréal, Montréal, Canada, 9Neurology Department, Montréal General Hospital, Montréal, Canada, 10Centre de Recherche, Institut universitaire de gériatrie de Montréal, Montréal, Canada

W263 Hypersexual impulse control disorders in Parkinson’s disease: a resting state fMRI study
Jose Pineda Pardo1, David Mata-Marín1, Lydia Vela1, Fernando Alonso1, Jose Obeso1, Ignacio Obeso2,3
1hmCINAC, Mostoles, Madrid, 2CINAC, Mostoles, Spain

W264 Structural Changes in Neurocognitive Networks Related with Cognitive Decline in Parkinson’s Disease
Ulug Ay1,2, Emel Erdogdu1,2, Ani Kicik2, Ali Bayram2, Dilek Arslan2, Zeynep Tutelcioglu2, Sevim Cengiz2, Eset Ozturk-Ilsik2, Basar Bilgic3, Hasmet Hanagos3, Aziz Ulug4, Hakan Gurvit5, Tamer Demirapar6
1Department of Neuroscience, Aziz Sancar Institute of Experimental Medicine, Istanbul University, Istanbul, Turkey, 2Hukusi Behret Life Sciences Research Laboratory, Istanbul University, Istanbul, Turkey, 3University of Bremen, Bremen, Germany, 4Department of Physiology, Faculty of Medicine, Istanbul Bilim University, Istanbul, Turkey, 5Institute of Biomedical Engineering, Bogazici University, Istanbul, Turkey, 6Department of Neurology, Istanbul Faculty of Medicine, Istanbul University, Istanbul, Turkey, 7CorTechs Labs, San Diego, CA, United States

W265 Intra-network functional connectivity changes of the frontoparietal network in Parkinson’s disease
Nikolas Teichert1, Christian Rubbert2, Benjamin Sigl1, Christian Mathys1, Simon B. Eickhoff1, Felix Hofstätter1, Martin Sudmeyer1, Christian Hartmann1, Bernd Turowski1, Alfonso Schnitzler1, Julian Caspers8,9
1Heinrich-Heine-University Düsseldorf, Medical Faculty, Düsseldorf, Germany, 2Department of Diagnostic and Interventional Radiology, University Dusseldorf, Medical Faculty, Dusseldorf, Germany, 3University Clinic Düsseldorf, Düsseldorf, Germany, 4Institute of Radiology and Neuroradiology, Evangelisches Krankenhaus, University of Oldenburg, Oldenburg, Germany, 5Forschungszentrum Jülich, Jülich, Germany, 6Department of Neurology, Ernst-von-Bergmann Klinikum, Potsdam, Germany, 7Department of Neuroscience, Center for Movement Disorders and Neuromodulation, Medical Faculty, Heinrich, Dusseldorf, Germany, 8Heinrich-Heine-Universität, Düsseldorf, Germany

W266 A longitudinal MRI study of functional brain connectome in a large cohort of PD patients
Silvia Basari1, Federico Agosta1, Homa Zahedmanesh2, Tanja Stojkovic3, Iva Stankovic3, Vladana Markovic4, Igor Petrovic5, Elka Stefanova5, Vladimir Kostic5, Massimo Filippi6
1San Raffaele Scientific Institute, Vita-Salute San Raffaele University, Milan, Italy, 2Department of Electronics, Information, and Bioengineering (DEIB), Politecnico di Milano, Milan, Italy, 3Clinic of Neurology, Faculty of Medicine, University of Belgrade, Belgrade, Serbia

W267 Structural connectome of brainstem nuclei in premanifest synucleinopathy: REM sleep behavior disorder
Maria Garcia-Gomar1,2, Laura Lewis1, Lawrence Wald2, Bruce Rosen2, Aleksandar Vidovic1, Marta Bianciardi2
1Buffalo Neuroimaging Analysis Center, Department of Neurology, Jacobs School of Medicine and Biomedical Sciences, University at Buffalo, Buffalo, NY, United States, 2Department of Radiology, A.A. Martins Center for Biomedical Imaging, Massachusetts General Hospital, Boston, MA, United States, 3Department of Radiology, A.A. Martins Center for Biomedical Imaging, MGH and Harvard Medical School, Boston, MA, United States
Poorer memory performance is linked to decline in the strength of connectivity in Parkinson’s Disease and Movement Disorders.

Braak model investigation in Parkinson disease using multimodal MRI biomarkers

Imaging the Locus Coeruleus in Parkinson’s disease with Ultra-high 7T MRI

International mega-analysis of cortical and subcortical morphometry in Parkinson’s Disease: ENIGMA-PD

Dynamic functional connectivity signature of cognitive decline in Parkinson’s disease

Robust multivariate models of longitudinal subcortical change in premanifest Huntington’s disease

7T MRI reveals the correlation of perivascular spaces with clinical features in Parkinson’s disease

Automatic Diagnosis of Spasmodic Dysphonia with Structural MRI and Machine Learning
W278 7T MRI reveals structure and functional connectivity change at angular gyrus in Huntington's disease
Juennan Xie1, Xiao-Yan Li2, Hong-Rong Cheng2, Hong-Lei Li2, Yi Dong3, Hsin-Yi Lai3,4, Zhi-Ying Wu4
1Department of Neurology and Research Center of Neurology in Second Affiliated Hospital, and Key Laboratory of Medical Neurobiology of Zhejiang Province, Zhejiang University School of Medicine; 2Interdisciplinary Institute of Neuroscience and Technology of Qiushi Academy for Advanced Studies, Hangzhou, China, 3Department of Neurology and Research Center of Neurology in Second Affiliated Hospital, and Key Laboratory of Medical Neurobiology of Zhejiang Province, Zhejiang University School of Medicine, Hangzhou, China, 4Department of Neurology and Research Center of Neurology in Second Affiliated Hospital, Key Laboratory of Medical Neurobiology of Zhejiang Province, Zhejiang University School of Medicine; Interdisciplinary Institute of Neuroscience and Technology of Qiushi Academy for Advanced Studies, Zhejiang University, Hangzhou, China, 5Department of Neurology and Research Center of Neurology in Second Affiliated Hospital, Key Laboratory of Medical Neurobiology of Zhejiang Province, Zhejiang University School of Medicine; Interdisciplinary Institute of Neuroscience and Technology of Qiushi Academy for Advanced Studies, Zhejiang University, Hangzhou, China

W279 Polygenic Risk for Autism Spectrum Disorder and Abnormal Deep Grey Matter Development
Vincent Frouin1, Simon Fischer2, Stanislas Dehaene1
1Humboldt-Universität zu Berlin, Berlin, Germany, 2Institute for Medical Psychology and Neuroscience, Kings College, London, United Kingdom

W280 Genetics of planum temporale asymmetry: limited relevance to disorders and cognitive variability
Amaia Carrión-Castillo1, Antonietta Pepe2, Xiang-Zhen Kong3, Simon Fischer4,5, Bernard Mazoyer4, Nathalie Tzourio-Mazoyer2, Fabrice Crivello2, Clyde Francks1,2
1Language and Genetics Department, Max Planck Institute for Psycholinguistics, Nijmegen, Netherlands, 2Univ. Bordeaux, GIN, IMN, UMR 5293, Bordeaux, France, 3Donders Institute for Brain, Cognition and Behaviour, Radboud University, Nijmegen, Netherlands

W281 Unearthing the Evolutionary History of Genes Influencing Human Sulcal Widening
Herve Lemaître4, Yann Le Guen5, Amanda Tilott6, Jason Stein7, Cathy Philippe1, Jean-Francois Mangin1, Vincent Fraun1, Simon Fischer1, Stanislas Dehaene1
1Neuropsin CEA, Saclay, France, 2Language and Genet. Dept., Max Planck Inst. for Psycholinguistics, Nijmegen, Netherlands, 3Dept of Genet. & Neurosci. Ctr., UNC-Chapel Hill, Chapel Hill, NC, United States

W282 Human brain arousal in the resting state: a genome-wide association study
Philippe Jawinski1, Holger Kirsten2, Christian Sander3, Janek Spada4, Christine Urike1, Jue Huang5, Ralph Burkhardt6, Markus Scholz2, Tilman Hensch3, Ulrich Hegel3
1Department of Psychology, Humboldt-Universität zu Berlin, Berlin, Germany, 2Institute for Medical Informatics, Statistics and Epidemiology, University of Leipzig, Leipzig, Germany, 3Department of Psychiatry and Psychotherapy, University Hospital Leipzig, Leipzig, Germany, 4Institute of Laboratory Medicine, Clinical Chemistry and Medical Diagnostics, Leipzig, Germany

W283 Identification of three novel genetic loci associated with global brain glucose metabolism
Michael Bello1, Valerio Napolioni1,4, Andre Altman1,5, Michael Greicius1
1Department of Neurology and Neurological Sciences, FINLab, Stanford University, Stanford, CA, United States, 2Centre for Medical Image Computing (CMIC), University College London, London, United Kingdom

W284 The associations of (Pro)renin receptor to Dopaminergic systems
Akira Wiberg1, Michael Ng1, Yasser Al Omran1, Fidel Alfaro-Almagro2, Jonathan Marchini3,4, David Bennett4, Stephen Smith5, Dominic Furniss6, Gwenaelle Douaud7
1Nuffield Department of Orthopaedics, Rheumatology, and Musculoskeletal Science, University of Oxford, Oxford, United Kingdom, 2FMRIB, Wellcome Centre for Integrative Neuroimaging, University of Oxford, Oxford, United Kingdom, 3Department of Statistics, University of Oxford, Oxford, United Kingdom, 4Nuffield Department of Clinical Neurosciences, University of Oxford, Oxford, United Kingdom

W285 Human Handedness: Genetics, Microtubules and Brain Language Areas
Akiro Wiberg1, Michael Ng1, Yasser Al Omran1, Fidel Alfaro-Almagro2, Jonathan Marchini3,4, David Bennett4, Stephen Smith5, Dominic Furniss6, Gwenaelle Douaud7
1Nuffield Department of Orthopaedics, Rheumatology, and Musculoskeletal Science, University of Oxford, Oxford, United Kingdom, 2FMRIB, Wellcome Centre for Integrative Neuroimaging, University of Oxford, Oxford, United Kingdom, 3Department of Statistics, University of Oxford, Oxford, United Kingdom, 4Nuffield Department of Clinical Neurosciences, University of Oxford, Oxford, United Kingdom

W286 GWAS of the white matter micro-structure suggests multigenic architectures: a UKBiobank study
Thomas Riquelme1, Yann Le Guen1, Antoine Grigis2, Hervé Lemaître2, Cathy Philippe2, Vincent Frouin1, Neurpsin CEA, Saclay, France
1INRIA J.-Lagrange, Saclay, France, 2Neurpsin CEA, Saclay, France

W287 Axon guidance pathway contributed to working memory in a Chinese sample
Chunhui Chen1, Gui Xue2
1Beijing Normal University, Beijing, China

W288 Updates from the ENIGMA-CNV working group: 15q11.2 structural variants influence cortical morphology
Dennis van der Meer1, Ida Sanderby1, Tobias Kaufmann1, Srdjan Djurovic2, Ingrid Agartz1, Lars Westlye3, Paul Thompson4, Ole Andreasen5
1Norwegian Center for Developmental Research, Oslo, Norway, 2Norwegian Centre for Mental Disorders Research, Oslo, Norway, 3Imaging Genetics Center, Stevens Neuroimaging & Informatics Institute, Keck, USC, Marina del Rey, CA, United States

W289 Genetic association study of cortical thickness for identifying risk genes in AD using random forest
Bo-Hyun Kim1, Yong-Ho Choi1, Kwangsik Nho2, SangYun Kim3, Jong-Min Lee4
1Hanyang University, Seoul, Korea, Republic of, 2Indiana University School of Medicine, Indianapolis, United States, 3Seoul National University Bundang Hospital, Seongnaim, Korea, Republic of

W290 On the genetic bases of incomplete hippocampal inversion: a genome-wide association study
Claire Cury1,2, Marzio Antonella Scelsi1, Roberto Taro1, Vincent Frouin1, Eric Artiges2, Andreas Heinze2, Henrik Walter2, Hervé Lemaître1, Jean-Luc Martinot1, Jean-Baptiste Poline2, Michael Smolko3, Gunter Schumann1, Andre Altman1, Olivier Colliot1, Inria, Rennes, France, 2University College London London, London, United Kingdom, 3Institut Pasteur, Paris, France, 4Neurpsin CEA, Gif-sur-Yvette, France, 5INSERM Unit 1000 “Neuromaging & Psychiatry”, University Paris Sud, Orsay, France, 6Charité-Universitätsmedizin, Berlin, Germany, 7Charité - Universitätsmedizin Berlin, Berlin, Germany, 8Hôpital Necker, Paris, France, 9McGill University, Montreal, Quebec, Canada, 10Technische Universität Dresden, Dresden, Germany, 11KCL, London, United Kingdom, 12ARAMIS Lab / ICMP, Paris, France
W291 Association between polygenic risk with cognition and brain structure in normal developing children
Matthias Kirschner1, Budhachandra Khundrakpam1, Uku Vainik1, Noor Al-Sharif1, Alan Evans1, Alain Dagher1
1Montreal Neurological Institute, McGill University, Montreal, Quebec, Canada, 2Department of Psychiatry, Psychotherapy and Psychosomatics, Psychiatric Hospital, University of Zurich, Zurich, Switzerland

W292 The influence of polygenic risk for psychiatric disorders on cortical complexity in healthy subjects
Simon Schmitt1, Friederike Stein1, Roman Kessler1, Katharina Borsch1, Tina Meiler1, Till Andlauer1, Alex Krug1, Til Knier1, Igor Nenadic1
1Philips University of Marburg, Marburg, Germany, 2University of Marburg, Marburg, Germany, 3Laboratory for Multimodal Neuroimaging, University of Marburg, Marburg, Germany, 4Max Planck Institute of Psychiatry, Munich, Germany

W293 ENIGMA task-based fMRI: A workgroup studying the genetic basis of task-evoked brain activity
Ilya Veer1, Leo Walter1, Tristram Leit1, Susanne Erik1, Henrik Walter1
1Charité - Universitätsmedizin Berlin, Berlin, Germany

W294 Interaction between chronic stress and KYNA-related genes on PFC activity during working memory
Leonardo Fazio2, Marco Papalino2, Grazziella Amico1, Pasquale DiCarlo1, Barbara Gela1, Raffaella Romano1, Popolizio Teresa2, Alessandro Bertolino1, Giulia Pergola1, Giuseppe Blasi1
1University of Bari Aldo Moro, Bari, Italy, 2IRCCS Casa Sollievo Della Sofferenza, San Giovanni Rotondo, FG, Italy

W295 Probabilistic modeling of the genetic influence on brain structure and schizophrenia diagnosis
Yoel Sanchez Araquio1, Gabriella Blokiland2, Tracey Petryshen2, GENUS Consortium1, Kayhan Batmanghelich1, Satarij Ghosh1, 2
1Princeton University, Princeton, NJ, United States, 2Massachusetts General Hospital, Boston, MA, United States, 3Massachusetts General Hospital, Boston, MA, United States, 4University of Pittsburgh, Pittsburgh, PA, United States, 5MIT, Cambridge, MA, United States, 6Harvard Medical School, Boston, MA, United States

W296 A novel SNP affecting CSMD1 increases intrinsic amygdala connectivity and prosocial behavior
Kevin Bickart1, Valerio Palamour1, Yongta Kim1, Riajan Khan1, Jonas Richiardi2, Andre Altmann3,1, Elena Shumskaya1,2, Albert Llera1, Christian Beckmann1,2
1Imaging Genetics Center, USC, Marina Del Rey, CA, United States, 2Vrije Universiteit Amsterdam, Amsterdam, Netherlands, 3Department of Psychology, New York University, New York, NY, United States, 4Faculty of Health, Institute of Health and Biomedical Innovation, QUT, Brisbane, Australia, 5Herston Imaging Research Facility and School of Clinical Sciences, QUT, Brisbane, Australia

W297 Shared Genetic Influence on Cognition and Functional Brain Connectivity
Andrew Reineberg1, Alexander Hatoum1, Naomi Friedman1
1University of Colorado Boulder, Boulder, CO, United States

W298 Investigating the common effect of haploinsufficiency on neuroimaging traits
Ciera Moreau1, Catherine Schramm2, Guillaume Huguet1, Sebastian Ursch3, Kuldeep Kumar2, Elise Douard1, Alan Evans1, Gunter Schumann4, Mollar Chakravarty5, Pierre Bellic1, Aurelie Labbe1, Celia Greenwood1, Sebastien Jaccquemont1
1University of Montreal, Montreal, Quebec, Canada, 2CHU Sainte Justine, Montreal, Quebec, 3CRUIGM, Montreal, Quebec, Canada, 4Montreal Neurological Institute, McGill University, Montreal, Quebec, Canada, 5KCL, London, United Kingdom, 6Douglas Institute, Montreal, Quebec, Canada, 7HEC, Montreal, Quebec, 8McGill University, Montreal, Quebec, Canada

W299 Autoregressive Mixed Models of Longitudinal Brain Changes, Cognition and Genetics in ADNI
Qifan Yang1,2, Sophia Thomopoulos1, Linda Ding2, Wesley Srentol1,2, Paul Thompson1,3, Neda Jahanbaf1,2
1Imaging Genetics Center, Stevens Neuroimaging & Informatics Institute, Keck, USC, Marina del Rey, CA, United States, 2Quantitative and Computational Biology, Department of Biological Sciences, USC, Los Angeles, CA, United States

W300 Investigating the genetics underpinnings of linked-brain structure associated to memory processes
Joao Guimaraes1,2,3, Thomas Wolters1,2, Linda de Voogd1,2,3, Marieke Klein1,2,3, Emma Sprooten1,2,3, Janita Brott1,2,3, Elena Shumskaya1,2,3, Barbara Franke1,2,3, Alberto Llera1, Christian Beckmann4,1,2,3,4
1Donders Institute for Brain, Cognition and Behaviour, Radboud University Nijmegen, Nijmegen, Netherlands, 2Radboud University Medical Center, Department of Cognitive Neuroscience, Nijmegen, Netherlands, 3Department of Human Genetics, Radboud University Medical Center, Nijmegen, Netherlands, 4Department of Psychology, New York University, New York, NY, United States, 5Department of Psychiatry, Radboud University Medical Center, Nijmegen, Netherlands, 6Centre for Functional MRI of the Brain (FMRIB), University of Oxford, Oxford, United Kingdom

W301 Heritability of Amygdala Nuclei Volumes in Adolescent Twins
Lachlan Strike1, Montana Samantzis1, Paul Thompson1, Greig de Zubicaray1,2, Margie Wright1,2
1Queensland Brain Institute, UQ, Brisbane, Australia, 2Imaging Genetics Center, Stevens Neuroimaging & Informatics Institute, Keck, USC, Marina del Rey, CA, United States, 3Faculty of Health, Institute of Health and Biomedical Innovation, QUT, Brisbane, Australia, 4Herston Imaging Research Facility and School of Clinical Sciences, QUT, Brisbane, Australia

W302 Mapping shared genetic risk for Parkinsons Diseases & Insomnia to the Human Brain in UK Biobank
Linda Ding1, Philip Jansen2, Alyssa Zhu1, Joanna Bright1, Paul Thompson3, Danielle Posthuma1, Eus Van Someren1, Neda Jahanbaf1,2
1Imaging Genetics Center, USC, Marina Del Rey, CA, United States, 2Vrije Universiteit Amsterdam, Amsterdam, Netherlands, 3Imaging Genetics Center, USC, Marina del Rey, CA, United States, 4Netherlands Institute for Neuroscience, Amsterdam, Netherlands

W303 Genetic Architecture of the Structural and Functional Connectome
Habib Gangadha1, Thomas Nichols1
1Statistics department, University of Oxford, Oxford, United Kingdom, 2Nuffield Department of Population Health, University of Oxford, Oxford, United Kingdom
W304 Genetic relationships between schizophrenia, bipolar disorder, IQ and ICV through Brain activation subtypes are organized into two highly pleiotropic clusters in the HCP data.

**Genetic Variation**

Michael Gregory1, Daniel Eisenberg1, Jonathan Kippenhan1, Jasmin Czarapata1, Joseph Callicott1, Venkata Matta2, Karen Berman1

Section on Integrative Neuroimaging, Clinical & Translational Neuroscience Branch, NIMH, NIH, Bethesda, MD, United States, 1Lieber Institute for Brain Development, Baltimore, MD, United States

W305 Brain activation subtypes are organized into two highly pleiotropic clusters in the HCP data.

**Genetics Other**

Sonja de Zwarte1, Rachel Brouwer1, Lysanne van Beek1, Andre Aleman2, Wiepke Cahn1, Kristel van Eijk3, Lieuwe de Haan4, Lydia Krabbendam5, Bochao Lin3, Jurjen Luykx1,3, Machteld Marcelis6, Jan-Venkata Mattay2, Karen Berman1

Department of Psychiatry, Early Psychosis Unit, Amsterdam, Netherlands, 2Lieber Institute for Brain Development, Baltimore, MD, United States, 3Maryland Psychiatric Research Center, Catonsville, MD, United States, 4University of Maryland SOM, Catonsville, MD, United States, 5Faculty of Behavioural & Movement Sciences, Dept Clinical, Neuro- & Developmental Psychology, VU, Amsterdam, Netherlands, 6King’s College London, King’s College London, London, United Kingdom, 7National Institutes of Health, Bethesda, MD, United States, 8University of Cambridge, Cambridge, United Kingdom, 9Research Centre Jülich, Jülich, Germany, 10National Institutes of Health, Bethesda, MD, United States

W306 Genetic ancestry and polygenic traits encoded in resting-state fMRI networks.

**GENETICS**

Yassine Benjaafar1, François Chouinard-Declerc2, Uku Vainik3, Sebastian Urchs3, Pierre Bellec4

1Université de Montréal, Montréal, QC, Canada, 2Montreal Neurological Institute, McGill University, Montreal, Quebec, Canada, 3Montreal Neurological Institute, Montreal, Quebec, Canada, 4CRiUGM University of Montreal, Outremont, Québec, Canada

W307 Heritability estimates of arterial-spin labeling and rs-MRI data for Amish Connectome Project

**WEDNESDAY, JUNE 12**

Odd numbers: 12:45 – 13:45; Even numbers: 13:45 – 14:45; Poster Reception: 18:15 – 19:15

**Neurogenetic Syndromes**

**W310 Impact of a schizophrenia risk variant of MIR137 on emotion-related brain connectivity**

Anna Digiovanni1, Tiziana Quarto1, Giulio Pergoli1,2, Leonardo Fazio1, Raffaella Roman1, Antonino Rampino2,3, Popolizio Teresa2, Giuseppe Biasi2,3, Alessandro Bertolina2,3

1University of Bari Aldo Moro, Bari, Italy, 2Lieber Institute for Brain Development, Baltimore, MD, United States, 3Psychiatry Unit - Bari University Hospital, Bari, Italy

**W311 Hemispheric relation of heritability of white-matter connectivity in human brain**

Suyu Zhang1, Long Wei2, Chenxi Zhao1, Liyuan Yang1, Gaolang Gong1

1Beijing Normal University, Beijing, China, 2Institute of Medical Imaging Engineering, University of Shanghai for Science and Technology, Shanghai, China

**W312 Integration of transcriptomic and sMRI data in a common neurogenetic developmental disorder**

Amy Lin1, Jen Forsyth1, Eva Mennigen1, Daqing Sun1, Ariana Vojdli, Leila Kushan-Wells1, Carrie Bearden1

1University of California-Los Angeles, Los Angeles, CA, United States

**W313 Transcriptomic Underpinnings of Altered Brain Organization in Neurodevelopmental Disorders**

Jakov Seidlit1,2, Ajay Nadigi1, Siyuan Liu1,2, Richard Bethlehem2, Petra Vértes2, Sarah Morgan2, František Valš1, Rafael Romero-Garcia2, François Lalande2, Liv Clasen3, Jonathan Blumenthal2, Joan Han2, Damon Poliaudelakis2, Luis de la Torre-Ubieta1, Daniel Geschwind1, Nancy Lee2, Declan Murphy4, Edward Budner1,2, Armin Raznahan1,2

1National Institutes of Health, Bethesda, MD, United States, 2University of Cambridge, Cambridge, United Kingdom, 3University of Tennessee, Memphis, TN, United States, 4UCI, Los Angeles, CA, United States, 5Drexel University, Philadelphia, PA, United States, 6King’s College London, London, United Kingdom, 7National Institutes of Health, Bethesda, MD, United States

**W314 X-chromosome insufficiency alters receptive fields across the human early visual cortex**

Tamar Green1, Hadi Hosseini1, Kalanit Grill-Spector2, Allan Reiss1

1Stanford University, Stanford, CA, United States, 2Dept. of Psychology and Wu Tsai Neurosciences Institute, Stanford, Stanford, CA, United States

**W315 Cerebellar lobe atrophy as predictor of cognitive status in Friedreich’s ataxia patients**

Camila Russo1, Giuseppe Pontillo1, Sirio Coccacozza1, Teresa Costabile1, Filomena Abate1, Agnese Liguori1, Elena Tedeschl1, Walter Del Vecchio2, Francesca Paciello1, Mario Quarrelli2, Francesco Sacc2, Alessandro Filla1,2, Arturo Brunetti1,2

1University Federico II, Naples, Italy, 2National Research Council, Naples, Italy

**W316 Effects of HPA-axis dysregulation on psychopathology and brain maturation in 22q11 Deletion Syndrome**

Corrado Sandini1, Maeille Chambaz2, Maude Schneider2, Marco Armanda2, Daniela Zoller2, Marie Schaar1, Carmen Sandi2, Dimitri Van De Ville1, Stephan Eliez1

1Developmental Imaging and Psychopathology Laboratory, University of Geneva, Geneva, Switzerland, 2University of Geneva, Genève, Switzerland, 3University of Geneva, Geneva, Switzerland, 4Developmental Imaging and Psychopathology Laboratory, University of Geneva, Geneva, Switzerland, 5EPFL, Lausanne, Switzerland, 6École Polytechnique Fédérale de Lausanne, Lausanne, Switzerland
W317  White matter development in 22q11.2 Deletion Syndrome and association with risk factors of psychosis
Joelle van der Molen1, Maria Podula2, Daniela Zöller1,3, Corrada Sandini1, Maude Schneider1, Marie Schaefer1, Stephan Eliez1
1Developmental Imaging and Psychopathology Laboratory, University of Geneva, Geneva, Switzerland, 2Friedrich Miescher Institute for Biomedical Research, Basel, Basel, Switzerland, 3École Polytechnique Fédérale de Lausanne (EPFL), Lausanne, Switzerland

W318  Structural and functional network abnormalities in the human brain of XXY syndrome
Siyuan Liu1, Cassidy McDermott1, Liv Clasen1, François Lalonde1, Jonathan Blumenthal1, Armin Raznahan2
1Developmental Neurogenomics Unit, National Institute of Mental Health, Bethesda, MD, United States, 2Developmental Neurogenomics Unit, National Institute of Mental Health, Bethesda, MD, United States

W319  The anterior hippocampus is the primary contributor to smaller hippocampal size in Down Syndrome
Katherine Koenig1, Se-Hong Oh1, Melissa Stasko2, Elizabeth Lissmore3, Elizabeth Roth1, Anne Birnbaum1, Thomas Scheidemanter4, Hudson Taylor4, Nancy Roizen5, Stephen Ruedrich6, Alberto Costa7
1The Cleveland Clinic, Cleveland, OH, United States, 2Hankuk University of Foreign Studies, Yongin, Korea, Republic of, 3Case Western Reserve University, Cleveland, OH, United States, 4University Hospitals, Cleveland, OH, United States

W320  Cortico-cortical vs Corticospinal Tract differences in 22q Deletion syndrome: A Fixel-based Analysis
Julia Villalon1, Talia Ni2, Neda Jahanshad3, Leila Kushan3, Christopher Ching4, Carrie Bearden5, Paul Thompson6
1University of Southern California, Marne del Rey, CA, United States, 2Imaging Genetics Center, University of Southern California, Los Angeles, CA, United States, 3Imaging Genetics Center, Stevens Neuroimaging & Informatics Institute, Keck, USC, Marina Del Rey, CA, United States, 4Semel Institute for Neuroscience and Human Behavior, UCLA, Los Angeles, CA, United States, 5Imaging Genetics Center, Keck School of Medicine, University of Southern California, Los Angeles, CA, United States, 6Keck School of Medicine of the University of Southern California, Marina del Rey, CA, United States

Gene Expression Correlates of the Cortical Network Underlying Sentence Processing
Xiong-Zhen Kong1, Nathalie Tzourio-Mazoyer2,3, Marc Joliot4,5, Evelina Fedorenko6,7, Jin Liu1, Simon Fishkin1,8, Clyde Franks1,9
1Max Planck Institute for Psycholinguistics, Nijmegen, Netherlands, 2Univ. Bordeaux, GIN, IMN, UMR 5293, Bordeaux, France, 3CNRS, GIN, IMN, UMR 5293, Bordeaux, France, 4CEA, GIN, IMN, UMR 5293, Bordeaux, France, 5Univ. Bordeaux, GIN, IMN, Bordeaux, France, 6McGovern Institute for Brain Research, MIT, Cambridge, MA, United States, 7Department of Psychiatry, Harvard Medical School, Boston, MA, United States, 8Department of Psychiatry, Massachusetts General Hospital, Boston, MA, United States, 9Faculty of Psychology, Beijing Normal University, Beijing, China.

W322  Multimodal gradients across mouse cortex and their human correspondence
Ben Fulcher1, John Murray2, Valerio Zerbi3, Xiao-Jing Wang4
1School of Physics, Sydney University, Sydney, Australia, 2Yale University, New Haven, CT, United States, 3ETH Zürich, Zürich, Switzerland, 4New York University, New York, NY, United States

W323  In-vivo mapping of cell types related to brain microstructure through gene expression
Marzio Antonio Scelsi1, Maira Tariq1, Jonathan Schott1, Gary Zhang1, Andre Altmann2
1University College London, London, United Kingdom

W324  Expression signatures of receptor genes in primary cortical areas
Thomas Muehleisen1,2,3, Cemil Kerimoglu1, Dominique Hilgert1, Andre Fischer1, Sven Cichon1,2,5
1Institute of Neuroscience and Medicine (INM-1), Research Centre Juelich, Juelich, Germany, 2Department of Biomedicine, University of Basel, Basel, Switzerland, 3C. & O. Vogt Institute for Brain Research, Heinrich Heine University, Duesseldorf, Germany, 4German Center for Neurodegenerative Diseases (DZNE), Goettingen, Germany, 5Institute of Medical Genetics and Pathology, Hospital Basel, Basel, Switzerland

W325  A molecular gradient along the longitudinal axis of the human hippocampus informs brain function
Jacob Vogel1, Renaud La Joie1, Michel Grothe1, Alex Diaz-Popkovich1, Andrew Doyle2, Etienne Vachon-Presseau1, Claude Lepage1, Reinder Vos de Woel1, Yasser Iturria-Medina1, Boris Bernhardt1, Gil Robinovich1, Alan Evans1
1Montreal Neurological Institute, McGill University, Montreal, Quebec, Canada, 2USCF, San Francisco, CA, United States, 3DZNE, Rostock, Canada, 4McGill University, Montreal, Quebec, Canada

W326  Transcriptional Signatures of Hierarchically Organized Chronnectome Architecture in the Human Brain
Jim Liu1, Mingui Xia1, Xindi Wang1, Xuhong Liao1, Yong He1, Bin Liu2, Beijin Normal University, Beijing, China

W327  Cortico-cortical vs Corticospinal Tract differences in 22q Deletion syndrome: A Fixel-based Analysis
Julia Villalon1, Talia Ni2, Neda Jahanshad3, Leila Kushan3, Christopher Ching4, Carrie Bearden5, Paul Thompson6
1University of Southern California, Marne del Rey, CA, United States, 2Imaging Genetics Center, University of Southern California, Los Angeles, CA, United States, 3Imaging Genetics Center, Stevens Neuroimaging & Informatics Institute, Keck, USC, Marina Del Rey, CA, United States, 4Semel Institute for Neuroscience and Human Behavior, UCLA, Los Angeles, CA, United States, 5Imaging Genetics Center, Keck School of Medicine, University of Southern California, Los Angeles, CA, United States, 6Keck School of Medicine of the University of Southern California, Marina del Rey, CA, United States

W328  Transcriptional correlates of structural covariance
Yohan Yeo1, Leon French2, Benjamin Darwisi, Jacob Ellegood1, Jason Lerch3
1Mouse Imaging Centre, Hospital for Sick Children, Toronto, Ontario, Canada, 2University of Toronto, Toronto, Ontario, Canada, 3Centre for Addiction and Mental Health, Toronto, Ontario, Canada

W329  Disrupted brain functional topological organization in patients with functional constipation
Lei Liu1, Chuxin Hu1, Yueyan Ding2, Yuanquan Wang3, Jingyu Lü1, Wenchao Zhang1, Karen M. von Deneen1, Jixin Liu1, Yongzhan Nie1, Yi Zhang1
1Center for Brain Imaging, School of Life Science and Technology, Xi’an University, Xi’an, Shaanxi, China, 2Xijing Gastrointestinal Hospital, The Fourth Military Medical University, Xi’an, Shaanxi, China

Odd numbers: 12:45 – 13:45; Even numbers: 13:45 – 14:45; Poster Reception: 18:15 – 19:15
W330 Slice-Leakage Artefact in Simultaneous Multi-Slice Echo-Planar Imaging Data
Carolyn McNabb1, Michael Lindner1, Shan Shen1, Kou Murayama1,2, Laura Burgess1, Tom Johnstone3
1University of Reading, Reading, United Kingdom, 2Kochi University of Technology, Kochi, Japan, 3Swinburne University of Technology, Melbourne, Australia

W331 Changes in The Origin of fMRI Global Signal Following One Night of Total Sleep Deprivation
Ehsan Shokri Kojori1, Nora Volkow2, Sukru Demiral3, Dardo Tomasi4, Peter Manza2, Corinde Wiers2, Gene-Jack Wang2
1National Institutes of Health, North Bethesda, MD, United States, 2NIH, Bethesda, MD, United States, 3NIH

W332 Comparison of feature selection methods based on discrimination and reliability for fMRI data
Wenyan Xu1, Zonglei Zhen2, Qing Li3, Xia Wu4
1College of Information Science and Technology, Beijing Normal University, Beijing, China, 2Beijing, China, 3State Key Laboratory of Cognitive Neuroscience and Learning, Beijing Normal University, Beijing, Beijing, China

W333 Deactivation of default mode network during touch
Timmy Strauss1, Robin Kämpe2, J. Paul Hamilton3, Ikan Olausson4, Fabian Rottstädt1, Claudia Roze5, Ilona Cray1
1University Hospital Dresden, Department of Psychosomatic Medicine and Psychotherapy, Dresden, Germany, 2Center for Social and Affective Neuroscience, Department of Clinical and, Linköping, Sweden, 3Department of Psychosomatic Medicine and Psychotherapy, Technical University, Dresden, Germany, 4Department of Neuroradiology, Medizinische Fakultät Carl Gustav Carus, Dresden, Germany

W334 Seed-based test-retest reliability of rsfMRI at 3T and 7T
Ajoy Nemani1, Mark Lowe2
1Cleveland Clinic Foundation, Cleveland, OH, United States, 2Cleveland Clinic, Cleveland, OH, United States

W335 Frequency Responses of White Matter BOLD Signal to Visual Stimuli
Arabinda Mishra1, Muwei Li2, Adam Anderson3, Allen Newton4, Zhaohua Ding2, John Gore1
1Vanderbilt University Institute of Imaging Science, Nashville, TN, United States

W336 Neuro-electrical evidence of sympathetic activity contributing to fMRI signals
Pinar Ozbay1, Catie Chang1, Dante Picchioni2, Hendrik Mandelkow3, Miranda Chappell-Farley4, Peter van Gelderen5
1NIHNS, NIH, Bethesda, MD, United States, 2Vanderbilt University, Nashville, TN, United States, 3University of California, Irvine, CA, United States

W337 Denoising pain related task multi-echo fMRI data by group ICA
Qingbao Yu1, Richard Reynolds1, Lauren Atlas2
1National Center for Complementary and Integrative Health, National Institutes of Health, Bethesda, MD, United States, 2National Institute of Mental Health, Bethesda, MD, United States, 3National Center for Complementary and Integrative Health, National Institute on Drug Abuse, NIH, Bethesda, MD, United States

W338 Common Neural and Transcriptional Correlates of Inhibitory Control Modulating Memory and Emotion
Wei Liu1, Nils Kohn1, Guillen Fernandez1
1Radboud University Medical Center, Nijmegen, Netherlands

W339 Corticostriatal Reward Sensitivity Predicts Weight Loss Following a 12-Month Intervention
Jamie Peven1, Shannon Donofry1, John Jakicic1, Renee Rogers1, Jennifer Watt1, Kirk Erickson1
1University of Pittsburgh, Pittsburgh, PA, United States

W340 Difference in functional characteristics of task-fMRI and resting state fMRI
Yul-Wan Sung1, Seiji Ogawa2
1Kansei Fukushima Res Inst, Tohoku Fukushima Univ, Sendai, Miyagi, 2Kansei Fukusui Res Inst, Tohoku Fukushi University, Sendai, Miyagi

W341 Task related regional difference in temporal characteristics of fMRI signals
Yul-Wan Sung1, Seiji Ogawa2
1Kansei Fukushima Res Inst, Tohoku Fukushima Univ, Sendai, Miyagi, 2Kansei Fukusui Res Inst, Tohoku Fukushi University, Sendai, Miyagi

W342 Striatum activation as evidence for neurofeedback learning and reward processing? - a placebo study
Doris Grossinger1, Guilherme Wood2, Matthias Witte2, Karl Koschutnig1, Manuel Ninas3, Silvia Kober1
1University of Graz, Graz, Austria, 2Future Sport Science, Adidas AG, Herzogenaurach, GA, United States, 35 LEAD Graduate School & Research Network, Eberhard-Karls University, Tuebingen, Germany

W343 TSNR Dependence on Cortical Orientation Relative to the B0 Field Axis
Olivia Viesmann1, Jingyuan Chen1, Klaus Scheffler2, Lawrence Wald3, Jonathan Polimeni2
1Department of Radiology, A.A. Martinos Center for Biomedical Imaging, MGH and Harvard Medical School, Charlestown, Boston, MA, United States, 2Max-Planck Institute for Biological Cybernetics, University of Tuebingen, Tuebingen, Germany, 3Harvard-Massachusetts Institute of Technology Division of Health Sciences and Technology, Cambridge, MA, United States

W344 A multi-target motor imagery training using EEG-fMRI Neurofeedback: an exploratory study on stroke
Simon Butet1, Giulia Lioi1, Mathis Fleury1, Anatole Lécuyer2, Christian Barillot1, Isabelle Bonan1
1CHU Rennes, Médecine physique et de réadaptation, Rennes, France, 2Univ Rennes, Inria, CNRS, Inserm, IRISA, EMPENN ERL U1228, Rennes, France, 3Univ Rennes, Inria, CNRS, IRISA, Hybrid Project Team, Rennes, France

W345 How are BOLD Measures and Connectivity Affected by Noise Removal in Resting-state and Task fMRI?
Bianca De Blasi1, Lorenzo Caciagli2, Silvia Francesca Storti3, Matthias Koep2, Hendrik Mandelkow1, Miranda Chappell-Farley3, Peter van Gelderen1, Jacco de Zwart1, Jeff Duyn1
1Department of Radiology, A.A. Martinos Center for Biomedical Imaging, MGH and Harvard Medical School, Charlestown, Boston, MA, United States, 2Centre for Medical Imaging, UCL, London, United Kingdom, 3Dept. of Computer Science, University of Verona, Verona, Italy, 4Centre for Medical Imaging, UCL, London, United Kingdom

W346 Low-level neural mechanisms support working memory performance in healthy ageing
Patrycja Naumczyk1, Karolina Finc2, Krzysztof Jodzio1
1School of Psychology, Institute of Brain Science and Rehabilitation, South China Normal University, Guangzhou, China, 2Centre for Modern Interdisciplinary Technologies, Torun, Poland

W347 Stress-induced changes of intra- and inter-network functional connectivity in healthy subjects
Miao Zhong1,2, Wenjie Jiang1, Junjing Wang1, Xiaojin Liu1, Lihong Liu3, Meiqi Niu1, Ling Zhao1, Ruiwang Huang1
1School of Psychology, Institute of Brain Science and Rehabilitation, South China Normal University, Guangzhou, China, 2Department of Psychology, The Chinese University of Hong Kong, Hong Kong, 3Department of Applied Psychology, Guangdong University of Foreign Studies, Guangzhou, China
W348 Positive effects of physical workout on working memory in healthy ageing
Potrycia Naumczyk1, Agnieszka Sabisz2, Beata Brzeska2, Angelika Sawicka3, Krzysztof Jodzio1, Paweł Winklewski1, Edyta Szurwolska2, Robert Olek4, Arkadiusz Szarmach3
1University of Gdańsk, Gdańsk, Poland, 2Medical University of Gdańsk, Gdańsk, Poland, 3Gdańsk University of Physical Education and Sport, Gdańsk, Poland

W349 The impact of physiological correction on spectral power and resting-state functional connectivity
M. Aras Koyvanrad1,2, Stephen Strother3, Jean Chen2
1Medical Biophysics, University of Toronto, Toronto, Ontario, Canada, 2Rotman Research Institute, Toronto, Ontario, Canada, 3Baycrest and University of Toronto, Toronto, Ontario, Canada

W350 The modular organization of the cingulate cortex
Elisabeth Caparelli1, Hong Gu1, Thomas Ross1, Yihong Yang1
1National Institute on Drug Abuse, Baltimore, MD, United States

W351 Replicability of group activations across two independent samples – Validation of a human fMRI test
Miriam Kampa1, Anita Schick2, Alexandra Sebastian3, Tim Klucken1, Michèle Wessa4, Oliver Tüscher3, Raffael Kalisch2, Ralf Dierks2, Aprajita Dhall9, Stapleton Kikkert3, Robert Olek1, Arkadiusz Szarmach3, Michèle Wessa9
1Medical Biophysics, University of Toronto, Toronto, Ontario, Canada, 2Rotman Research Institute, Toronto, Ontario, Canada, 3Baycrest and University of Toronto, Toronto, Ontario, Canada, 4Center for Medical Psychiatry and Neurology, University of Bergen, Bergen, Norway, 5Institute of Brain Research, Lake Maggiore, Italy, 6Institution of Heavy Ion Physics, Beijing, China, 7Department of Electrical Engineering, Eindhoven, Netherlands, 8Radboud University, Nijmegen, Netherlands, 9Center for Medical Physics and Biomedical Engineering, Karlsruhe Institute of Technology, Karlsruhe, Germany

W352 Studying brain function during auditory stimulation with quantitative susceptibility mapping
Patrycia Naumczyk1, Agnieszka Sabisz2, Beata Brzeska2, Angelika Sawicka3, Krzysztof Jodzio1, Paweł Winklewski1, Edyta Szurwolska2, Robert Olek4, Arkadiusz Szarmach3
1University of Gdańsk, Gdańsk, Poland, 2Medical University of Gdańsk, Gdańsk, Poland, 3Gdańsk University of Physical Education and Sport, Gdańsk, Poland

W353 Dual spin populations create functional contrast in human fMRI
Amanda Taylor1, Jung Hwan Kim2, Vimal Singh3, Josef Pfeuffer1, David Ross1
1Department of Neuroscience, Baylor College of Medicine, Houston, TX, United States, 2Center for Advanced MRI, Baylor College of Medicine, Houston, TX, United States, 3Siemens Healthcare, Erlangen, Germany

W354 Neural correlates of temporal order judgment: an fMRI study utilizing control of the task difficulty
Jan Nikolaj1, Mateusz Chojnowski2, Joanna Dążykowa2, Joanna Gorgo1, Tomasz Wołak2, Bibiana Batá1, Monika Lewandowska2, Joanna Dreszer2
1Nicolaus Copernicus University in Toruń, Poland, Toruń, Poland, 2Institute of Polish Language, University of Silesia in Katowice, Poland, Toruń, Poland, 3Faculty of Psychology, Warsaw University, Warsaw, Poland, 4Institute of Physiology and Pathology of Hearing, Warsaw, Poland, Toruń, Poland, 5Department of Psychology, Faculty of Humanities Nicolaus Copernicus University, Toruń, Poland, 6Department of Psychology, Faculty of Humanities Nicolaus Copernicus University, Toruń, Poland, 7Faculty of Humanities, Nicolaus Copernicus University, Toruń, Poland

W355 Neurofeedback of Frontotriastrial Network Connectivity: Feasibility of a Novel Schizophrenia Treatment
Franziska Weiss1, Martin Fungisai Gerchen1, Peter Kirsch1
1Central Institute of Mental Health, Mannheim, Germany

W356 Assessing somato- and mototopic organisation in Focal Hand Dystonia using high-resolution 7T fMRI
Daisie Pokenham1, Michael Ashgar2, Paul Glover1, George O’Neill1, Ayan Sengupta1, Denis Schluppek1, Rosa Sanchez Panchuelo1, Miles Humberstone1, Susan Francis1
1University of Nottingham, Nottingham, United Kingdom

W357* RtQC:An open-source toolbox for real-time fMRI quality control (live software presentation at OHBM)
Stephan Heinis2, Lydia Hellinger1, Johan van der Meer3, Carles Falcón1, Yury Koush1, David Mehler1, Gustavo Pompoldi1, Frank Scharnowski1, Stavros Skouras2
1Department of Electrical Engineering, Eindhoven, Netherlands, 2University of Zurich, Zurich, Switzerland, 3QIMR Berghofer, Brisbane, QLD, 4Barcelona Beta Brain Research Center, Barcelona, Catalonia, 5Yale University, New Haven, CT, United States, 6Cardiff University, Cardiff, United Kingdom, 7Foundation Asile Des Aveugles, Zurich, Switzerland, 8University of Vienna, Vienna, Austria, 9Department of Biological and Medical Psychology, University of Bergen, Bergen, Norway

W358 Increased dorsolateral PFC-recruitment during emotion regulation in anxiety-prone individuals
Anne-Kathrin Brehl1, Nils Kohn1, Aart Schene2, Guileen Fernandez2
1Donders Institute, Radboud University, Nijmegen, Netherlands, 2Radboudumc, Nijmegen, Netherlands

W359 Filtering Spurious Fluctuations of Sliding Window Correlation
Víctor Vergara1, Anees Abro1, Vince Calhoun2
1The Mind Research Network, Albuquerque, NM, United States, 2Mind Research Network, Albuquerque, NM, United States

W360 Resting State fMRI Analysis of the DMN Network of Patients with Stroke, treated with BonTA
Rodrigo Martín1, Oscar Marrufo1, Adriana Cruz1, Jorge Hernández-Franco2, Lorena Polofo3, Chelel Palencia4, Cecilia Camberos-Angulo5, María de los Remedios Quijada-Cruz6, Alfredo Rodríguez7
1Universidad Nacional Autónoma de México, Facultad de Ciencias, Departamento de Física, Ciudad de México, Mexico, 2Instituto Nacional de Neurologia y Neurocirugia, Mexico City, Mexico, 3National Institute of Neurology and Neurosurgery, Mexico, Mexico, 4National Institute of Neurology and Neurosurgery, Mexico, Mexico, 5University Autonoma Metropolitana, Mexico, Mexico

W361 Functional MRI of Arousals in Sleep
Guangyu Zhou1,2, Jing Xu3, Shuqin Zhou4, Jiayi Liu1,2, Zi Hui Su1,5, Qihong Zou1, Jia-Hong Gao1,2,6,7
1Department of Electrical Engineering, Eindhoven, Netherlands, 2University of Warwick, Coventry, UK, 3Institution of Heavy Ion Physics, Beijing, China, 4Beijing City Key Lab for Medical Physics and Engineering, Institution of Heavy Ion Physics, School of Physics, Peking University, Beijing, China, 5Laboratory of Applied Brain and Cognitive Sciences, College of Advanced Interdisciplinary Studies, Shanghai International Studies University, Shanghai, China, 6Department of Biomedical Engineering, College of Engineering, Peking University, Beijing, China, 7Nuffield Department of Clinical Neurosciences, Oxford University, Oxford, United Kingdom, 8McGovern Institute for Brain Research, Peking University, Beijing, China, 9Shenzhen Institute of Neuroscience, Shenzhen, China

W362 Emerging functional connectivity differences in language-related networks in infants at risk for ASD
Janelle Liu1, Towny Tsang2, Carolyn Ponting3, Shafali Jeste4, Susan Bookheimer5, Mirella Dapretto6
1UCLA, Los Angeles, CA, United States, 2Yale University, New Haven, CT, United States

W363 Coupling of local functional connectivity and BOLD signal variability predicts cognitive performance
Jintao Sheng1, Gui Xue1
1Beijing Normal University, Beijing, Haidian
W364 Identifying functional resting state networks in silence using Looping Star
Nikou Danemasti1, David Lythgoe1, Florian Wiesinger2, Ana Beatriz Solana3, Steven Williams4, Fernando Zelaya5
1Department of Neuroimaging, King’s College London, London, United Kingdom, 2ASL Europe, GE Healthcare, Munich, Germany

W365 Translational model for fMRI activation in impaired cerebrovascular reactivity
Marco Piccirelli1, Christian van Niftrik1, Giovanni Muscas2, Martina Sebk3, Joseph Fisher4, Oliver Buzinov1, Antonios Valavanis1, Luca Regli1, Christoph Stippich1, Jorn Fierstra1
1University Hospital Zurich, Zurich, Switzerland, 2University of Toronto, Toronto, Ontario, Canada

W366 Evaluation of Resting State Functional Connectivity Classification Pipelines for Chronic Back Pain
Kenneth Weber1, Christine Lav1, Katherine Martucci2, Gadi Gilm1, Bennett Lewis3, Sahana Narayani4, Trevor Hastie1, Tor Wager1, Sean Mackey1
1Stanford University, Palo Alto, CA, United States, 2Duke University, Durham, NC, United States, 3University of Colorado Boulder, Boulder, CO, United States

W367 Improved cluster-wise model based on back propagation neural network
Huashuai Xu1,2, Lisa D. Nickerson1, Fengyu Cong1, Huanjie Li1
1Dalian University of Technology, Dalian, China, 2University of Jyväskylä, Jyväskylä, Finland, 3Harvard University, Boston, MA, United States

W368 The neural basis of the craving induced by smoking prohibited symbols in smokers
Wanwan Lv1, Qichao Wu2, Xiaochu Zhang3
1University of Science and Technology of China, Hefei, China, 2University of Science and Technology of China, Hefei, Anhui, 3Harbin Institute of Technology, Harbin, China

W369 Detecting fast sub-second activation sequences with sequential fMRI pattern analysis
Lennart Wittkuhn1,2, Nicolas Schuck1,3
1Max Planck Research Group NeuroCode, Max Planck Institute for Human Development, Berlin, Germany, 2International Max Planck Research School COMP2PSYCH, Berlin, Germany, 3Max Planck UCL Centre for Computational Psychiatry and Ageing Research, Berlin, Germany

W370 The association between autonomic reactivity and conditioned pain modulation is mediated by the PAG
Elena Makovac1,2, Giovanni Calcagnini1, David Hohenschurz-Schmidt2, Alessandra Venezia1, Ottavia Dipasquale1, Jade Jackson2, Sonia Medina2, Steven Williams1, Stephen McMahon2, Matthew Howard1
1Centre for Neuroimaging Sciences, King’s College London, London, United Kingdom, 2Wolfson Centre for Age Related Diseases, King’s College London, London, United Kingdom

W371 Assessing uncertainty of visual cortical areas from resting state fMRI activity recorded at 3T
Azzurra Invernizzi1, Nicolas Grave1, Hinke Holbertsma1, Koen Haak1, Remco Renkens1, Frans Cornelissen1
1University Medical Center Groningen, Groningen, Netherlands, 2Donders Institute, Nijmegen, Netherlands

W372 Neural representation of prospective decisions during spatial navigation in a virtual subway network
Qing Qi1, Yihe Weng1, Shuai Wang1, Senming Zheng1, Lixiang Chen1, Qinyuan Chen1, Sijia Liu1, Yichen Zhang1, Ruixiang Huang1
1Center for the Study of Applied Psychology, School of Psychology, South China Normal University, Guangzhou, China
2Department of Experimental Psychology, University of Oxford, Oxford, United Kingdom

W373 Comparison of brain activation according to the action observation for hand grasp patterns
Mi-Young Lee1, Ju-Sang Kim1, Joon-Ho Seo1
1Ewha Haany University, Geongsansi, Korea, Republic of

W374 Fluid Intelligence Predicts Novel Rule Implementation in a Frontoparietal Control Network
Nadja Tschentscher1, Daniel Mitchell1, John Duncan2
1LMU Munich, Munich, Germany, 2University of Cambridge, Cambridge, United Kingdom

W375 The neural basis of the binaural integration of speech: A combined tACS-fMRI study
Basil Preissig1,2, Riecke Lars1, Matthias Sjerps1,2, Anne Kösem3, Bob Bramson1, Peter Hagoort1, Alexis Hervais-Adelman1
1Donders Institute for Cognitive Neuroimaging, Radboud University, Nijmegen, Netherlands, 2Max Planck Institute for Psycholinguistics, Nijmegen, Netherlands, 3Department of Psychology, Neurolinguistics, Zuerich, Switzerland, 4Department of Cognitive Neuroscience, Faculty of Psychology and Neuroscience, Mastricht University, Mastricht, Netherlands, 5London Neuroscience Research Center (CRNL), Brain Dynamics and Cognition Team, INSERM U928, CNRS UMR5, Lyon, France

W376 Simple Data Acquisition Choices can Adversely Affect Preprocessing Strategies in Resting State fMRI
Anna Crawford1, Mark Lowe2
1Cleveland Clinic Foundation, Cleveland, OH, United States, 2Cleveland Clinic, Cleveland, OH, United States

W377 Excitation/inhibition balance in the aMCC influences resting state activity in the CEN
Lena Danyel2,3,4, Lejla Colic2,3, Dominik Denzel5,6, Felicia Van Durong7, Liliana Ramona Demescu2, Meng Li2,3, Martin Walter2,3,4,5
1Department of Psychiatry and Psychotherapy, University Tübingen, Tübingen, Germany, 2Leibniz Institute for Neurobiology, Magdeburg, Germany, 3Clinical Affective Neuroimaging Laboratory, Magdeburg, Germany, 4IMPRS for Cognitive and Systems Neuroscience, Max-Planck-Institute for Biological Cybernetics, Tübingen, Germany, 5Medical Faculty, University Magdeburg, Magdeburg, Germany, 6Max-Planck-Institute for Biological Cybernetics, Tübingen, Germany

W378 A novel, multimodal approach informed by PET to study the brain pharmacodynamic response under MDMA
Ottavia Dipasquale1, Pierluigi Selvaggi1, Mattia Veronesi1, Anthony Gabay2, Federico Türkheimer2, Mitul Mehta1
1Department of Neuroimaging, IOPPN, King’s College London, London, United Kingdom, 2Department of Experimental Psychology, University of Oxford, Oxford, United Kingdom

W379 Testing vascular contributions to BOLD spin-echo EPI signals with cortical B0 orientation effects
Olivia Viessmann1, Avery Berman1, W Scott Hoge2, Kawin Setsompop1,3, Lawrence Wald1,3, Jonathan Polimeni1,3
1A. A. Martinos Center for Biomedical Imaging, Harvard Medical School, Massachusetts General Hospital, Charlestown, Boston, MA, United States, 2Brigham and Women’s Hospital, Harvard Medical School, Boston, MA, United States, 3Harvard-Massachusetts Institute of Technology Division of Health Sciences and Technology, Cambridge, MA, United States

W380 Delayed Cerebral Hemodynamic Responses in Patients with Chronic Fatigue Syndrome (ME/CFS)
Zack Shan1, Leighton Barnden1, Kevin Finegan2, Sandeep Bhuta1, Timothy Ireland1, Donald Staines2, Sonya Marshall-Gradsnik1
1Griffith University, Gold Coast, QLD, Australia, 2Gold Coast University Hospital, Gold Coast, QLD, Australia

Odd numbers: 12:45 – 13:45; Even numbers: 13:45 – 14:45; Poster Reception: 18:15 – 19:15
W381 Detectability of ocular dominance and orientation preference in V1 using fMRI
Manila Menezes de Oliveira1,2, James Pang1,12, Peter Robinson1,1, Mark Schira1
1University of Sydney, Sydney, Australia, 2ARC research Council Center for Integrative Brain Function (CIBF), Sydney, Australia, 3QIMR Berghofer Medical Research Institute, Brisbane, Australia, 4School of Psychology, University of Wollongong, Wollongong, Australia

W382 Increased alexithymia is associated with reduced neural reactvity towards negative stimuli
Xiaoxiao Zheng1, Lei Xu1, Jialin Li1, Meina Fu1, Fei Xin1, Feng Zhou1, Congcong Liu1, Keshuang Li1, Benjamin Becker1, Keith Kendrick1
1University of Electronic Science and Technology of China, Chengdu, Sichuan, China

W383 Increased Global Interaction across Functional Brain Modules as Concentration of Propofol Increased
Shengpei Wang1, Yun Li1, Tianzuo Li1, Huiguang He1
1Institute of Automation, Chinese Academy of Sciences, Beijing, China, 2Beijing Tongren Hospital, Capital Medical University, Beijing, China, 3Beijing Shijitan Hospital, Capital Medical University, Beijing, China

W384 Reliability of Stationary and Non-stationary Functional Connectivity Across Multiple Frequency Bands
Zhixiong Yang1,2, Bharat Biswal2
1Nanning Normal University, Nanning, China, 2New Jersey Institute of Technology, Newark, NJ, United States

W385 Characterization of Inter-hemispheric Symmetry of Functional Networks in Brain White Matter
Yeli Huang1, Lei Hao1, Peiqiang Wang1, Zhaohua Ding1
1Hebei University, Baoding, China, 2Vanderbilt University Institute of Imaging Science, Nashville, TN, United States

W386 Alteration in regional homogeneity in first-episode bipolar disorder and major depressive disorder
Fei Wang1
1The First Affiliated Hospital of China Medical University, Shenyang, China

W387 Altered functional connectivity in the hippocampal subregions of taxi drivers
Limin Peng1, Ling-Li Zeng1, Yi Ming Fan1, Hui Shen1, De Wen Hu1
1National University of Defense Technology, Changsha, Hunan

W388 Knowing where to switch the direction: a study with a virtual subway map
Siqi Liu1, Yihe Weng1, Senning Zheng1, Shuai Wang1, Huiyuan Huang1, Jie Song1, Qing Qi1, Lu Zhang1, Ruiwang Huang2
1Hebe University, Baoding, China, 2Capital Medical University, Beijing, China

W389 Contextual interference differently modulates activity in regions of the default mode network
Lisa Pawels1, Jolien Gooijers1, Celine Moes1, Hamed Ziaradab, Thiago Santos Monteiro1, Geneviève Albouy1, Stefan Sunaert1,2,3, Stephan Swinnen1, Sima Chalavi1,2,3
1KU Leuven, Leuven, Belgium, 2UZ Leuven, Leuven, Belgium, 3Institute for Human Cognitive and Brain Sciences, University of Leuven, Belgium

W390 CoordsFinder – software enables systematic search for area-based meta-analyses
Pavel Novikov1, Marie Arsalidou2,3
1Centre for Cognition and Decision Making, National Research University Higher School of Economics, Moscow, Russian Federation, 2Department of Psychology, National Research University Higher School of Economics, Moscow, Russian Federation, 3Department of Psychology, Faculty of Health, York University, Toronto, Ontario, Canada

W391 Patterns of neuronal variability in the sensorimotor network mediate affective temperaments
Benedetta Cono1, Paola Magioncalda1, Matteo Martino1, Shankar Tumati1, Laura Capobianco1, Andrea Escelsior1, Giulia Adavasta1, Daniel Russo1, Mario Amore1, Matilde Inglese1, Georg Northoff4
1University of Genoa, Genoa, Italy, 2Ca’Foscari School of Medicine at Mount Sinai, New York, United States, 3University of Ottawa, Ottawa, Canada, 4The Royal Institute of Mental Health Research & University of Ottawa, Ottawa, Canada

W392 Tracking functional and structural brain plasticity in patients with visual snow
Lars Michel1, Njoud Aladasy1, Patrick Freund1, Marco Piccirelli1, Arwa Baeshn1, Jamuna Alghamdi1, Bujar Salihu1, Shila Pazah1, Reza Mazloumi1, Fahad Alshehri1, Klara Landou1, Spyros Kollas1
1Department of Neuroradiology, University Hospital of Zurich, Zurich, Switzerland, 2Spinal Cord Injury Center Balgrist, University of Zurich, Zurich, Switzerland, 3King Abdulaziz University, Jeddah, Saudi Arabia, 4Department of Ophthalmoology, University Hospital of Zurich, Zurich, Switzerland

W393 EPI based distortion- and resolution-matched T1-Like anatomy for submillimeter-resolution fMRI
at 7T
Adnan Shah1, Guangxiao Liu1, Takashi Ueguchi1
1CiNeT, NiCT, Suita City, Osaka, Japan

W394 Optimizing single echo and multi echo 7T fMRI sequences for studying cortical and subcortical areas
Steven Milletic1, Pierre-Louis Bazin1,2, Wietse van der Zwaag1, Nikolaus Weiskopf1, Birte Forstmann1, Robert Trampel1
1University of Amsterdam, Amsterdam, Netherlands, 2Department of Neurophysiology, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, 3Spinazoo Center, Amsterdam, Netherlands

W395 Sampling rate effects on resting state fMRI metrics
Niko Huotari1, Laura Raitanmaa1, Heta Helakari1, Janne Kanen1, Ville Raatikainen1, Viola Borchardt1, Jussi Kantola1, Vesa Kiviniemi1, Vesa Korhonen1
1University of Oulu, Oulu, Finland, 2Leibniz Institute for Neurobiology, Magdeburg, Germany, 3Oulu University Hospital, Oulu, Finland

W396 Efficacy of EEG-fMRI Neurofeedback in stroke in relation to the DTI structural damage: a pilot study
Giulia Lia1, Simon Butet1, Mathis Fleury1, Anatole Lécuyer1, Isabelle Bonan1, Christian Barillot1
1Univ Rennes, Inria, CNRS, ENSR, IRISA, EMPENN ERL U1228, Rennes, France, 2CHU Rennes, Médecine physique et de réadaptation, Rennes, France, 3Univ Rennes, Inria, CNRS, IRISA, Hybrid Project Team, Rennes, France

W397 Dynamic up- and down-regulation of large-scale cortical networks during task-on and task-off periods
Katarzyna Kazimierczak1,2, Karsten Specht1, Justyna Beresniewicz1, Kristiina Kompass1, Rene Westerhausen1, Renate Grüner1, Lars Erlstrand1, Kenneth Hugdahl1
1University of Bergen, Bergen, Norway, 2University of Oslo, Oslo, Norway, 3Department of Radiology, Haukeland University Hospital, Bergen, Norway, 4Department of Clinical Engineering, Haukeland University Hospital, Bergen, Norway

W398 Effects of neurofeedback on the activities of the motor-related areas using execution and imagery
Huixiang Yang1, Yuxiang Yang1, Kenji Ogawa1
1Center for the Study of Applied Psychology, School of Psychology, Institute of Brain Science and Rehabilitation, South China Normal University, Guangzhou, China, 2School of Psychology, Institute of Brain Science and Rehabilitation, South China Normal University, Guangzhou, China

W399 To view full abstract text and ePosters, visit www.aievolution.com/hbm1901
W399 Emotion Regulation Using Implicit Closed-Loop Amygdala Neurofeedback
Apurva Watve1, Amelie Haug2, Yury Koush3, David Willinger4, Annette Bruehl4, Philipp Stämplfi2, Frank Scharnowski4, Ronald Sladky6
1University of Zurich, Zurich, Switzerland, 2Yale University, New Haven, CT, United States, 3University of Vienna, Vienna, Austria

W400 Pain-elicited brain responses: a person’s ID?
Rui Zhao1, Qian Su2, Meng Liang2
1School of Basic Medical Sciences, Tianjin Medical University, Tianjin, China, 2School of Medical Imaging, Tianjin Medical University, Tianjin, China

W401 Deconvolution of fMRI Data using a Paradigm-Free Iterative Approach based on PDEs
Isa Costantini1, Samuel Deslauriers-Gauthier1, Rachid Deriche1
1Inria Sophia-Antipolis Mediterranée, Université Côte d’Azur, Valbonne, France

W402 Differential effects of antipsychotic exposure on CBF, vascular reactivity and reward related BOLD
Peter Hawkins1, Anthony Vernon1, Mitul Mehta2
1King’s College, London, London, United Kingdom, 2King’s College London, London, United Kingdom

W403 Facial Movement Influences face Processing: An fMRI study
Gufei Zhou1, Lixia Tian2, Jiangang Liu2
1Beijing Jiaotong University, Beijing, China

W404 Influence of Suffix and Gender on Inflection of Italian Nouns: A Rapid Event-related fMRI Study
Andrea Russo1, Maria De Martino2, Azzurra Mancuso1, Francesco Di Salile1, Annibale Elia3, Alessandro Laudanna1, Fabrizio Esposito4
1University of Salerno, Fisciano, Salerno, Italy, 2University of Salerno, Fisciano, Italy, 3University of Salerno, Fisciano, Italy, 4University of Salerno, Baronissi, Italy

W405 Dynamic neural disruptions associated with antisocial behavior
Weixiong Jiang1, Hani Zhong1, Lingli Zeng1, Hui Shen1, Wei Wang1, Dewen Hu2, Qingyang Shen2
1University of North Carolina at Chapel Hill, Chapel Hill, NC, United States, 2Hunan First Normal University, Changsha, China, 3National University of Defense Technology, Changsha, China, 4Central South University, Changsha, China

W406 Temporal Characteristics of the EEG-alpha Associations with the BOLD fMRI Signal in Resting-State
SeyedMohammadm Shams1,2, Pierre LeVan3, Jean Chen1,2
1Rotman Research Institute, Toronto, Ontario, Canada, 2Department of Medical Biophysics, University of Toronto, Toronto, Ontario, Canada, 3University Medical Center Freiburg, Freiburg im Breisgau, Deutschland

W407 The attentional ventral network at the base of the Attentional Boost Effect
Giulia Bechi Gabrielli1, Sabrina Fagiolini1, Emiliano Macaluso1, Pietro Spataro1, Laura Serra2, Marco Bozzali1, Clelia Rossi-Arnaud2
1Neuromaging Laboratory, S.Lucia Foundation, Rome, Italy, 2Neuroimaging Lab.,S.Lucia Foundation-Dep. of Education, University of Roma Tre, Rome, Italy, 3Impati Team, Lyon Neuroscience Research Center, Lyon, France, 4Department of Economy, Universitas Mercatorum, Rome, Italy, 5Neuroimaging Laboratory, Santa Lucia Foundation, Rome, Italy, 6Neuroimaging Lab.,S.Lucia Foundation,Rome,Italy - Brighton & Sussex Medical School, University of Sussex, Brighton, United Kingdom, 7Department of Psychology, Faculty of Medicine and Psychology, University La Sapienza, Rome, Italy

W408 Reliable 3D mapping of oculomotor dominance columns in humans using GE-EPI fMRI at 7 T
Daniel Haenelt1,2, Nikolaus Weiskopf1, Roland Mueller1, Shahin Nasri1,2, Jonathan Polimeni1,2, Roger Toft1,2, Martin Sereno1, Robert Trampel1
1Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, 2International Max Planck Research School on Neuroscience of Communication: Function, Structure, and Plasticity, Leipzig, Germany, 3Athinoula A. Martinos Center for Biomedical Imaging, Charlestown, Boston, MA, United States, 4Department of Radiology, Harvard Medical School, Boston, MA, United States, 5Department of Psychology, College of Sciences, San Diego State University, San Diego, CA, United States, 6Department of United States

W409 Luminance signals in the human brain
Shai Sabbath1, Michael Worden2, David Berson1, Jerome Sanes2,3
1Hebrew University, Jerusalem, Israel, 2Brown University, Providence, RI, United States, 3Providence VA Medical Center, Providence, RI, United States

W410 The endocannabinoid system as a predictor of fear extinction learning – An fMRI study
Jennifer Spohr1, Martin Ulrich2, Georg Grön1, Paul Plener1, Michael Prost1, Laura Bindilati1, Birgit Alber2
1Dept. Child and Adolescent Psychiat., University Hospital Ulm, Ulm, Germany, 2Dept. Psychiat., Ulm University, Ulm, Germany, 3Medical University of Vienna, Vienna, Austria, 4Faculty of Endocannabinoids/Lipidomics, University Mainz, Mainz, Germany

W411 The smell of babies – natural reward for the maternal brain
Laura Schäfer1, Marie Michael2, Ilona Croy2
1TU Dresden, Dresden, GA, United States, 2TU Dresden, Dresden, Germany

W412 Accelerated Clustered Sparse fMRI Volume Acquisition in Language Mapping
Phillippi Kell1, Charlotte Nettekoven1, Kilian Weiss1, Thorsten Lichtenstein1, Roland Goldbrunner1, Daniel Giese1, Carolin Weiß2, Lucas2
1University Hospital Cologne, Cologne, Germany, 2Philips Healthcare, Hamburg, Germany

W413 Mapping the neural correlates of mood and anxiety disorders: A meta-analysis of task-fMRI studies
Delfina Jania1, Dominik Moser1, Goeille Doucet1, Maxwell Lubert2, Alexander Rasgon4, Won-Hee Lee3, James Murrough1, Gabriele San5, Simon B. Eckhoff2, Sophia Frangou2
12. Faculty of Medicine and Psychology, Sapienza University of Rome, Roma, Italy, 2Icahn School of Medicine at Mount Sinai, New York, NY, United States, 3Icahn School of Medicine at Mount Sinai, New York, NY, United States, 4Sapienza University of Rome, Roma, Italy, 5Institute of Clinical Neuroscience and Medical Psychology, Medical Faculty, University Dusseldorf, Dusseldorf, Germany

W414 Use of functional correlation tensors for fMRI monitoring of neuroplasticity during motor learning
Tony Frazzelli1, Lukas Grajauskas2, Sujay Ghosh Hajra3, Caressa Liu3, Xiaowei Song4, Ryan D’Arcy5
1Simon Fraser University, Surrey, British Columbia, 2Simon Fraser University, Burnaby, BC, 3Fraser Health Authority, Surrey, British Columbia

W415 Predictive utility of functional connectivity vs. voxel activation: being connected is key!
Christian Habeck1, Qolamreza Razlighi1, Yaakov Stern1
1Cognitive Neuroscience Division, Department of Neurology, Columbia University, New York, NY, United States

W416 Hysteresis measure of whole brain connectivity by first order average derivative strength
Kyle Henke1,2, Vince Calhoun1,2, Victor Vera1, Flora Espinoza1
1The Mind Research Network, Albuquerque, NM, United States, 2University of New Mexico, Albuquerque, NM, United States
W417 Population Receptive Fields' Size and Complex Visual Dysfunction: a Posterior Cortical Atrophy Model
Pieter de Best1, Noa Raz1, Nitzan Guy1, Tamir Ben-Hur2, Serge Dumoulin3,4, Yoni Pertsov1, Netta Levin1
1MRI Unit, Department of Neurology, the Hadassah Hebrew University Medical Center, Jerusalem, Israel, 2Department of Cognitive Sciences, the Hebrew University of Jerusalem, Israel, 3Department of Neurology, the Hadassah Hebrew University Medical Center, Jerusalem, Israel, 4Spinaza Center for Neuroimaging, Amsterdam, Netherlands, 5Department of Experimental and Applied Psychology, VU University, Amsterdam, Netherlands, 6Department of Experimental Psychology, Helmholz Institute, Utrecht University, Utrecht, Netherlands, 7Department of Psychology, the Hebrew University of Jerusalem, Israel

W418 Improvement of spatial and temporal resolution of fMRI for olfactory brain regions
Dmitry Dessert1, Ilona Croy1, Thomas Hummel1, Tim Wesemann1, Hannes Wahi1, Paul Kunke1, Jennifer Linn1
1Dresden University of Technology, Dresden, Germany, 2Department of Psychosomatic Medicine and Psychotherapy, Technical University, Dresden, Germany, 3University Hospital Dresden, Dresden, 4University Hospital of Dresden, Dresden, Germany

W419 Combining in-plane acceleration (GRAPPA) with simultaneous multi-slice (multiband) in functional MRI
Stephanie McManus1, Ross Moir1,2
1Harvard University, Cambridge, MA, United States, 2A.A. Martinos Center for Biomedical Imaging, Massachusetts General Hospital, Charlestown, MA, United States

W420 Resting state functional abnormalities in Alzheimer’s disease revealed using ALFF analysis
Lenka Krocjovicova1, Radek Marecek1, Stanislov Sutovsky1, Irena Roktorov1
1Applied Neuroscience Research Group, Central European Institute of Technology, Masaryk University, Brno, Czech Republic, 2First Department of Neurology, St. Anne’s University Hospital and Faculty of Medicine, Masaryk University, Brno, Czech Republic, 3First Department of Neurology, Comenius University, Bratislava, Slovakia

W421 Language fMRI Predicts Naming Outcome in Left Temporal Lobe Epilepsy Surgery: A Multicenter Study
Jeffrey Binder1, Sara Swanson1, Manoj Raghavan1, Wade Mueller1, Linda Allen1, Christopher Anderson1, Chad Carlson1, Lisa Conant1, William Gross1, Colin Humphries1, Robyn Busch2, Mark Lowe2, John Langfitt1, Madalina Tivarus2, Daniel Drane3, David Loring4, Monica Jacobs5, Victoria Morgan5, Jerzy Szafarski1, Leonardo Bonilha6, Susan Bookheimer7, Thomas Grabowski8, Jennifer Vannest9
1Medical College of Wisconsin, Milwaukee, WI, United States, 2Cleveland Clinic, Cleveland, OH, United States, 3University of Rochester, Rochester, NY, United States, 4Emory University, Atlanta, GA, United States, 5Vanderbilt University, Nashville, TN, United States, 6Vanderbilt University Institute of Imaging Science, Nashville, TN, United States, 7University of Alabama at Birmingham, Birmingham, AL, United States, 8Medical University of South Carolina, Charleston, SC, United States, 9UCLA, Los Angeles, CA, United States, 10University of Washington, Seattle, WA, United States, 11University of Cincinnati, Cincinnati, OH, United States

W422 Supplementary motor network connectivity is associated with motor performance and frailty
Florian Lammers1, Norman Zacharias2, Friedrich Borchers11, Insa Feinkohl1, Claudia Spies1, Georg Winterer1
1Charité University Medical Center, Berlin, Germany, 2Charité – Universitätsmedizin Berlin, Berlin, Germany, 3Max-Dehbrueck-Center for Molecular Medicine in the Helmholtz Association (MDC), Berlin, Germany

W423 Is there a specialization for taste quality in Primary Gustatory Cortex: A 7 Tesla fMRI study
Antonietta Condi1, Anne Roefs1, Sieske Franssen1, Anne Prinster1, Elena Cantone2, Francesco Di Salle2,3, Elia Formisano2, Fabrizio Esposito2,3,4
1Department of Medicine, Surgery and Dentistry, “Scuola Medica Salernitana”, University of Salerno, Baranissi, Italy, 2Faculty of Psychology and Neuroscience, Maastricht University, Maastricht, Netherlands, 3Biorheology and Bioimaging Institute, National Research Council, Naples, Italy, 4Section of ENT, Department of Neuroscience, University of Naples Federico II, Naples, Italy, 5Department of Diagnostic Imaging, University Hospital “San Giovanni di Dio e Ruggi D’Aragona”, Salerno, Italy

W424 Neurophysiological effects of polyphenol-rich whole coffee cherry extract in older adults
Jennifer Robinson1, Julio Yanes1, Meredith Reid1, Jerry Murphy1, Jessica Busler1, Petey Mumford1, Kaelin Young1,2, PB Zietzkowski3, John Hunter1, Darren Beck1
1Auburn University, Auburn, AL, United States, 2FutureCeuticals, Irvine, CA, United States, 3FutureCeuticals, Inc., Momence, IL, United States, 4Edward Via College of Osteopathic Medicine, Auburn, AL, United States

W425 Dynamic Properties of Task-Positive Network During Working Memory Predict Better Task Performance
Hong Gu1, Jin Fan2, Yihong Yang1
1National Institute on Drug Abuse, Baltimore, MD, United States, 2Queens College, The City University of New York, New York, NY, United States

W426 Neural Substrates of Implicit Intention for Adults with Autism Spectrum Disorder
Ting Chen1, Susan Shur-Fen Gau2,3, Tai-Lou Chou1
1Department of Psychology, National Taiwan University, Taipei, Taiwan, 2Department of Psychology, National Taiwan University, Taipei, Taiwan, 3National Taiwan University Hospital and College of Medicine, Taipei, Taiwan

W427 Assessment of back-reconstruction methods for Multi-Subject Spatial Independent Component Analysis
Guoqiang Hu1, Huanjie Li1, Qing Zhang1, Jinlian Wu1, Fengyu Cong1, Lisa Nickerson2
1School of Biomedical Engineering, Dalian University of Technology, Dalian, China, 2Department of Radiology, Affiliated Zhongshan Hospital of Dalian University, Dalian, China, 3Department of Psychiatry, Harvard Medical School, Harvard University, Boston, MA, United States

W428 Temporal complexity of fMRI within resting state networks
Amir Omidvarani1, Mangor Pedersen1, Andrew Zalesky1, Graeme Jackson1
1University of Melbourne, Melbourne, Australia, 2The Florey Institute of Neuroscience and Mental Health, Melbourne, Australia, 3Melbourne University, Melbourne, VIC

W429 An fMRI investigation of gait disturbances in diabetic peripheral neuropathy
Caroline Wong1, Vivian Pu1, Abdalla Mohamed1, Fangrong Zong1, Eric Kho1, E Shyong Tai1, Fatima Narsissah1, Kavita Venkataramanan1
1Clinical Imaging Research Centre, Singapore, Singapore, 2National University Hospital, Singapore, Singapore, 3The University of Queensland, Queensland, Australia, 4National University of Singapore, Singapore, Singapore

W430 Spatial ICA analysis of functional networks modulated by sensory stimuli of different modalities
Lining Li1,2, Qianqian Liu1,2, Fei Tang1,2, Guan Huang1,2, Li Hu1,2, Zhiguo Zhang1,2
1School of Biomedical Engineering, Health Science Center, Shenzhen University, Shenzhen, China, 2Guangdong Provincial Key Laboratory of Biomedical Measurements and Ultrasound Imaging, Shenzhen, China, 3Institute of Psychology, CAS, Beijing, China
W431 Reliability of brain response to natural stimuli: robustness in representing individual difference
Jiaqi Gao1, Jinfeng Wu2, Yang Hu3, Zhengzheng Deng1, Yinshan Wang1, Zhi Yang1, Xinian Zuo2
1Department of Psychology, University of Chinese Academy of Sciences, Beijing, China, 2Institute of Psychology, Chinese Academy of Sciences, Beijing, China, 3Shanghai Key Laboratory of Psychotic Disorders, Shanghai Mental Health Center, Shanghai, China

W432 Feedforward and feedback pathways of human somatosensory system during pain and touch processing
Yingchao Song1, Meng Liang1
1School of Medical Imaging, Tianjin Medical University, Tianjin, China

W433 Investigating the Spatiotemporal Properties of the Hemodynamic Response to Hypercapnia
Jinxia (Fiona) Yao1, Ho-Ching Yang1, James Wang1, Zhenhu Liang1,2, Thomas Talavage1,3, Gregory Scheele2, Bernd Weber3, Monika Eckstein4, René Hurlemann2, Keith Kendrick1, Benjamin Beckey1
1Weldon School of Biomedical Engineering, Purdue University, West Lafayette, IN, United States, 2Yanshan University, Qinhuangdao, China, 3School of Electrical and Computer Engineering, Purdue University, West Lafayette, IN, United States

W434 Impaired cognitive performance under psycho-social stress in cannabis dependence
Weihua Zhao1, Kaeli Zimmermann1, Xinqi Zhou1, Feng Zhou1, Meina Fu1, Christian Denmbach1, Dirk Scheeler1, Beimd Weber1, Monika Eckstein1, René Hurlemann1, Keith Kendrick1, Benjamin Beckey1
1University of Electronic Science and Technology of China, Chengdu, China, 2Department of Psychiatry and Division of Medical Psychology, University of Bonn, Bonn, Germany, 3Department of Epileptology,University of Bonn, Bonn, Germany, 4Heidelberg University, Heidelberg, Germany

W435 Segmental Degree Centrality in Resting-State Functional MRI
Li-Xia Yuan1, Na Zhao1, Yu-Feng Zang1,2
1Institutes of Psychological Sciences, Hangzhou Normal University, Hangzhou, China, 2Center for Cognition and Brain Disorders and the Affiliated Hospital, Hangzhou Normal University, Hangzhou, China, 3Zhejiang Key Laboratory for Research in Assessment of Cognitive Impairments, Hangzhou, China

W436 The Functional Connectivity of Dorsolateral Subthalamic nucleus and its Reliability
Na Zhao1, Ying Jing1, Yu-Feng Zang1, Jue Wong1
1Hangzhou Normal University, Hangzhou, China

W437 Early visual exposure is necessary for future specialization of the fusiform face area in the blind
Rui Dai1, Zirui Huang2, Xuchu Weng3, Sheng He4
1University of Electronic Science and Technology of China, Chengdu, China, 2University of Helsinki, Helsinki, Finland, 3University Hospital of Helsinki, Helsinki, Finland, 4University of Helsinki, Aalto University, Helsinki, Finland

W438 Neural impact of native language literacy during speech processing of non-native language
Yu Zhang1, Pierre Bellec2
1University de Montreal / CRIUGM, Montreal, QC, Canada, 2National Rehabilitation Center Research Institute, Saitama, Japan

W439 FMRI decoding using convolutional neural networks
Yu Zhang1, Pierre Bellec2
1University de Montreal / CRIUGM, Montreal, QC, Canada, 2National Rehabilitation Center Research Institute, Saitama, Japan

W440 Decoding adult ADHD in space and time with combined fMRI and EEG
Vijayal Salmela1, Juha Salmi1, Emma Salo1, Sami Leppämäki1, Pekka Tani1, Laura Hakkanen1, Marja Laasonen1, Kimmo Alho1
1University of Helsinki, Helsinki, Finland, 2Helsinki University Hospital, Helsinki, Finland, 3University of Helsinki, Aalto University, Helsinki, Finland

W441 Cerebral Activities during Air Inhalation through Mouth Using fMRI
Chan-A Park1, Eun-Jin Choi1, Kyung-Jin Lee1, Chang-Ki Kang1, Yeong-Bae Lee2
1Gachon University, Incheon, Korea, Republic of, 2Gachon University Gil Medical Center, Incheon, Korea, Republic of

W442 The benefit of macro-anatomical alignment for fMRI-based imaging genetics
Robert Bitterle1, Peter Hahn1, Christina Novak1, Natalie Reining1, Eva Raspor1, Thomas Lancaster2, Rainer Goeble1, David Linden1, Andreas Reif1
1University Hospital Frankfurt, Goethe University, Frankfurt, Germany, 2School of Medicine, Cardiff University, Cardiff, United Kingdom, 3Maastricht University, Maastricht, Netherlands

W443 Neural correlates of enhanced response inhibition under stress
Jingjing Chang1, Rongjun Yu2
1South China Normal University, Guangzhou, China, 2National University of Singapore, Singapore, Singapore

W444 A resting state fMRI study on pain threshold
Yufang Wang1, Siija Guo1, Jing Lu1, Yang Xia1, Dezhong Yao1
1School of Life Science and Technology, University of Electronic Science and Technology of China, Chengdu, China

W445 Breath Hold Challenges in fMRI: Methodological Issues in Modelling BOLD Signal Changes
Simone Cauzzi1, Alejandro Callara2, Maria Sole Morelli1, Valentina Hartwig3, Domenico Montanaro4, Claudio Passino1, Michele Emdin1, Alberto Giannoni4, Nicola Vanello1
1Institute of Life Science, Scuola Superiore Sant’Anna, Pisa, Italy, 2Institute of Medical Imaging and Biophotonics, National Research Council, Pisa, Italy, 3Dipartimento di Ingegneria dell’Informazione, University of Pisa, Pisa, Italy, 4Institute of Clinical Psychology, National Research Council, Pisa, Italy, 5Fondazione Toscana Gabriele Monasterio, Pisa, Italy

W446 Neural representations underlying mental imagery as unveiled by representation similarity analysis
Maddalena Boccia1, Valentina Sulpizio1, Cecilia Guariglia1, Gaspare Galati3, Rainer Goebel3, David Linden3, Andreas Reif1
1IRCCS Santa Lucia, Rome, Italy, 2University of Bologna, Bologna, Italy, 3Sapienza University of Rome, Rome, Italy

W447 Disrupted resting-state effective connectivity of the thalamus in schizophrenic patients
Minghui Hud1, Meng Liang1
1Tianjin Medical University, Tianjin, China

W448 Filling the gap: mapping the facial homunculus in one-handed individuals and controls
Victoria Root1, Dolly-Anne Muret2, John Thornton2, Tamar Makin2
1Wellcome Centre for Integrative Neuroimaging, University of Oxford, Oxford, United Kingdom, 2Institute of Cognitive Neurosciences, University College London, London, United Kingdom, 3UCLH Lysiholm Department of Neuroradiology, National Hospital of Neurology and Neurosurgery, London, United Kingdom

W449 Respiratory modulation of cardiovascular pulsations enables heterodyne mapping of the brain
Lauren Raitaram1, Niko Huotari1, Vesa Korhonen1, Heta Heikkin1, Jussi Kantola1, Janne Kanarinen1, Vesa Kiviniemi1
1University of Oulu, Oulu, Finland, 2Oulu University Hospital, Oulu, Finland
**W450** Notizia dell’AFNI: Adapting to future needs in human neuroimaging

**Authors:** John Lee, Richard Reynolds, Paul Taylor, Dylan Nielsen, Robert Cox

**Institutions:** 1NIHM, Bethesda, MD, United States, 2NIH, Bethesda, MD, United States, 3National Institute of Mental Health, Washington, DC, United States, 4NIH/NIMH/DHHS/USA, Bethesda, MD, United States

**W451** Direct Contribution Comparison of Brain Structure and Function on Age, Sex and Treatment Prediction

**Authors:** Ning-Xuan Chen, Gui Fu, Su Lu, Chao-Gan Yan

**Institutions:** 1CAS Key Laboratory of Behavioral Science, Institute of Psychology, Beijing, China, 2Radiology, West China Hospital, Sichuan University, Chengdu, China, Chengdu, China

**W452** Remote effects of gliomas on language activity

**Authors:** Guizlar Kaya, Geert-Jan Rutten, Martijn Jansma

**Institutions:** 1Elisabeth-TweeSteden Hospital, Tilburg, Netherlands

**W453** COMT Val158Met influences the functional connectivity of the frontoparietal network at rest

**Authors:** Sichu Wu, Hwee-Ling Lee, Neeraj Upadhyay, Junxiao Wang, Zhao Qinh, Xuming Li, Xue Lian, Xin Zhang, Bing Zhang

**Institutions:** 1Drum Tower Hospital, Medical School of Nanjing University, Nanjing, China, 2German Center for Neurodegenerative Diseases (DZNE), Bonn, Germany

**W454** Brain response to pre-attentive facial expressions in male and female youths with conduct disorder

**Authors:** Elizabeth-BwiseStedend Hospital, Toirbu, Netherlands

**W455** Structural and functional connectivity of the anterior cingulate cortex in patients with borderline personality disorders

**Authors:** Jinyao Yi, Xiaoxia Lei, Mingtian Zhong, Shuqiao Yao

**Institutions:** 1National Institute of Mental Health, Bethesda, MD, United States, 2NIH, Bethesda, MD, United States

**W456** Effects of Highly Purified Cannabidiol (CBD) on fMRI of Working Memory in Epilepsy

**Authors:** Antonello Baldassarre, Maria Serena Filardi, Sara Spadone, Francesca Simonelli

**Institutions:** 1IMT School for Advanced Studies Lucca, Lucca, Italy, 2University of Modena and Reggio Emilia, Modena, Italy, 3Dept. of Neuroscience, Imaging and Clinical Sciences, University G. d’Annunzio, Chieti, Italy, 4University of Chieti, Chieti, Italy, 5Department of Neuroscience, Imaging and Clinical Sciences, University G. d’Annunzio, Chieti, Italy

**W457** Resting state functional connectivity between brain networks predicts sequence motor learning

**Authors:** Antonello Baldassarre, Maria Serena Filardi, Sara Spadone, Francesca Simonelli

**Institutions:** 1IMT School for Advanced Studies Lucca, Lucca, Italy, 2University of Modena and Reggio Emilia, Modena, Italy

**W458** Frequency-dependent competition between task positive and task negative networks in different states

**Authors:** Zhou Xu-feng, Zhou Zhi-Wei, Jio-Hui Pan, Yu-Feng Zang, Hang Zhang

**Institutions:** 1Institutes of Psychological Sciences, Hangzhou Normal University, Hangzhou, China, 2Center for Cognition and Brain Disorders Hangzhou Normal University, Hangzhou, China, 3Hangzhou, China

**W459** Human Personality Illegible in Neuroimaging Data

**Authors:** David Tomecek, Renata Andirovicova, Iveta Fajnerova, Filip Dechterenka, Jan Rydlo, Jiri Horacek, Jiri Lukavsky, Jaroslav Tintera, Jaroslav Hlinka

**Institutions:** 1National Institute of Mental Health, Kecany, Czech Republic, 2Institute of Computer Science, Czech Academy of Sciences, Prague, Czech Republic, 3Institute of Psychology, Czech Academy of Sciences, Prague, Czech Republic, 4Department of Radiology, Institute for Clinical and Experimental Medicine, Prague, Czech Republic, 5Institute of Computer Science, The Czech Academy of Sciences, Prague, Czech Republic

**W460** Comparing synchrony of brain activity evoked by different video clips via inter-subject correlation

**Authors:** Arman Khojandi, Emily Finn, Daniel Handwerker, Peter Molfese, Peter Bandettini

**Institutions:** 1Section on Functional Imaging Methods, National Institute of Mental Health, Bethesda, MD, United States

**W461** Acupuncture effects on autonomic regulation are point-specific: a human hypothalamic fMRI study

**Authors:** Jorge Manuel, Natalia Förber, Florian Bessner

**Institutions:** 1Hannover Medical School, Hannover, Germany

**W462** Simulation and measurement of the effect of TSNR on fMRI scan duration using clinical multiband EPI

**Authors:** Pin Pullen, Jasper Degryse, Han Bossier, Beatrijs Moerkerke, Marcel Brass, Guy Vingerhoets, Eric Achten

**Institutions:** 1Ghent University Hospital, Ghent, Belgium, 2Ghent University, Ghent, Belgium

**W463** Individual Variability of Functional Connectivity in Resting-State and Naturalistic fMRI Paradigms

**Authors:** Mark O’Reilly

**Institutions:** 1Western University, London, Ontario, Canada

**W464** FMRI evidence for broader tuning functions of walking direction signals in older adults

**Authors:** Christoph Koch, Thad Polk, Shu-Chen Li, Nicolas Schuck

**Institutions:** 1Max Planck Research Group NeuroCode, Max Planck Institute for Human Development, Berlin, Germany, 2International Max Planck Research School on the Life Course (LIFE), Berlin, Germany, 3University of Michigan, Ann Arbor, MI, United States, 4TU Dresden, Dresden, Germany

**W465** Vascular reactivity measured with high temporal resolution fMRI in hereditary and sporadic CAA

**Authors:** Thijs van Harten, Sabine Voigt, Emma Koemans, Anna van Opstal, Sanneke van Rooijen, Mark van Buchem, Gisela Terwindt, Jacco Zwanenburg, Marianne Walderveer, Jeroen van der Grond, Marijke Wermelt, Matthias van Osch

**Institutions:** 1LUMC, Leiden, Zuid Holland, 2LUMC, Leiden, Netherlands, 3UMCU, Utrecht, Zuid Holland

**W466** Interaction of transitivity and meaning during action observation

**Authors:** Francesca Simperelli, Andrea Leo, Davide Duzzii, Francesca Benuzzi, Giacomo Handjaras, Luca Cechetti, Emiliano Ricciardi, Pietro Pietrini, Carlo Porro, Fausta Lui

**Institutions:** 1IMT School for Advanced Studies Lucca, Lucca, Italy, 2University of Modena and Reggio Emilia, Modena, Italy

**W467** Flexible use of emotional resources in resilient emerging adults – An fMRI study

**Authors:** Christian Siedentopf, Wladimir Zarin, Nursem Yalcin-Siedentopf, Steiger Ruth, Anja Ischebeck, Hofer Alex, Eike Gizewski

**Institutions:** 1Medical University Innsbruck, Innsbruck, Austria, 2University of Graz, Graz, Austria
W504 Quantifying arterial CO2 contributions to systemic low-frequency oscillations in resting-state BOLD
Nicolete Schwarz1,2, Megan Shevennell2, Michael Rohan1, Blaise Frederick1,2
1McLean Hospital, Belmont, MA, United States, 2Harvard Medical School, Boston, MA, United States
Integration of color and shape into object takes place in early visual cortex
Xioying Wang1, YanChao Bi1
1Beijing Normal University, Beijing, Beijing
W505 Peripheral Nervous System Reconstruction Reroutes Cortical Motor Output—Brain Reorganization
Ahmad Amini1,2, Florian Fischmeister1, Eva Matt1, Robert Schmidhammer1, Frank Rattay1, Roland Beisteiner3
1Medical University of Vienna, Department of Neurology, Clinical fMRI Study Group, Vienna, Austria, 2TU-BioMed Association for Biomedical Engineering, Vienna University of Technology, Vienna, Austria, 3Highfield MR Centre, Medical University of Vienna, Vienna, Austria, 4Institute of Psychology, University of Graz, Graz, Austria, 5Ludwig Boltzmann Institute for Experimental and Clinical Traumatology, Vienna, Austria

Multi-Modal Imaging

W508 Longitudinal tau-PET uptake and atrophy in atypical Alzheimer’s disease
Irene Sintini1, Peter Martin1, Jonathan Graff-Radford1, Matthew Senjem1, Christopher Schwarz1, Mary Machulda1, Daniel Drubach1, Val Lowe1, Clifford Jack1, Keith Josephs1, Jennifer Whitwell1
1Mayo Clinic, Rochester, MN, United States
W509 Imaging brain function with simultaneous BOLD and viscoelasticity contrast: fMRI/IMRE
Patricia Lan1, Kevin Glaser2, Richard Ehman1, Gary Glover1
1Stanford University, Stanford, CA, United States, 2Mayo Clinic, Rochester, MN, United States
W510 Multidimensional Neuroimaging Biosignatures of Perinatally Acquired HIV/early ART in 7-year-old Children
Isaac Khobre1, Frances Robertson1,2, Marcin Jankiewicz3,2, Martha Holmes1, Francesca Little1, Mark Cotton1, Andre van der Kouvë1,2, Barbara Laughton1, Emmanuel Nwosu1, Ernesta Mentejäs1,2, Allison Moez2
1University of Cape Town, Cape Town, South Africa, 2Cape Universities Body Imaging Centre, Cape Town, South Africa, 3Stellenbosch University, Cape Town, South Africa, 4Massachusetts General Hospital, Boston, MA, United States, 5Harvard Medical School, Boston, MA, United States, 6Washington University in St. Louis, St. Louis, MO, United States
W511 Relating electrical connectivity to fMRI/DTI
Dengfeng Huang1, Jung Hennig1, Pierre LeVan1
1Department of Radiology, Medical Physics, Medical Center –University of Freiburg, Faculty of Medicine, Freiburg, Germany

W512 Pharmacological modulation of simultaneously collected resting state EEG and fMRI signals
Anna Forsythe1, Rebecca McMillan1, Doug Campbell1, Doug Campbell1, Gemma Molpas2, Elizabeth Maxwell2, Jamie Sleight2, Joergen Dukart2, Joerg Hopp2, Suresh Murthukumarasamy2
1University of Auckland, Auckland, New Zealand, 2Department of Anaesthesiology, Auckland District Health Board, Auckland, Auckland, 3Auckland District Health Board, Auckland, New Zealand, 4Institute of Neuroscience and Medicine, Brain & Behaviour (INM-7), Research Centre, Jülich, Jülich, Germany, 5Institute of Systems Neuroscience, Medical Faculty, Heinrich Heine University Düsseldorf, Düsseldorf, Germany, 6Clinical Biomarker Division, F Hoffman La Roche, Auckland, Switzerland, 7University of Auckland, Auckland, Auckland

W513 Integration of multi-modal connectomes to predict individual differences in behaviour and cognition
Tiago Azevedo1, Luca Passamonti2, Pietro Lio3, Nicola Toschi3
1Department of Computer Science and Technology, University of Cambridge, Cambridge, United Kingdom, 2Department of Clinical Neurosciences, University of Cambridge, Cambridge, United Kingdom, 3Martinos Center for Biomedical Imaging (MGH) and Harvard Medical School, Boston, MA, United States
W514 A “more” optimal basis set for EEG artifact denoising of EEG-fMRI
Shuyu Yue Zhang1, Jürgen Hennig1, Pierre LeVan1
1University Medical Center Freiburg, Freiburg im Breisgau, Germany
W515 To what extent do alpha rhythm modulations explain hemodynamic activity in the default mode network?
Marco Marino1,2, Dante Martin1,2
1IRCSS San Camillo Hospital Foundation, Venice, Italy, 2University of Oxford, Oxford, United Kingdom
W516 Comparison of results from simultaneous H2O15-PET and fMRI during galvanic vestibular stimulation
Thomas Stephan1,2, Frode Willoch1, Sandra Becker-Bense1, Matthias Brendel1, Nathalie Albert1, Markus Schwaiger1, Marianne Dieterich1,2, Peter Bartenstein4
1Department of Neurology, Ludwig-Maximilians-Universität, München, Germany, 2German Center for Verteigo and Balance Disorders, Ludwig-Maximilians-Universität, München, Germany, 3Institute of Basic Medical Sciences, University of Oslo, Oslo, Norway, 4Department of Nuclear Medicine, University Hospital, Ludwig-Maximilians-Universität, München, Germany, 5Department of Nuclear Medicine, Technische Universität München, München, Germany, 6Munich Cluster of Systems Neurology – SyNergy, München, Germany
W517 Brain organization in early adolescence is linked with a physically active lifestyle
Piergiorgio Salvani1, Thomas Wassenen1, Catherine Wheatley1, Nicholas Beale1, Daniel Papp1, Michiel Cottaris1, Moises Fernandez Hernandez2, Mattea Bastiani3, Sean Fitzgibbon1, Eugene Duff1, Thomas Nichols1, Stephen Smith1, Helen Dawes1, Heidi Johansen-Berg1
1FMRIB, Wellcome Centre for Integrative Neuroimaging, University of Oxford, Oxford, United Kingdom, 2Oxford Brookes University, Oxford, United Kingdom, 3Nuffield Department of Population Health, University of Oxford, Oxford, United Kingdom
W518 Extreme novelty seeking associated multimodal reward-circuit shared over drinking, ADHD, depression
Shile Qi1, Jing Sui2, Victor Vergard3, Zening Fu4, Rongtao Jiang5, Juan Bustillo6, Roshel Lenroot6, Andrew R. Mayer1, Armin Irajii7, Rogers Silva8, Xiaohong Mo9, Michael C. Stevens10, Jingyu Liu11, Jiayu Chen1, Dangdong Lin1, Eswar Damoraju2, Xia Yang3, Congying Chu4, Mustafa Solomon5, Dongmei Zh1, Jessica A. Turner5, Daniel H. Mathalon6, Judith M. Ford7, James Voyvodic8, Bryon A. Mueller9, Aynsenil Belger11, Sarah C McEwen11, Steven G. Potkin11, Adrian Predo11, Gunter Schumann1, Vince Calhoun11
1The Mind Research Network, Albuquerque, NM, United States, 2Institute of Automation, Chinese Academy of Sciences, Beijing, China, 3Department of Psychiatry, University of New Mexico, Albuquerque, NM, United States, 4Department of Psychiatry, University of New Mexico, Albuquerque, NM, United States, 5Huaxi Brain Research Center, West China Hospital of Sichuan University, Chengdu, China, 6Olin Neuropsychiatry Research Center, Hartford, CT, United States, 7Institute of Psychiatry, King’s College London, London, United Kingdom, 8Department of Psychology, Georgia State University, Atlanta, GA, United States, 9Department of Psychiatry, University of California, San Francisco, CA, United States, 10Department of Radiology, Brain Imaging and Analysis Center, Duke University, Durham, NC, United States, 11Department of Psychiatry, University of Minnesota, MN, United States, 12Department of Psychiatry, University of North Carolina School of Medicine, Chapel Hill, NC, United States, 13Sleep and NeuroImaging Center, Faculty of Psychology, Southwest University, Chongqing, China, 14Department of Psychiatry and Human Behavior, University of California Irvine, Irvine, CA, United States.
W544 Diffusion Tensor Imaging White Matter Atlas for the Domestic Feline Brain
Erica Barry1, Philippa Johnson2, Wenning Luh3, Ashish Roi4, Sofia Cerda-Gonzalez6
1Cornell University, Ithaca, NY, United States, 2College of Veterinary Medicine, Cornell University, Ithaca, NY, United States, 3College of Human Ecology, Cornell University, Ithaca, NY, United States, 4Radiology and Biomedical Imaging, University of California, San Francisco, CA, United States, 5Medvet, Chicago, IL, United States

W545* The MNI-NOEL 3D Myeloarchitectonic atlas of the human cerebral cortex
Seok-Jun Hong1, Seiles Yung1, Hyo Lee1, Fatemeh Fadaiel1, Ruvnno Gili2, Neda Bemasconi3, Andrea Bemasconi1
1Montreal Neurological Institute, McGill University, Montreal, Quebec, Canada

W546 Functional segregations of human middle temporal gyrus
Jinpings Xu1, Qingmao Hu1
1Institute of Biomedical and Health Engineering, Shenzhen Institutes of Advanced Technology, Chinese, Shenzhen, China

W547 Consensual Atlas of ReSTing-state Networks: Reconciling differences in brain functional atlases
Gaelle Doucet1, Won-Hee Lee2, Sophia Frangou2
1Icahn School of Medicine at Mount Sinai, New York, NY, United States, 2Icahn School of Medicine at Mount Sinai, New York, NY, United States

Xiaoxiao Qi1, Shengwei Zhang1, Konstantinos Arfanakis1
1Illinois Institute of Technology, Chicago, IL, United States

W549 Unbiased Age-Specific Structural Brain Atlases for Chinese Pediatric Population
Tengda Zhao1, Xuhong Liao1, Vladimir Fonov2, Qiushi Wang3, Weiwei Meng2, Yanpei Wang1, Shaozheng Qin1, Shuping Tan1, Jia-Hong Gao4, Alan Evans1, Sha Tao1, Qi Dong1, Yong He2
1State Key Laboratory of Cognitive Neuroscience and Learning, Beijing Normal University, Beijing, China, 2School of Systems Science, Beijing Normal University, Beijing, China, 3Montreal Neurological Institute, McGill University, Montreal, Quebec, Canada, 4Academy for Advanced Interdisciplinary Studies, Peking University, Beijing, China, 5Beijing HuilongGuan Hospital, Peking University, Beijing, China

W550 Systematic evaluation of structural T1-weighted brain templates for use in studies on older adults
Abdur Raquib Ridwan1, Shengwei Zhang1, Mohammad Rakheen Niaz2, Xiaoxiao Qi1, David A. Bennett7, Yongyi Yang1, Konstantinos Arfanakis1
1Illinois Institute of Technology, Chicago, IL, United States, 2Rush University, Chicago, IL, United States

W551 A high-resolution structural template for studies in older adults: Development and Evaluation
Mohammad Rakheen Niaz2, Abdur Raquib Ridwan1, Xiaoxiao Qi1, David A. Bennett7, Mohammad Rakheen Niaz2, Konstantinos Arfanakis1
1Illinois Institute of Technology, Chicago, IL, United States, 2Rush University, Chicago, IL, United States

W552 Notizia dell’AFNI! AFNI now makes templates from your subjects easily!
John Lee1, Paul Taylor1, Robert Cox1, Daniel Glen1
1NIMH, Bethesda, MD, United States

W553 Inference of an extended short fiber bundle atlas and white matter organization
Nicole Labra Aval1, Jessica Leibenberg2, Denis Rivière3, Guillaume Auzaiz4, Clara Fischer5, Fabrice Poupon6, Pamela Guevard7, Cyril Poupon8, Jean-François Mangin9
1NeuroSpin-CEA (Commissariat à l’Energie Atomique et aux Energies Alternatives), Université Paris Sud, Gif-sur-Yvette, France, 2Université Paris Diderot, Sorbonne Paris Cité, UMR-S 1161 INSEERM, Paris, France, 3NeuroSpin-CEA (Commissariat à l’Energie Atomique et aux Energies Alternatives), Gif-sur-Yvette, France, 4Institut de Neurosciences de la Timone, Aix-Marseille University, Marseille, France, 5NeuroSpin-CEA (Commissariat à l’Energie Atomique et aux Energies Alternatives), Gif-sur-Yvette, France, 6Unidad de Neurociencias de la Timone, Aix-Marseille University, Marseille, France, 7NeuroSpin-CEA (Commissariat à l’Energie Atomique et aux Energies Alternatives), Gif-sur-Yvette, France, 8Université de Paul Sabatier, Toulouse, France, 9Université de Toulouse, France

W554 The Mayo Clinic Adult Lifespan Template (MCALT): Segments and Atlases for Older Adult Brains
Christopher Schwartz1, Jeffrey Gunter2, Chadwick Ward3, Kejal Kantarci4, Prashanthi Venkani5, Matthew Senjem1, Ronald Petersen1, David Knopman5, Clifford Jack1
1Mayo Clinic, Rochester, MN, United States

W555 Development of multimodal templates of the older adult brain: T1w and DTI in common space
Yingjuan Wu1, Abdur Raquib Ridwan1, Xiaoxiao Qi1, Shengwei Zhang1, David A. Bennett7, Konstantinos Arfanakis1
1Illinois Institute of Technology, Chicago, IL, United States, 2Rush University, Chicago, IL, United States

W556 Local optimal transport for functional brain template estimation
Thomas Bazeille1, Hugo Richard1, Hicham Janati1, Bertrand Thirion1
1Parietal Team, INRIA, Gif-sur-Yvette, France

W557 In-vivo probabilistic structural atlas of human parabrachial and vestibular nuclei complex at 7Tesla
Kayito Singh1, Ioel Indovina1, Jeffrey Staba1, Marta Bianciardi1, Patrick Park1, Kayla Ferko1, Terry Peters1, Ali Khan1
1Western University, London, Ontario, Canada

W558 Anatomical fiducials for quantifying template creation convergence: application to a 7T dataset
Jonathan Lou1, Greydon Gilmore1, Yiming Xiao1, Andrew Parrent1, John Demarco1, Geetika Gupta1, Patricia Park1, Kayla Ferko1, Terry Peters1, Ali Khan1
1Western University, London, Ontario, Canada

W559 A Population MRI-Based Atlas of the cynomolgus macaque
Qiming Lyu1, Xiangyu Shen1, Mingchao Yan1, Shengyao Yan1, WenWen Yu1, Krista Zielje1, Zheng Wang1, Yingjuan Wu1, Abdur Raquib Ridwan1, Xiaoxiao Qi1, Shengwei Zhang1, David A. Bennett7, Konstantinos Arfanakis1
1Institute of Neuroscience, Chinese Academy of Sciences, Shanghai, China

W560 Comparison between cytoarchitectonic and MRI based parcellation of the human auditory cortex
Omer Faruk Guban1, Hartmut Mohlberg2, Katrin Amunts2, Rainer Goebel1, Federico De Martino1
1Maastricht University, Maastricht, Netherlands, 2Research Centre Jülich, Jülich, Germany

W561 A probabilistic atlas of the human ventral tegmental area
Anne Truitt1, Laura Fontanesi2, Martijn Mulder1, Bernhard Hommel1, Birte Forstmann3
1Leiden University, Cognitive Psychology Unit & Leiden Institute for Brain and Cognition, Leiden, Netherlands, 2University of Amsterdam, Integrative Model-based Cognitive Neuroscience Research Unit, Amsterdam, Netherlands, 3University of Basel, Economic Psychology, Basel, Switzerland

W562 Utrecht University, Experimental Psychology, Utrecht, Netherlands
W562 A revised toolbox for combining probabilistic cytoarchitectonic maps and functional imaging data
Simon B. Eickhoff1, Svenja Caspers2, Guillaume Flandin3, Martina Minnerop4, Claudia R. Eickhoff5, Timo Dickscheid6, Peter Pieperhoff1, Hartmut Mohlberg1, Karl Zilles1, Katrin Amunts1
1Institute of Neuroscience and Medicine (INM-1, INM-7), Forschungszentrum Jülich, Jülich, Germany, 2Institute of Anatomy I, Heinrich Heine University Duesseldorf, Duesseldorf, Germany, 3Hospital for Central Europe for Neuroimagining, UCL Queen Square Institute of Neurology, London, United Kingdom, 4Center for Movement Disorders and Neurorehabilitation, Heinrich-Heine University Düsseldorf, Düsseldorf, Germany, 5Clinical Neuroscience and Medical Psychology, Medical Faculty, Heinrich Heine University, Duesseldorf, Germany

W563 Construction of Volume-Surface Consistent Templates for Infant Brain MRI
Sahar Abdolah1, Zhengwang Wu1, Gang Li1, Li Wang1, Weil Li1, Pei-Thuian Yao2, Dinggang Shen1
1Department of Radiology and Biomedical Research Imaging Center, University of North Carolina, Chapel Hill, NC, United States

W564 Superficial white matter dMRI analysis: where are we now?
Miguel Guevara1, Pamela Guevara2, Cyril Poupon1, Jean-François Mangin2
1Neurospin, Gif-sur-Yvette, 2Universidad de Concepción, Concepción, Chile

W565 A React-based Neuroimaging Visualisation Library for the Web
Armin Taheri1, Najmeh Khalli-Mahani1, Christine Rogers2, Cecile Madjar3, Gregory Kiar4, PJ Toussaint2, Candice Czech2, Natalia Beck5, Lindsay Lewis6, Carolina Makowski2, Samir Das2, Reza Adalat2, Shawn Brown, Alan Evans
1Montreal Neurological Institute and Hospital, Montreal, Quebec, Canada, 2Montreal Neurological Institute and Hospital, Montreal, Quebec, Canada, 3Montreal Neurological Institute, Montreal, Quebec, Canada, 4McGill Centre for Integrative Neuroscience, Montreal Neurological Institute, McGill University, Montreal, QC, Canada, 5McGill University, Montreal, Quebe, Canada, 6McGill University, Westmount, Quebec, Canada, 7MRI, McGill University, Montreal, Quebec, Canada

W566 Assessing multiscale reproducibility of parcellation methods using traveling subjects
Giuseppe Li1, Ayumi Yamas hitcha1, Noraki Yahata2, Takashi Itoh2, Takashi Yamada3, Naho Ichikawa1, Masahiro Takamura1, Yujiro Yoshihara1, Akira Kunimatsu1, Naohiro Okada4, Hirota Yamagata4, Koji Matsus1, Ryu-ichiro Hashimoto5, Go Okada4, Yuky Sakai6, Jin Narumoto4, Yasuhiro Shimada6, Kiyoto Kasaio7, Nobumasa Kato8, Hidehiko Takahashi5, Yasumasa Okada5, Saori Tanaka1, Okto Yamashita1, Hiroshi Imamizu10, Mitsuo Kawato11, Jun Morimoto12
1ATR, Brain Information Communication Research Laboratory Group, Kyoto, Japan, 2National Institute of Radiological Sciences, Chiba, Japan, 3Showa University, Tokyo, Tokyo, Japan, 4Hiroshima University, Hiroshima, Japan, 5Kyoto University, Kyoto, Japan, 6The University of Tokyo, Tokyo, Japan, 7Institute of Neuropsychiatry, Graduate School of Medicine, The University of Tokyo, Tokyo, Japan, 8Yamaguchi University Graduate School of Medicine, Yamaguchi, Japan, 9Saitama Medical University, Saitama, Japan, 10Showa University, Tokyo, Japan, 11Kyoto Prefectural University of Medicine, Kyoto, Japan, 12Brain Activity Imaging Center, ATR-Promotions Inc., Kyoto, Japan

W567 Brain areas associated with basic mathematical operations
Ksenia Kanopkin1, Marie Arsalidou2
1National Research University Higher School of Economics, Moscow, Russian Federation, 2York University, Toronto, Ontario, Canada

W568 Human Adolescent Brainnetome Atlas: A New Version for 9 years Old Children
Wen Li1, Luqi Cheng2, Lingzhong Fan3, Tianzhi Jiang4,5
1Institute of automation Chinese academy of sciences, Beijing, China, 2University of Electronic Science and Technology of China, Chengdu, China, 3Institute of Automation Chinese academy of sciences, Beijing, China, 4Brainnetome Center & National, Institute of Automation, Chinese Academy of Sciences, Beijing, China, 5Institute of Automation, Chinese Academy of Sciences, Beijing, China

W569 Individualized connectivity-based parcellation of the human brain with diffusion tensor imaging
Meizhen Han1, Guoyuan Yang1, Siqian Zhuo1, Boyan Xu1, Hai Li1, Weiwel Men1, Jianqiao Ge1, Hesheng Liu1, Jiahong Gao1
1Center for MRI Research, Peking University, Beijing, China, 2Martinos Center for Biomedical Imaging, Massachusetts General Hospital, Charlestown, MA, United States

W570 High-dimensional dictionary learning on massive fMRI data: multi-scale functional atlases
Kamalaker Dadi1, Arthur Mensch1, Krasztosf Gargolewski2, Bertrand Thirion2, Goel Varaouaux2
1Pareial Team, INRIA, Gif-sur-Yvette, France, 2Stanford University, San Francisco, CA, United States

W571 TemplateFlow: a 4D standard space of neuroimaging standard images
Oscar Esteban1, Rostka Ciric2, Christopher Markiewicz2, Yaroslav Halchenko2, Goncalves Mathias3, Sattraj Gho4, Russel Polack4, Krasztos公斤f Gargolewski5
1Stanford University, Stanford, CA, United States, 2University of Pennsylvania, Philadelphia, PA, United States, 3Dartmouth College, Dartmouth, NH, United States, 4MIT, Cambridge, MA, United States, 5HMS, Cambridge, MA, United States, 6Stanford, Palo Alto, CA, United States, 7Stanford University, San Francisco, CA, United States

W572* Mechanical Properties of the Human Brain: Development of an MR Elastography Template
Lucy Hiscox1, Shalaka Sharma1, Hillary Schwab2, Matthew McCurry3, Curtis Johnson4
1University of Delaware, Newark, DE, 2University of Illinois at Urbana-Champaign, Urbana, IL, United States, 3Dartmouth College, Hanover, NH, United States

W573 The Application of Human Brainnetome Atlas in Mental Disorder focus on Insula
Jie Tang1, Tianzhi Jiang2, Lingzhong Fan3, Kristoffer Madson4, Yongfeng Yang5, Simon B. Eickhoff6
1Institute of Automation, Chinese Academy of Sciences, Beijing, China, 2Brainnetome Center & National, Institute of Automation, Chinese Academy of Sciences, Beijing, China, 3Institute of Automation Chinese Academy of Sciences, Beijing, China, 4Danish Research Centre for Magnetic Resonance, Hvidovre, Denmark, 5The Second Affiliated Hospital of Xinxiang Medical University, Xinxing, China, 6Forschungszentrum Jülich, Jülich, Germany

Databasing and Data Sharing

W574 Open research: linking the bits and pieces with OpenAIRE-connect
Camille Maumet1, Xavier Rolland1, Axel Bonnet1, Argiro Kokogiannaki2, Sorina Camarasu Pop2, Christian Barillot1
1Univ Rennes, Inria, CNRS, Inserm, Rennes, France, 2Univ Lyon, INSA Lyon, Univ. Claude Bernard Lyon 1, UJ-M-Saint Etienne, CNRS, Inserm, CREATIS UMR 5220, Lyon, France, 3Athene Research Center, Athens, Greece
INFORMATICS
Databases and Data Sharing

W575 The best of both worlds: using semantic web with JSON-LD. An example with NIDM-Results & Datalad
Comil Meamet1, Satrajit Ghosh2, Yaraslov Halchenko3, Dorota Jarecka4, B. Nichols5, Jean-Baptiste Poin6, Michael Hämke2
1Inria, CNRS, InsERM, Rennes, France, 2MIT/HMS, Cambridge, MA, United States,
3Dartmouth College, Hanover, NH, United States, 4Massachusetts Institute of Technology, Boston,
MA, United States, 5Bioinformatics and Computational Biology, Genentech Inc, South San Francisco,
CA, United States, 6McGill University, Montreal, Quebec, Canada, 1Research Centre Jülich, Jülich,
Germany

W576 A large open-source dataset of acute stroke MRIs and related automated lesion segmentation algorithm
Chin-Fu Li1, Sandhya Ramachandra1, Victor Wang2, Xin Xu3, John Hsu4, Susumu Mori5, Michael Miller1,
Andrea Faria2
1Department of Biomedical Engineering, Johns Hopkins University, Baltimore, MD, United States,
2Department of Radiology, Johns Hopkins University, Baltimore, MD, United States

W577 Introducing a Brain MRI and Cognitive Dataset: Iranian Brain Imaging Database
Seyed Amir Hossein Batouli1, Minoo Sisakhti2
1School of Advanced Technologies in Medicine, Tehran University of Medical Sciences, Tehran, Iran,
Islamic Republic of, 2Institute for Cognitive Sciences Studies, Tehran, Iran, Islamic Republic of

W578 A new repository to share Brain Tumour data: European Network for Brain Imaging of Tumours
Cyril Pernet1, Daniele Marinazzo2, Christophe Stippich3, Roland Beisteiner4, Linda Douw4,
Ansders Eklund5
1University of Edinburgh, Edinburgh, United Kingdom, 2Ghent University, Ghent, Belgium, 3University
Hospital Zürich, Zürich, Switzerland, 4Medical University of Vienna, Department of Neurology,
Clinical MRI Study Group, Vienna, Austria, 5VU University Medical Center, University of Amsterdam,
Amsterdam, Netherlands, 6Department of Biomedical Engineering & Department of Computer and
Information Science, Linköping Uni, Linköping, Sweden

W579 Quantity and Quality: Normative Open-Access Neuroimaging Databases
Scott Isherwood1, Birte Forstmann1, Pierre-Louis Bazin2, Anneke Alkemade1
1Radboud University, Nijmegen, Netherlands

W580 Harmonising white matter hyperintensities measures across studies: impact of BIANCA training options
Ludovica Griffanti1, Ilaria Bertani2, Valentina Bordin2, Irene Mattio12, Giovanna Zamboni3, Sona Suri3, Enidó Zsófia4, Klaus Ebmeier5, Maria Marcella Lagana6,
Giuseppe Baselli2, Mark Jenkinson1, Andreia Faria2
1Wellcome Centre for Integrative Neuroimaging (WIN), FMRIB, NDCN, University of Oxford, Oxford,
United Kingdom, 2Department of Electronics, Information and Bioengineering, Politecnico di Milano,
Milan, Italy, 3Department of Biomedical, Metabolic and Neural Sciences, University of Modena
and Reggio Emilia, Modena, Italy, 4Department of Psychiatry, University of Oxford, Oxford, United
Kingdom, 5Wellcome Centre for Integrative Neuroimaging (WIN), OXBA, Dept. of Psychiatry,
University of Oxford, Oxford, United Kingdom, 6IRCCS Fondazione Don Carlo Gnocchi, Milan, Italy,
7Department of Paediatrics, University of Oxford, Oxford, United Kingdom

W581 BIDScoin: an easy toolkit to convert your data according to the Brains Imaging Data Standard (BIDS)
Marcel Zwiers1, Robert Oostenbelt2, Daniel Gomez2
1Radboud University, Nijmegen, Netherlands

W582 Detecting and harmonizing scanner differences in the ABCD study
Dylan Nielsen1, Francisco Pereira2, Charles Zheng3, Nino Migneishvili4, John Lee5, Adam Thomas1,
Peter Bandettini6
1National Institute of Mental Health, Bethesda, MD, United States, 2UCLA, Los Angeles, CA,
United States

W583 Sharing and visualization of BIDS electrophysiology data via the LORIS multi-modal platform
Christine Rogers1, Cecile Madjar1, Samir Das1, Armin Toher1, James Desjardins2, Shawn Brown3,
Mouna Safi-Harbi3, Melanie Legault4, Najmeh Khalili-Mahani5, Mayada Elsabbagh6, Scott Huberty1,
David Blader1, Muhammad Khart1, Ali Zee Wickenheiser1, Jorge Bosch-Bayard1, Eduardo Aubert Vazquez2,
Pedro Valdes-Sosa5, Alan Evans6
1McGill Centre for Integrative Neuroscience, Montreal Neurological Institute, McGill University,
Montreal, Quebec, Canada, 2Brock University, St. Catharines, Canada, 3Montreal Neurological
Institute, McGill University, Montreal, Quebec, Canada, 4University of Alberta, Edmonton, Alberta,
Canada, 5Cuban Neuroscience Center, Havana, Cuba, 6Montreal Neurological Institute, McGill
University, Montreal, Quebec, Canada

W584 The Canadian Open Neuroscience Platform (CONP) Ethics & Governance Framework
Stephanie Dyke1, Barth Knoppers2, Alan Evans1
1Montreal Neurological Institute, McGill University, Montreal, Quebec, Canada, 2Centre of Genomics
and Policy, McGill University, Montreal, Quebec, Canada

W585 Functional specialization in human cognition: a large-scale neuroimaging initiative
Ana Luisa Pinho1, Juan Jesús Torre1, Gaël Gaël Varoquaux1, Bertrand Thirion1
1Parietal Team, Inria, Gif-sur-Yvette, France

W586 Distributions of image quality metrics in MRIQC Web-API
Dylan Nielsen1, Charles Zheng1, Oscar Esteban1, Krzysztof Gorgolewski2, Yaraslov Halchenko3,
Satrajit Ghosh4, Peter Bandettini1, Adam Thomas1
1National Institute of Mental Health, Bethesda, MD, United States, 2Stanford University, Stanford,
CA, United States, 3Dartmouth College, Hanover, NH, United States, 4MIT/HMS, Cambridge, MA,
United States

W587 Constructing an Ontology of Neuroscience Experiments for the Neuroimaging Data Model (NIDM)
Karl Helmer1, David Keato2, Tibor Auer3, Satrajit Ghosh1, Comil Meamet6, Thomas Nichols4,
Jean-Baptiste Poin6
1Massachusetts General Hospital, Charlestown, MA, United States, 2University of California Irvine,
Irvine, CA, United States, 3University of London, London, United Kingdom, 4Institute of Systems Neuroscience, Medical Faculty, Heinrich Heine University,
Düsseldorf, Germany, 5Montreal Neurological Institute and Hospital, McGill University, Montréal,
Canada

W588* One thing to bind them all: A complete RAW data structure for auto-generation of BIDS datasets
Benjamin Podrack1, Kyle Meyer1, Yaraslov Halchenko2, Michael Hanke3
1Institute of Neuroscience and Medicine, Brain & Behaviour (INM-7), Research Centre Jülich, Jülich,
Germany, 2Dartmouth College, Hanover, NH, United States, 3Dartmouth College, Dartmouth, NH,
United States, 4Institute of Systems Neuroscience, Medical Faculty, Heinrich Heine University,
Düsseldorf, Germany

W589 R3BRAIN: an open brain imaging resources for reliability, reproducibility and replicability
Yinshao Wang1, Yi Dang1, Quan Zhou2, Jiao Gao2, Chao Jiang3, Wei Luo3, Xi-Nian Zuo2,3,4
1Key Laboratory of Behavioral Science, Institute of Psychology, Chinese Academy of Sciences, Beijing,
China, 2Department of Psychology, University of Chinese Academy of Sciences, Beijing, China,
3Magnetic Resonance Imaging Research Center, Institute of Psychology, Chinese Academy of
Sciences, Beijing, China, 4Key Laboratory for Brain and Education Sciences, Guangxi Teachers
Education University, Guangxi, China
W590 Federated Learning in Distributed Databases: Meta-Analysis of Large-Scale Subcortical Brain Data
Santiago Smith Silva Rincon1, Boris Gutman2, Eduardo Romero3, Paul Thompson4, Andre Altman5, Marco Lorenzi1
1Inria, Sophia Antipolis, France, 2Illinois Institute of Technology, Chicago, IL, United States, 3University of Nacional de Colombia, Bogota, Colombia, 4Imaging Genetics Center, Stevens Neuroimaging & Informatics Institute, Keck, USC, Marina del Rey, CA, United States, 5University College London, London, United Kingdom, 6INRIA, Sophia Antipolis, France

W591 SweetData: a versatile open-source tool for lab data management and validation
Ronald Stadl1, Lukas Lenaersdorff2, Michael Woletz2, Helena Hartmann2, Martin Tik3, Christian Windschberger1, Claus Lamm1
1University of Vienna, Vienna, Austria, 2Medical University of Vienna, Vienna, Austria

W592* Orchestrating cloud networks for discoverable, accessible, interoperable, and reusable neuroscience
Soichi Hayashi1, Lindsey Kitchell2, Brent McPherson3, Bradley Caron2, Daniel Bullock4, Paolo Avesani5, Robert Hensche6, Eleftherios Garyfallidis7, Lei Wang2, Ivo Dinov4, Franco Pestilli8
1Indiana University, Bloomington, IN, United States, 2Indiana University Bloomington, Bloomington, IN, United States, 3Indiana University-Bloomington, Bloomington, IN, United States, 4Indiana University - Bloomington, Bloomington, IN, United States, 5Fondazione Bruno Kessler, Trento, Italy, 6Indiana University, Bloomington, Bloomington, IN, United States, 7Northwestern University, Chicago, IL, United States, 8University of Michigan, Ann Arbor, MI, United States

W593 Open Science Identifier
John Saigle1, Samir Das2, Pierre Rioux3, Alan Evans3
1McGill University, Montreal, Quebec, Canada, 2Montreal Neurological Institute and Hospital, Montreal, Quebec, Canada

W594 The LORIS Open-Science Biobank Module: An Integrative Approach to Digital Biorepositories
Henni Rabalais1, Rida About-Haidar2, Samir Das3, Angela Genge4, Sonia Laî4, Melanie Legault4, Leigh Evans5, Nicolas Brosard6, Zaliqa Rosili7, John Saigle8, Alan Evans9
1McGill Centre for Integrative Neuroscience, Montreal, Quebec, Canada, 2Montreal Neurological Institute and Hospital, Montreal, Quebec, Canada, 3Montreal Neurological Institute, McGill University, Montreal, Quebec, Canada

W595 NIH Funded NITRC’s Triad of Services: Software, Data, Compute
Nina Preuss1, David Kennedy2, Christian Haselgrove3, Albert Crowley4, Matt Travers4, Abby Paulson5
1TCG, Washington, DC, United States, 2University of Massachusetts Medical School, Worcester, MA, United States, 3University of Massachusetts Medical School, Worcester, MA, United States, 4TGCA, Washington, DC, United States, 5TCG, San Francisco, CA, United States

Informatics Other

W596* PyParadigm - A Python library to create paradigms
Felix Knorr1, Johannes Petzold2, Michael Marxen2
1TU Dresden, Dresden, Saxony

W597* Nideconv: a Python package for hierarchical, Bayesian linear deconvolution of neural signals
Gilles de Hollander1, Tomas Knapen2
1CEITEC Masaryk University, Brno, Czech Republic

W598 An open source GUI toolbox for EEG-fMRI fusion analysis
Jianfu Li1, Guofeng Ye1, Pingfu Wang2, Xiaobao Liu3, Sisi Jiang4, Li Dong5, Cheng Luo2, Tiejun Liu3, Dezhang Yao6
1University of Science and Technology of China, Beijing, China

W599* Neuroscout: a cloud-based platform for flexible re-analysis of naturalistic fMRI datasets
Alejandro De La Vega1, Quinten McNamara2, Ross Blair3, Michael Hanke4, Tal Yarkoni4
1University of Texas Austin, Austin, TX, United States, 2Stanford University, Palo Alto, CA, United States, 3Research Centre Jülich, Jülich, Germany, 4University of Texas at Austin, Austin, TX, United States

W600* Mask_explorer and movement_info: User friendly tools for fMRI quality control
Martin Gajdoš1, Michal Míkl1, Radek Marecek1
1CEITEC Masaryk University, Brno, Czech Republic

W601 Tools for FAIR Neuroimaging Experiment Metadata Annotation with NIDM Experiment
David Kean1, Karl Helmer2, Camille Maumet3, Smruti Padhy4, Dorota Jarecka5, David Kennedy6, Satrajit Ghosh7, Jean-Baptiste Poline8
1University of California, Irvine, Irvine, CA, United States, 2Massachusetts General Hospital, Charlestown, MA, United States, 3Inria, Univ Rennes, CNRS, Inserm, Rennes, France, 4Massachusetts Institute of Technology, Cambridge, MA, United States, 5Massachusetts Institute of Technology, Boston, MA, United States, 6University of Massachusetts Medical School, Worcester, MA, United States, 7MIT/HMS, Cambridge, MA, United States, 8University of Pennsylvania, Philadelphia, PA, United States

W602 NiMARE: Neuroimaging Meta-Analysis Research Environment
Taylor Solt1, Katherine Bottenhorn2, Thomas Nichols3, Krzysztof Gorgolewski4, Michael Riedel5, Matthew Sutherland6, Tal Yarkoni5, Angela Laird5
1Department of Psychology, Florida International University, Miami, FL, United States, 2Department of Population Health, University of Oxford, Oxford, United Kingdom, 3Stanford University, San Francisco, CA, United States, 4Department of Physics, Florida International University, Miami, FL, United States, 5University of Texas at Austin, Austin, TX, United States

W603 Connectome consistency: how reliable is my connectome based analysis in structure and function?
Yusuf Osmanioglu1, Drew Parker1, Graham Baum2, Rostko Cinc2, Theodore Satterthwaite2, Robin Verma2
1Center for Biomedical Image Computing and Analytics, University of Pennsylvania, Philadelphia, PA, United States, 2University of Pennsylvania, Philadelphia, PA, United States

W604 Fantastic containers and how to tame them
Yaroslav Halchenko1, Kyle Meyer2, Matt Travers2, Dotora Jarecka3, Satrajit Ghosh4, Jakub Kaczmarzyk5, Michael Hanke6
1Dartmouth College, Hanover, NH, United States, 2TGCA, Washington, DC, United States, 3Massachusetts Institute of Technology, Boston, MA, United States, 4MIT/HMS, Cambridge, MA, United States, 5MIT, Cambridge, MA, United States, 6Research Centre Jülich, Jülich, Germany

W605 From reproducible to reusable—lessons for neuroscience from data science
Elizabeth DuPre1, Jean-Baptiste Poline2
1McGill University, Montreal, Quebec, Canada

W606* SwipesForScience: An open source gamified citizen science framework for scalable data annotation
Anisha Keshav1, Jason Yeatman2, Ariel Rokem3
1University of Washington, Seattle, WA, United States
Workflows

W608 MNAp: Multimodal Neuroimaging Analysis Platform for Flexible, Extensible and Rapid Analyses
Alon Avteevici1, Zailyn Tamayo1, Jie Lisa Ji1, John Murray1, Brendan Adkinson2, Charles Schleifer2, Antonija Kolobaric1, Youngsun Cha1, Alexej Kraljic1, Nina Purgi3, Anka Slana Ozigic1, Grega Repovs1
1Yale University, New Haven, CT, United States, 2Yale University, New Haven, CT, United States, 3UCLA, Los Angeles, CA, United States, 4Mind Lab, Brain Lab, Department of Psychology, Faculty of Arts, University of Ljubljana, Ljubljana, Slovenia, 5University of Ljubljana, Ljubljana, Slovenia, 6Faculty of Arts, University of Ljubljana, Ljubljana, Slovenia

W609 Visbrain: A multi-purpose GPU-accelerated open-source suite for multimodal brain data visualization
Elienne Combrisson1, Raphael Valla2, Christian O'Reilly3, Mainak Jast1, Annolisa Passarelli1, Anne-Lise Spivey1, Thomas Thiery1, David Meunier1, Dimitrii Altukhov1, Tarek Lajnef1, Perrine Ruby1, Aymric Guitton1, Karim Jerbi1
1University of Montreal, Montreal, QC, Canada, 2Centre de Recherche en Neurosciences de Lyon, Bron cedex, France, 3Blue Brain Project, Ecole Polytechnique Fédérale de Lausanne, Genève, Switerland, 4Massachusetts General Hospital, Charlestown, MA, United States, 5IAC - CNR, Roma, Italy, 6Aix-Marseille Université, Marseille, France, 7Moscow State Pedagogical University, Moscow, Russian Federation, 8Psychology Department, University of Montreal, Montreal, Quebec, Canada, 9Inter-University Laboratory of Human Movement Biology, University of Lyon, University Claude Bernard, Villeurbanne, France, 10University of Montreal, Montreal, Quebec, Canada

W610 MRtrix3_connectome: A BIDS Application for quantitative structural connectome construction
Robert Smith1,2, Alon Connelly1,2
1The Florey Institute of Neuroscience and Mental Health, Melbourne, Australia, 2The University of Melbourne, Melbourne, Australia

W611 Development of Population-specific Brain Atlas with High-throughput High-performance Computing
Yukai Zou1, Wenhui Zhu1, Ho-Ching Yang1, Yu Zhu1, Yunjie Tong1, Thomas Talavagel1, Joseph Rispold1
1Purdue University, West Lafayette, IN, United States

W612* Neuroimaging PheWAS: a free cloud computing platform for big brain-wide imaging association studies
Lu Zhao1, Ishaan Batta1, Caroline O'Drisroll1, Samuel Hobel1, Hosung Kim1, Arthur Toga1
1USC Stevens Neuroimaging and Informatics Institute, University of Southern California, Los Angeles, CA, United States, 2These authors contributed equally to this work, Los Angeles, CA, United States

W613* Interactive Tool for Visual Quality Control of Cortical Parcellations
Deepraj Kothapalli1, Meral Tuli1, Fabian Cortier1, Sophia Thomopoulos1, Paul Thompson1, Neda Jahanshad1, Meredith Braske1
1Imaging Genetics Center, Stevens Neuroimaging & Informatics Institute, Keck, USC, Marina del Rey, CA, United States

W614 Easier and More Accurate Quality Control Workflow for FreeSurfer Parcellations via VisualQC
Prodeep Reddy Roamana1, Athena Theyers1, Stephen Arnott1, Stefanie Hassel1, Joel Ramirez1, Jacqueline Harris1, Mojdeh Zamyadi1, Raymond Lam1, Roumen Milev1, Daniel Mueller1, Susan Rottigger1, Sidney Kennedy1, Sandra Black1, Anthony Long1, Robert Bartha1, Glenda McQueen1, CAN-BIND Investigator Team1, Stephen Strout2
1Baycrest Health Sciences, Toronto, Ontario, Canada, 2Rotman Research Institute, Toronto, Ontario, 3University of Calgary, Calgary, AB, Canada, 4Sunnybrook Health Sciences, Toronto, ON, 5Rotman Research Institute, Toronto, Ontario, Canada, 6UBC, Vancouver, Canada, 7Queen's University, Kingston, ON, Canada, 8Centre for Addiction and Mental Health, Toronto, ON, Canada, 9St. Michael's Hospital, Toronto, ON, Canada, 10Toronto Western Hospital, Toronto, ON, Canada, 11Robarts Research Institute, London, ON, Canada, 12Canadian Biomarker Integration Network for Depression, Toronto, ON, Canada, 13Ontario Brain Institute, Toronto, ON, Canada, 14Baycrest and University of Toronto, Toronto, ON, Canada

W615* A FAIR Approach to Neuroimaging Analysis with Boutiques
Gregory Kiat1, Erin Bendorff2, Jerome Charriere1, Simon Dube1, Louis-Oliver Guerin1, Axel Bannet1, Sarina Camarasu Pop1, Natacha Beck1, Pierre Roux1, Serge Boroday1, Jean-Baptiste Poline1, Shawn Brown1, Tristan Giatard1, Alan Evans1
1Montreal Neurological Institute, McGill University, Montreal, Quebec, Canada, 2Concordia University, Montreal, Quebec, Canada, 3University of Lyon, Lyon, France

W616 Multi-Scale Brain Parcellator: a BIDS App for the Lausanne Connectome Parcellation
Sebastien Tourbier1, Yasser Alemán-Gómez2, Alessandra Grillo1, Patric Hagmann1
1University Hospital of Lausanne, Lausanne, Switzerland, 2Vrije Universiteit Amsterdam, Utrecht, Netherlands

W617 A computational pipeline for MRI-informed 3D histology of the human brain
Mattek Mancini1, Shauna Crampsie1, David Thomas2,3, Zane Jounmukantane1, Janice Holton1, Juan Eugenio Iglesias2,3

W618* GiraffeTools: a web application for interactive data analysis
Tim van Mourik1,2
1Radboud University, Donders Institute for Brain and Cognition, Nijmegen, Netherlands, 2IBM

W619 New advances in the Clinica software platform for clinical neuroimaging studies
Alexandre Routier1, Arnaud Marcoux1, Mauricio Diaz Melo2, Jerémy Guillon1, Jorge Samper-Gonzalez1, Junhao Wen1, Simona Bottani1, Alexis Guyot1, Elina Thibeau–Sutre1, Marc Teichmann1,4, Marie-Odile Dambies5,6,7,8,9,10
1AMIS Lab, ICM, Inserm U1127, CNRS UMR 7225, Sorbonne University, Inria, Paris, France, 2Inria Paris, SED, France, 3FrontLab, ICM, Inserm U1127, CNRS UMR 7225, Sorbonne University, Paris, France, 4Department of Neurology, National Reference Center for “PPA and rare dementias”, Institute for Memory and Alzheimer’s Disease, Pitié–Salpêtrière Hospital, AP-HP, Paris, France, 5Laboratoire d’Imagerie Biomédicale, Sorbonne Université, Inserm U 1146, CNRS UMR 7371, Paris, France, 6AP-HP, Pitié-Salpêtrière Hospital, Department of Nuclear Medicine, Paris, France, 7Centre d’Imagerie de Traitement des Images (CATI, cati-neuroimaging.com), Paris, France
W620* Notizia dell’AFNI: Meet afni_proc.py—Your New Best Friend
Robert Cox1, Richard Reynolds2, Paul Taylor3
1NIMH/NINDS/USA, Bethesda, MD, United States, 2NIH, Bethesda, MD, United States, 3NIMH, Bethesda, MD, United States

W621* FitLins: Reproducible model estimation for fMRI
Christopher De La Vega1, Tal Yarkoni1, Russell Poldrack1, Krzysztof Gorgolewski1
1Stanford University, Stanford, CA, United States, 2University of Texas at Austin, Austin, TX, United States

W622 Analysing Neuroimaging Experiments within the R environment for Statistical Computing and Graphics
Joerg Polzehl1, Karsten Tabelow1
1WIAS, Berlin, Germany

W623 Making network neuroscience more findable, accessible, interoperable, and reusable via brainlife.io
Brent McPherson1, Dan Bullock1, Bradley Caron1, Lindsey Kitchell1, Soichi Hayashi1, Josh Faskowitz1, Olaf Sporns3, Richard Betzel1, Paolo Avesani2, Franco Pestilli1
1Indiana University, Bloomington, IN, United States, 2Fondazione Bruno Kessler, Trento, Italy

W624* DMRPrep: a Robust, Scalable Preprocessing Pipeline for diffusion MRI
Adam Richie-Holford1, Jason Yeatman1, Ariel Rokem1, Anisha Keshavan1
1University of Washington, Seattle, WA, United States

W625 A Layered Shader Framework for Simultaneous GPU-Based Compute and Visualization of Neuroimaging Data
Tyler Ard1, Arthur Toga2
1USC Stevens Neuroimaging and Informatics Institute, Los Angeles, CA, United States, 2University of Southern California, Los Angeles, CA, United States

W626 GRETRA 2.0.0 and BrainNet Viewer 1.63: Toolkits for Brain Network Analysis and Visualization
Mingrui Xia1, Jinhui Wang2, Xindi Wang3, Xuhong Liao1, Jin Liu1, Hao Wang4, Alan Evans3, Yong He1
1Boston Children’s Hospital, Harvard Medical School, Boston, MA, United States, 2Harvard Medical School, Cambridge, MA, United States, 3Boston Children's Hospital, Harvard Medical School, Boston, MA, United States, 4Red Hat, Inc., Boston, MA, United States, 5Massachusetts Open Cloud, Boston, MA, United States

W627 Biomedical imaging ANAlysis IN Arcana (Banana): collaborative development of analysis workflows
Thomas Clase1,2, Francesco Sforazzini1, Phillip Ward1,2,3, Zhaojin Chen1,5, Gary Egan1,3,4
1Monash Biomedical Imaging, Monash University, Melbourne, Australia, 2Australian National Imaging Facility, Melbourne, Australia, 3Australian Research Council Centre of Excellence for Integrative Brain Function, Melbourne, Australia, 4Monash Institute of Cognitive and Clinical Neurosciences, Monash University, Melbourne, Australia, 5Department of Electrical and Computer Systems Engineering, Monash University, Melbourne, Australia

W628 LAB-QA2GO: A free, easy-to-use toolbox for the quality assessment of magnetic resonance imaging data
Christoph Vogelbacher1,2, Miriam H. A. Bopp1,2, Verena Schuster1, Peer Herholz1,4, Andreas Jansen1,2, Jens Sommer1
1Laboratory for Multimodal Neuroimaging, University of Marburg, Marburg, Germany, 2Center for Mind, Brain and Behavior (CMBB), Marburg, Germany, 3Department of Neurosurgery, University of Marburg, Marburg, Germany, 4Montreal Neurological Institute and Hospital, Montreal, Quebec, Canada, 5International Laboratory for Brain, Music and Sound Research (BRAMS), Montreal, Quebec, Canada, 6Cognitive Neuroscience Unit, Montreal Neurological Institute, McGill University, Montreal, Quebec, Canada, 7Core-Unit Brainimaging, Faculty of Medicine, University of Marburg, Marburg, Germany

W629* Advancements in the BRAIN platform through the integration of community-based tools and standards
Shawn Brown1, Pierre Roux1, Natacha Beck2, Najmeh Khalili-Mahani1, Candice Czech1, Armin Taheri1, Serge Boroday1, Gregory Kiar1, Xavier Lécours-Boucher1, Carolina Makowski1, Jean-Baptiste Poline1, Reza Adalat2, Tristan Giatar1, Samir Das1, Alan Evans2
1Montreal Neurological Institute and Hospital, Montreal, Quebec, Canada, 2MN, McGill University, Montreal, Quebec, Canada, 3MNI, McGill University, Montreal, Quebec, Canada, 4Concordia University, Montreal, Quebec, Canada

W630 White Matter Mapping on brainlife.io: A Findable, Accessible, Interoperable, Reusable Implementation
Daniel Bullock1, Soichi Hayashi1, Lindsey Kitchell1, Brent McPherson1, Bradley Caron1, Franco Pestilli1
1Indiana University, Bloomington, IN, United States

W631 ChRIS: An Opensource Containerized Service for Pipelining Clinical and Research Computation
Rudolph Pienaar1,2, Jorge Bernal-Rusiel1, P. Ellen Grant3, Daniel McPherson4, Ravisantosh Gudimetla5, Dr. Turk6, Orran Krieger6
1Boston Children’s Hospital, Boston, MA, United States, 2Harvard Medical School, Cambridge, MA, United States, 3Boston Children's Hospital, Harvard Medical School, Boston, MA, United States, 4Red Hat, Inc., Boston, MA, United States, 5Massachusetts Open Cloud, Boston, MA, United States, 6Boston University, Boston, MA, United States

W632 Understanding and mitigating the impact of preprocessing pipelines on neuroimaging analyses
Nikhil Bhogwat1, Adamou Barry1, Erin Dickie1, Shawn Brown1, Celo Greenwood2, Bratislav Miličić3, David Kennedy4, Jean-Baptiste Poline2
1University of Toronto, Toronto, Ontario, Canada, 2McGill University, Montreal, Quebec, Canada, 3CAMH, Toronto, Ontario, Canada, 4McGill University, Montreal, QC, 5McGill University, Montreal, Quebec, Canada, 6University of Massachusetts Medical School, Worcester, MA, United States

W633 Visualizations as Scaffolds for Expertise: Learning from fMRIPrep’s Visual Reports
Jeremy Wright1
1Stanford University, Palo Alto, CA, United States

W634* FMRIflows: a consortium of fully automatic univariate and multivariate fMRI processing pipelines
Michael Nattrass1, Peer Herholz1, Omer Faruk Gulban2, Ayse Ilkay Isik3, Sandra Da Costa4, Micah Murray5
1The Laboratory for Investigative Neurophysiology (The LINE), Department of Radiology, CHUV, Villars-le-Terroir, Schweiz, 2Montreal Neurological Institute and Hospital, Montreal, Quebec, Canada, 3Department of Cognitive Neuroscience, Maastricht University, Maastricht, Netherlands, 4Max Planck Institute for Empirical Aesthetics, Frankfurt am Main, Germany, 5Center for Biomedical Imaging, Ecole Polytechnique Fédérale de Lausanne (EPFL), Lausanne, Switzerland, 6The Laboratory for Investigative Neurophysiology (The LINE), CHUV and Fondation Asile des Aveugles, Lausanne, Switzerland
W651 Within-subject fMRI analyses of the successful retrieval effect in recognition memory
Evon Layher1, Laura Pritsche1, Tyler Santander1, Caitlin Taylor1, Shuying Yu2, Scott Grafton1, Emily Jacobs3, Michael Miller1
1Department of Psychological and Brain Sciences, University of California, Santa Barbara, Santa Barbara, CA, United States

W652 Effects of basic emotions and congruency on associative memory – eye-tracking and fMRI study
Manika Riegl1, Malgorzata Wierzbala, Marek Wypych1, Michał Szczepaniak, Katarzyna Jednorog, Piotr Vuilleumier4, Artur Marchewka1
1Laboratory of Brain Imaging, Nencki Institute of Experimental Biology of PAS, Warsaw, Poland, Warsaw, Poland, 2University of Geneva, Geneva, Switzerland, 3Laboratory of Brain Imaging, Nencki Institute of Experimental Biology of PAS, Warsaw, Poland, 4Nencki Institute of Experimental Biology, Warsaw, Poland, 5University of Geneva, Geneva, Geneva

Long-Term Memory (Episodic and Semantic)

W653 Enhancement of episodic autobiographical memory by bodily-self cues
Lucie Brèche1, Sébastien Hausmann2, Robin Mange2, Bruno Herbelin2, Andrea Serino2,4, Olaf Blanke1,2,5
1Swiss Federal Institute of Technology (EPFL), Lausanne, Switzerland, 2Center for Neuropsychotics, EPFL, Campus Biotech, Geneva, Switzerland, 3Center for Biomedical Imaging (CIBIM), Lausanne, Geneva, Switzerland, 4MySpace Lab, Department of Clinical Neurosciences, University Hospital of Lausanne, Switzerland, 5Department of Neurology, Geneva University Hospital, Switzerland

W654 Model-based MRI reveals abstract concept representations in medial prefrontal cortex and hippocampus
Caitlin Bowman1, Dagmar Zeithamova1
1University of Oregon, Eugene, OR, United States

W655 In search of my past: Effective connectivity during autobiographical memory search
N. Eji Nawa1, Hiroshi Ando1
1NICT, Saita, Japan

W656 Anterior and posterior hippocampus connectivity with memory specificity and generalization regions
Dasa Zeithamova1, Lea Frank1, Caitlin Bowman1
1University of Oregon, Eugene, OR, United States

W657 The neural basis of the beneficial effects of recall before recognition
Bi Zhu1, Xuhao Shao1
1Beijing Normal University, Beijing, China

W658 Task-dependent recruitment of modality-specific and multimodal regions during conceptual processing
Philipp Kuhnke1, Markus Kiefer1, Gesa Hartwigsen1
1Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, 2Ulm University, Ulm, Germany

W659 Encoding-retrieval similarity of neural correlates for vivid memories in young and older adults
Christine Bastin1, Mohamed Ali Bahri1, Emma Delhaye1, Eric Salmon1, Arnaud D’Argembeau1, Adrien Falville1
1University of Liège, Liège, Belgium, 2University of Geneva, Geneva, Switzerland

W660 Association between Memory Aging and Changes in White Matter Networks
Xuwen He1, Yaojing Chen1, Jialing Fan1, Zhanjun Zhang1
1State Key Laboratory of Cognitive Neuroscience and Learning, Beijing Normal University, Beijing, China

W661 An fMRI Investigation of Expectation Effects on Episodic Memory
Darya Frank1, Alex Kafkas1, Daniela Montaldi1
1University of Manchester, Manchester, United Kingdom

W662 Decoding narrative contents from fMRI responses by incorporating causally related previous events
Hyoungh Song1,2, Hyesoon Ko2, Jongwuk Lee2, Won Mok Shim1,2
1Center for Neuroscience Imaging Research (CNIR), Suwon, Korea, Republic of, 2Sungkyunkwan University, Suwon, Korea, Republic of

W663 Functional Brain Correlates of Emotional and Social Memory
Daphne Stam1, Yun-An Huang1, Jan Van den Stock1,2
1Laboratory for Translational Neuropsychiatry, KU Leuven, Leuven, Belgium, 22 Geriatric Psychiatry, University Psychiatric Center KU Leuven, Leuven, Belgium, 3Brain and Emotion Laboratory, Maastricht University, Maastricht, Netherlands

W664 Exploring the contribution of the default mode network to the integration of conceptual information
Lucilla Lanzoni1, Daniela Ravasio1, Hannah Thompson1, Deniz Vatansever1, Daniel Margulies1, Jonathan Smallwood2, Elizabeth Jefferies1
1Department of Psychology, University of York, York, United Kingdom, 2Department of Psychological Sciences, University of Bergamo, Bergamo, Italy, 3School of Psychology, University of Surrey, Surrey, United Kingdom, 4Fudan University, Shanghai, China, 5Institut du Cerveau et de la Moelle Epinière, Pairs, France

W665 The medial temporal lobe’s role in recognition memory: Neuroimaging and neuropsychological evidence
Alex Kafkas1, Daniel Cox1, Penny Cristiano1, Ellen Migo1, Laura Marsh1, Robin Morris2, Michael Kopelman2, Andrew Hayes1, Daniela Montaldi1
1University of Manchester, Manchester, United Kingdom, 2King’s College London, London, United Kingdom

W666 An ERP Investigation into the Effects of Masked Repetition Priming on Recognition Memory
Carmen Ionita1, Deborah Talmi1, Jason Taylor1
1University of Manchester, Manchester, United Kingdom

W667 Direct Comparison of Brain Activity Related to Semantic and Episodic Memory
Deniz Vatansever1, Jonathan Smallwood1, Elizabeth Jefferies1
1Fudan University, Shanghai, China, 2University of York, York, United Kingdom

W668 Hippocampal sharp wave ripples linked to the content of visual episodic recollection in humans
Yitzhak Noraman1, Erin Yeagle2, Simon Khvits1, Michal Harel1, Ashesh Mehta1, Rafael Malach1
1Weizmann Institute of Science, Rehovot, 2Feinstein Institute for Medical Research, Manhasset, NY, United States

W669 Navigating a semantic space with a distance and a direction code in the human brain
Simone Viganò1, Manuela Piazza1
1Center for Mind/Brain Sciences, University of Trento, Rovereto, Italy
W670* Neurochemical modulation in the anterior temporal lobe: a combined MRS, fMRI and TMS approach
JeYoung Jung1, Stephen Williams2, Matthew Lambon Ralph1
1University of Nottingham, Nottingham, United Kingdom, 2University of Manchester, Manchester, United Kingdom
W671 Durable memory using the method of loci is linked to efficient neural coding
Isabella Wagner1, Boris Korndörfer2, Guillaume Fernandez3, Martin Dresler3
1University of Vienna, Vienna, Austria, 2Donors Institute for Brain, Cognition, and Behaviour, Nijmegen, Netherlands
W672 Longitudinal measurement of brain networks related to adolescent development of memory abilities
David Warren1, Nicholas Christopher-Hayes2, Anthony Range3, Julia Stephen3, Vince Calhoun4, Yu-Ping Wang5, Tony Wilson6
1UNMC, Omaha, NE, United States, 2University of Nebraska Medical Center, Omaha, NE, United States, 3Mind Research Network, Albuquerque, NM, United States, 4The Mind Research Network University of New Mexico, Albuquerque, NM, United States, 5Tulane University, New Orleans, LA, United States
W673 Locus coeruleus and parasympathetic network interactions revealed with fMRI at 7T
Didac Vidal-Pineiro1, Markus Sneve1, Inge Amlien1, Kristine Walhovd1, Anders Fjell2
1Centre for Lifespan Changes in Brain and Cognition, Department of Psychology, University of Oslo, Oslo, Norway, 2Department of Radiology, Harvard Medical School, Boston, MA, United States
W674 Viewing one’s body modulates hippocampal connectivity and neural predictors of episodic memory
Baptiste Gauthier1, Nathan Faivre2, Florian Lance3, Robin Mange1, Jevita Potheegadoo1, Olaf Blanke1
1EPFL - LNCO, Geneva, Switzerland
W675 Our Inner-Speech Language interacts with Our Reality Tag in the Episodic Hippocampal System
JeYoung Jung1,2, Stephen Williams2, Matthew Lambon Ralph1
1University of Nottingham, Nottingham, United Kingdom, 2University of Manchester, Manchester, United Kingdom
W676 A lifespan approach to connectivity changes during associative encoding tasks
Isabella Wagner1, Boris Korndörfer2, Guillaume Fernandez3, Martin Dresler3
1University of Vienna, Vienna, Austria, 2Donors Institute for Brain, Cognition, and Behaviour, Nijmegen, Netherlands
W677 Behavioural and Neural evidence for Context Dependence theory in Retrieval Induced Forgetting
Stevia Ng1,2, Chun Kit Wong1, Christopher Asplund1,2,3, Stuart Derbyshire1,2
1Centre for Lifespan Changes in Brain and Cognition, Department of Psychology, University of Oslo, Oslo, Norway, 2Centre for Lifespan Changes in Brain and Cognition, Department of Psychology, University of Oslo, Oslo, Norway, 3Basque Center on Cognition, Brain and Language, San Sebastian, Spain
W678 The precuneus constitutes a core structure in a neocortical visuo-spatial memory network
Bjorn Schott2, Torsten Wüstenberg3, Eva Lücke1, Ina-Maria Poh1, Anni Richter1, Constanze Seidenbecher1, Stefan Pollmann1, Jasmin Kzikilmak1, Alan Richardson-Klavehn1
1Leibniz Institute for Neurobiology, Magdeburg, Germany, 2Department of Psychiatry and Psychotherapy, University Medicine Göttingen, Göttingen, Germany, 3Systems Neuroscience in Psychiatry, Central Institute for Mental Health, Mannheim, Germany, 4Department of Pulmonary Medicine, Faculty of Medicine, Otto von Guericke University, Magdeburg, Germany, 5Institute of Psychology, Otto von Guericke University, Magdeburg, Germany, 6Institute of Psychology, University of Hildesheim, Hildesheim, Germany, 7Department of Neurology, Faculty of Medicine, Otto von Guericke University, Magdeburg, Germany
W679 Neural modulation of the Testing Effect via test-potentiated encoding with feedback
Petra Ludowicy1, Jaiione Arnoez-Telleria2, Kshipra Gurunandan3, Daniela Czernochowski1, Thomas Lachmann1, Pedro Paz-Alonso4
1Technische Universität Kaiserslautern, Kaiserslautern, Germany, 2BCBL - Basque Center on Cognition Brain and Language, Donostia, Spain, 3Basque Center on Cognition, Brain and Language, San Sebastián, Spain, 4BCBL - Basque Center on Cognition, Brain and Language, San Sebastian, Spain
W680 Longitudinal Evidence for Reduced Hemispheric Encoding/Retrieval Asymmetry in Aging
Jarkko Johansson1, Alireza Salami1, Anders Lundquist1, Anders Wöhl1, Mikael Andersson1, Lars Nyberg2
1Umeå University, Umeå, Sweden
W681 Age - related dynamic of episodic memory neural correlates evidence from a naturalistic memory task
Koulaoud Abichou1, Valentina La Corte1, Alexandre Gaston Bellegarde1, Pascale Piolino1
1Paris Descartes, Paris, France
W682 Dynamics of oscillatory activity in parietal cortex during memory-based decisions
Sara Spadone1, Stefania Delta Penna1, Annalisa Tosoni2, Carlo Sestieri1
1Dept. of Neuroscience, Imaging and Clinical Sciences, University G. d’Annunzio, Chieti, Italy, 2University of Chieti, Chieti, Italy, 3Università d’Annunzio, Chieti, Chieti
W683 The role of the medial temporal lobe in context-dependent memory retrieval
Alicia Nunez Vorobiov1, Matteo Feurra2, Peter Hilgamer3, Thomas Grunwald1, Lennart Stieglitz2, Johannes Santheim4, Tommaso Fedele5
1National Research University Higher School of Economics, Moscow, Russian Federation, 2Higher School Of Economics, Moscow, Russian Federation, 3Schweizerische Epilepsie-Klinik, Zurich, Switzerland, 4Schweizerische Epilepsie-Klinik, Klinik Leng, Zurich, Switzerland, 5Klinik für Neurochirurgie, Universitätsspital Zürich, Zurich, Switzerland, 6UniversitätsSpital Zürich, Zürich, Switzerland, 7Higher School of Economics, Moscow, Russian Federation
W684 Immediate and Long-Term Impact of Focused Attention: An fMRI study
Sanda Dolcos1, Yuta Katsumi1, Amanda Shen2, Kelly Bost Freeman2, Suhnyung Jun3, Paul Bogdan1, Florin Dolcos1
1University of Illinois at Urbana-Champaign, Champaign, IL, United States, 2University of Illinois at Urbana-Champaign, Champaign, IL, United States, 3University of Illinois at Urbana-Champaign, Urbana-Champaign, IL, United States
W685 Distinct oscillatory iEEG patterns predict episodic odor memory richness at encoding and retrieval
Anne-Lise Saive1,2, Thomas Thier1, Etienne Combrisson1, Jean-Pierre Royet1, Samuel Garcia1, Sylvain Rheim1, Jean Isnard1, Jane Poilly2, Nadine Ravé1, Karim Jerbi3
1University of Montreal, Montreal, QC, 2Lyon Neuroscience Research center, Lyon, France, 3UCBL, Neurological Hospital Bron, Bron, France

Odd numbers: 12:45 – 13:45; Even numbers: 13:45 – 14:45; Poster Reception: 18:15 – 19:15
W686 Common recognition memory effects across stimuli encoded via attention search and capture
Lewis Dunne1, Bertram Opitz2, Philip Dean2
1University of Surrey, Guildford, United Kingdom, 2University Of Surrey, Guildford, United Kingdom

W687 Brain activity during unconstrained future and past thinking and its modulation by TMS
Ruud Berkers1, Seyma Boyrak1, Paula Renz1, Gesa Hartwigsen1, Daniel Margulies2, Roland Benoit1
1Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Saxony, 2Institut du Cerveau et delo Moelle Épinière, Paris, France

W688 Functional and structural plasticity in one hour: a neurofeedback by fMRI study
Theo Marinis1, Erika Rodrigues2, Tiago Bortolani2, Jorge Molf3, Fernanda Tovar-Molf3
1D’Or Institute for Research and Education (IDOR) / Federal University of Rio de Janeiro (UFRJ), Rio de Janeiro, Brazil, 2D’Or Institute for Research and Education (IDOR) / Augusto Motta University (Unisampa), Rio de Janeiro, Brazil, 3D’Or Institute for Research and Education (IDOR), Rio de Janeiro, Brazil, 4D’Or Institute for Research and Education (IDOR) / Federal University of Rio de Janeiro (UFRJ), Rio de Janeiro, Brazil

W689 The deaf graph: Structural brain networking in auditory deprivation
Francesca Savio1, Lisa Novello1, Chiara Maffei2, Stefania Benetti3, Ceren Battal1,3, Stefania Mattioni3, Olivier Collignon1,3, Jorge Jovicich1
1CIMeC (Center for Mind/Brain Sciences), University of Trento, Mattarello (TN), Italy, 2Athinoula A. Martinos Center, Massachusetts General Hospital and Harvard Medical School, Charlestown, MA, United States, 3Institute of Research in Psychology (IPSY) and in Neuroscience (IoNS), University of Louvain, Louvain-la-Neuve, Belgium

W690 Enhancing Declarative Memory in Older Adults Via Image-Guided Excitatory Theta Burst TMS
Leonardo Christov-Moore1, Tyler Wishard2, Peter Schuette3, Sonja Hiller4, Andrew Leuchter5, April Thames3, Ellen Woo3, Gary Small3, Nanthia Suthana3
1University of Central Florida, Los Angeles, CA, United States, 2University of California, Los Angeles, CA, United States, 3University of Southern California, Los Angeles, CA, United States

W691* Pulses of spontaneous activity drive functional connectivity changes in disused brain networks
Dillon Newbold1, Timothy Laumann2, Catherine Hoyt1, Derek Miller1, Jacqueline Hampton1, Mario Ortega1, Annie Nguyen4, Ashley Nielsen1, Deanna Greene5, Steven Petersen2, Abraham Snyder2, Dillan Newbold1, Timothy Laumann2, Catherine Hoyt1, Derek Miller1, Jacqueline Hampton1, Mario Ortega1, Annie Nguyen4, Ashley Nielsen1, Deanna Greene5, Steven Petersen2, Abraham Snyder2, Dillan Newbold1, Timothy Laumann2, Catherine Hoyt1, Derek Miller1, Jacqueline Hampton1, Mario Ortega1, Annie Nguyen4, Ashley Nielsen1, Deanna Greene5, Steven Petersen2, Abraham Snyder2, Dillan Newbold1, Timothy Laumann2, Catherine Hoyt1, Derek Miller1, Jacqueline Hampton1, Mario Ortega1, Annie Nguyen4, Ashley Nielsen1, Deanna Greene5, Steven Petersen2, Abraham Snyder2, Dillan Newbold1, Timothy Laumann2, Catherine Hoyt1, Derek Miller1, Jacqueline Hampton1, Mario Ortega1, Annie Nguyen4, Ashley Nielsen1, Deanna Greene5, Steven Petersen2, Abraham Snyder2, Dillan Newbold1, Timothy Laumann2, Catherine Hoyt1, Derek Miller1, Jacqueline Hampton1, Mario Ortega1, Annie Nguyen4, Ashley Nielsen1, Deanna Greene5, Steven Petersen2, Abraham Snyder2, Dillan Newbold1, Timothy Laumann2, Catherine Hoyt1, Derek Miller1, Jacqueline Hampton1, Mario Ortega1, Annie Nguyen4, Ashley Nielsen1, Deanna Greene5, Steven Petersen2, Abraham Snyder2, Dillan Newbold1, Timothy Laumann2, Catherine Hoyt1, Derek Miller1, Jacqueline Hampton1, Mario Ortega1, Annie Nguyen4, Ashley Nielsen1, Deanna Greene5, Steven Petersen2, Abraham Snyder2, Dillan Newbold1, Timothy Laumann2, Catherine Hoyt1, Derek Miller1, Jacqueline Hampton1, Mario Ortega1, Annie Nguyen4, Ashley Nielsen1, Deanna Greene5, Steven Petersen2, Abraham Snyder2, Dillan Newbold1, Timothy Laumann2, Catherine Hoyt1, Derek Miller1, Jacqueline Hampton1, Mario Ortega1, Annie Nguyen4, Ashley Nielsen1, Deanna Greene5, Steven Petersen2, Abraham Snyder2, Dillan Newbold1, Timothy Laumann2, Catherine Hoyt1, Derek Miller1, Jacqueline Hampton1, Mario Ortega1, Annie Nguyen4, Ashley Nielsen1, Deanna Greene5, Steven Petersen2, Abraham Snyder2, Dillan Newbold1, Timothy Laumann2, Catherine Hoyt1, Derek Miller1, Jacqueline Hampton1, Mario Ortega1, Annie Nguyen4, Ashley Nielsen1, Deanna Greene5, Steven Petersen2, Abraham Snyder2, Dillan Newbold1, Timothy Laumann2, Catherine Hoyt1, Derek Miller1, Jacqueline Hampton1, Mario Ortega1, Annie Nguyen4, Ashley Nielsen1, Deanna Greene5, Steven Petersen2, Abraham Snyder2, Dillan Newbold1, Timothy Laumann2, Catherine Hoyt1, Derek Miller1, Jacqueline Hampton1, Mario Ortega1, Annie Nguyen4, Ashley Nielsen1, Deanna Greene5, Steven Petersen2, Abraham Snyder2, Dillan Newbold1, Timothy Laumann2, Catherine Hoyt1, Derek Miller1, Jacqueline Hampton1, Mario Ortega1, Annie Nguyen4, Ashley Nielsen1, Deanna Greene5, Steven Petersen2, Abraham Snyder2, Dillan Newbold1, Timothy Laumann2, Catherine Hoyt1, Derek Miller1, Jacqueline Hampton1, Mario Ortega1, Annie Nguyen4, Ashley Nielsen1, Deanna Greene5, Steven Petersen2, Abraham Snyder2, Dillan Newbold1, Timothy Laumann2, Catherine Hoyt1, Derek Miller1, Jacqueline Hampton1, Mario Ortega1, Annie Nguyen4, Ashley Nielsen1, Deanna Greene5, Steven Petersen2, Abraham Snyder2, Dillan Newbold1, Timothy Laumann2, Catherine Hoyt1, Derek Miller1, Jacqueline Hampton1, Mario Ortega1, Annie Nguyen4, Ashley Nielsen1, Deanna Greene5, Steven Petersen2, Abraham Snyder2, Dillan Newbold1, Timothy Laumann2, Catherine Hoyt1, Derek Miller1, Jacqueline Hampton1, Mario Ortega1, Annie Nguyen4, Ashley Nielsen1, Deanna Greene5, Steven Petersen2, Abraham Snyder2, Dillan Newbold1, Timothy Laumann2, Catherine Hoyt1, Derek Miller1, Jacqueline Hampton1, Mario Ortega1, Annie Nguyen4, Ashley Nielsen1, Deanna Greene5, Steven Petersen2, Abraham Snyder2, Dillan Newbold1, Timothy Laumann2, Catherine Hoyt1, Derek Miller1, Jacqueline Hampton1, Mario Ortega1, Annie Nguyen4, Ashley Nielsen1, Deanna Greene5, Steven Petersen2, Abraham Snyder2
1Simon Fraser University, Burnaby, BC, Canada, 2Fraser Health Authority, Surrey, BC, Canada

W692 Rapid brain microstructural changes during visuomotor adaptation
Takui Hayashi1,2, Shuntaro Sasa1, Shoko Kasuga1, Hiroshi Kadota2
1Tokyo University of Agriculture and Technology, Tokyo, Japan, 2Harvard University, Cambridge, MA, United States, 3University of Wisconsin at Madison, Madison, WI, United States, 4Queen’s University, Kingston, Canada, 5Kochi University of Technology, Kochi, Japan

W693 Detection of Motor Learning Related Neuroplasticity through fMRI monitoring
Gokulraj Probhakaran1, Khalidoo Al-Nosairy2, Claus Tempelman1, Khazar Ahmad3, Michael Hoffmann1,2,3,4
1Visual Processing Laboratory, Department of Ophthalmology, Otto-von-Guericke University, Magdeburg, Germany, 2Department of Neurology, Otto-von-Guericke University, Magdeburg, Germany, 3Center for Behavioral Brain Sciences, Magdeburg, Germany

W694 Changes in functional connectivity induced by a long-term working memory training
Dongha Lee1,2, Changwon Jang1, Hoae-Jeong Park1,2,3,4
1University of Coimbra, Coimbra, Portugal, 2Center for Systems and Translational Brain Sciences, Institute of Human Complexity and Systems Science, Yonsei University, Seoul, Korea, Republic of, 3BK21 PLUS Project for Medical Science, Yonsei University College of Medicine, Seoul, Korea, Republic of, 4Center for Systems and Translational Brain Sciences, Institute of Human Complexity and Systems Scien, Seoul, Korea, Republic of, 5Department of Cognitive Science, Yonsei University, Seoul, Korea, Republic of

W695 Modulation of neural activity patterns and functional network properties for motor imagery
Josephine Heine1, Harald Prüß1,2, Friedemann Paul1,2,4, Carsten Finke1,2,5
1Department of Neurology, Charité - Universitätsmedizin, Berlin, Germany, 2German Center for Neurodegenerative Diseases (DZNE), Berlin, Germany, 3NeuroCure Clinical Research Center, Charité - Universitätsmedizin, Berlin, Germany, 4Experimental and Clinical Research Center, Max Delbrueck Center for Molecular Medicine, Berlin, Germany, 5Berlin Center for Advanced Neuroimaging, Charité - Universitätsmedizin, Berlin, Germany

W696 Brain activity in input-deprived visual cortex in glaucoma – (no) fMRI-evidence of plasticity
Benedetta Heimler1, Galit Buchs1, Lior Reich1, Amir Amidi1
1Hebrew University of Jerusalem, Jerusalem, Israel

W697 Reversible hippocampal & white matter damage reveal neuroplastic recovery from NMDAR encephalitis
Nicolas Stein2,3,4,5,6
2Department of Neurology, Charité - Universitätsmedizin, Berlin, Germany, 3German Center for Neurodegenerative Diseases (DZNE), Berlin, Germany, 4Department of Nuclear Medicine, Klinikums der Charité, Universitätsmedizin Berlin, Berlin, Germany, 5NeuroCure Clinical Research Center, Charité - Universitätsmedizin, Berlin, Germany, 6Berlin School of Mind and Brain, Humboldt-Universität zu Berlin, Berlin, Germany

W698 Properties of language recruitment in the congenitally deprived visual network
Benedetta Heimler1, Galit Buchs1, Lior Reich1, Amir Amidi1
1Hebrew University of Jerusalem, Jerusalem, Israel

W699 Changes in functional connectivity induced by a long-term working memory training
Qiong Wu1, Isabelle Ripp1, Mónica Emch2, Igor Yakuhevi3,4,5,6
1TUM-Neuroimaging Center (TUM-NIC), Klinikum Rechts der Isar, Munich, Germany, 2Department of Nuclear Medicine, Klinikums Rechts der Isar, Technische Universität München, Munich, Germany, 3Department of Nuclear Medicine, Technische Universität München, Munich, Germany, 4Department of Nuclear Medicine, Technische Universität München, Munich, Germany

W700 Hippocampal change during memory training predicts memory function after 3 years in older adults
Anne Cecille Bråthen1, Ann-Marie de Lange2, Anders Fjell2
1University of Oslo, Oslo, Norway, 2Oslo University Hospital, NORMENT, Oslo, Norway, 3Centre for Lifespan Changes in Brain and Cognition, Department of Psychology, University of Oslo, Oslo, Norway

W701 Stroke induced damage leads to localized de-differentiation of neural representations
Jeremy Purcell1, Celia Litovsky2, Robert Wiley2, Brent Rapp2
1University of Maryland, Baltimore, MD, United States, 2Johns Hopkins University, Baltimore, MD, United States
W702 Pregnancy and adolescence entail similar neuroanatomical adaptations
Susanna Carmona1,2, Magdalena Martínez1,4, María Paternina3,4, Lara Wierenga5, Yasser Alemán6,7,8, Luis Marcos-Vidal1,9, Laura Beumal1,9, Romina Cortizo1,9, Cristina Pozzobon1,9, Marisol Picado1, Florencia Lucco1, David García1, Juan Soliva1, Adolfo Toebel1, Jiska Peper1,2, Eveline Crane1,2, Daniel Martín de Bita3,4, Alberto Fernández-Pena3,4, Manuel Desco1,3,9, Agustín Ballestros2, Oscar Villarroya1, Eiselina Hoekzema1,2
1Instituto de Investigación Sanitaria Gregorio Marañón, Madrid, Spain, Madrid, Spain, 2Faculty of Health Sciences, Universitat Oberta de Catalunya, Barcelona, Spain, 3Centro de Investigación Biomédica en Red de Salud Mental, Madrid, Spain, Madrid, Spain, 4Department de Bioingenieria e Ingeniero Aeroespacial, Universidad Carlos III de Madrid, Leganés, Madrid, Spain, 5University Institute of Mental Health Vidal i Barraquer, Ramon Llull University, Barcelona, Spain, Barcelona, Spain, 6Brain and Development lab, Psychology Department Leiden University, Leiden, Netherlands, 7Center for Psychiatric Neuroscience, Department of Psychiatry, Centre Hospitalier Universitaire Vaud, Lausanne, Switzerland, 8Unitat de Recerca en Neurociència Cognitiva, Department of Psychiatry and Forensic Medicine, Univers, Madrid, Spain, 9Unitat de Recerca en Neurociència Cognitiva, Department of Psychiatry and Forensic Medicine, Univers, Barcelona, Spain, 10Il Barcelona, Assisted Medicine Reproduction, Barcelona, Spain, Barcelona, Spain, 11Brain and Development Laboratory, Leiden University, Leiden, the Netherlands, Leiden, Netherlands, 12Instituto de Investigación Sanitaria Gregorio Marañón, Madrid, Spain, 13Fundación Nacional de Investigaciones Cardiovasculares Carlos III, Madrid, Spain, Madrid, Spain

W703 Effects of second language learning on the plastic aging brain: connectivity and cognition changes
Giovanna Bubbico1, Piero Chiacchiaretta2, Valentina Panara3, Gianna Sepede4, Antonio Ferretti5, Mauro Gianni Perrucci2
1University G. d’Annunzio Chieti-Pescara, Chieti, Italy, 2Department of Neurosciences, Imaging and Clinical Sciences, University “G. d’Annunzio” of Chieti, Chieti, Italy

W704 Real-time fMRI neurofeedback training for chronic tinnitus (NeuroTin)
Nicolas Gninenko1, Ali Zaidi1, Zahra Khaliliardali1, Stephanie Trznadel2, Ranganatha Renganathan3, Sven Haller4, Dimitri Van De Ville5, Niels Birbaumer6,7
1École Polytechnique Fédérale de Lausanne, Lausanne, Switzerland, 2Wyss Center, Geneva, Switzerland, 3University Hospital of Geneva, Geneva, Switzerland, 4Pontificia Universidad Católica, Santiago, Chile, 5University of Geneva, Geneva, Switzerland, 6University of Tübingen, Tübingen, Germany

W705 Compensatory plasticity within the language networks in Aphasia
Maria José Torres-Prieto1, Diana López-Barrosa2, Nuria Roé-Vellvé1, José Paredes-Pacheco3, Dávila Guadalupe1, Marcelo Berthier4
1Cognitive Neurology and Aphasia Unit, University of Malaga, Malaga, Spain, 2Cognitive Neurology and Aphasia Unit, University of Malaga, Malaga, Malaga, Spain, 3Molecular Imaging Unit, Centro de Investigaciones Médico-Sanitarias, Malaga, Spain

W706 Neuroplasticity related to immobilization and virtual reality training
Franccesca Zizza1, Frauke Nees1, Jamila Andoli1, Stefano Silvani1, Robin Bekrater-Bodmann1, Dieter Kleinboehn1, Herta Flor1
1Central Institute of Mental Health & Heidelberg University, Mannheim, Germany

W707 Imaging mechanisms of brain plasticity underlying the early stages of functional recovery in MS
Elenonra Pattucelli1, Ilona Lipp1,2, Catherine Foster1, Rachael Stickland1, Alison Davidson1, Richard Wise1, Valentina Tomassini5,6,7
1Cardiff University, CUBRIC, Cardiff, United Kingdom, 2Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, 3Institute of Psychological Medicine and Clinical Neurosciences, Cardiff University School of Medicine, Cardiff, United Kingdom, 4Helen Durham Centre for Neuroinflammation, University Hospital of Wales, Cardiff, United Kingdom

W708 Reorganization in cerebral and cerebellar cortices is not restricted by somatotopy
Avital Hofhary1, Tamar Makin1
1Wellcome Centre for Human Neuroimaging, University College London, London, United Kingdom, 2Weizmann institute of Science, Rehovot, Israel, 3Institute of Cognitive Neuroscience, University College London, London, United Kingdom

W709 Radical reorganization of brain networks supports typical development following bilateral perinatal
Timothy (Laumann1, Mario Ortega2, Catherine Hoyt3, Jacqueline Hampton4, Donna Dierker5, Rebecca Coalition6, Babatunde Adeyemo6, Adrian Gilmore6, Joshua Shimony7, Deanna Greene8, Steven Nelson9, Abraham Snyder1, Steven Petersen1, Bradley Schlaggar2, Nico Dosenbach1,2
1Washington University School of Medicine, St. Louis, MO, United States, 2Department of Neurology, Washington University School of Medicine, St. Louis, MO, United States, 3Washington University School of Medicine, St. Louis, MO, United States, 4Washington University in St. Louis, St. Louis, MO, United States, 5Laboratory of Brain and Cognition, National Institute of Mental Health, Bethesda, MD, United States, 6Washington University in St. Louis School of Medicine, Saint Louis, MO, United States, 7Mallinckrodt Institute of Radiology, Washington University School of Medicine, St. Louis, MO, United States, 8VA VISN17 Center of Excellence, Waco, TX, United States, 9Kennedy Krieger Institute, Baltimore, MD, United States

W711 Peripherally representing portions of V1 are more efficient with long-term use of peripheral vision
Leland Fleming1, Wesley Burge2, Dawn DeCarlo3, Kristina Visser2,4
1University of Alabama at Birmingham, Birmingham, AL, United States, 2The University of Alabama at Birmingham, Birmingham, AL, United States, 3University of Alabama at Birmingham, Birmingham, AL, United States

W712 AMC Training-induced Structural Plasticity in Hippocampus Predicts Long-term Gains in Math Ability
Ye Xie1, Chunjie Wang2, Jian Weng3, Kaustubh Supekar4, Hyesang Chang5, Feiyan Chen6,7
1Bio-X Lab, Department of Physics, Zhejiang University, Hangzhou, China, 2Department of Optical Engineering, Zhejiang University, Hangzhou, China, 3College of Biomedical Engineering and Instrumental Science, Zhejiang University, Hangzhou, China, 4Department of Psychiatry & Behavioral Sciences, Stanford University School of Medicine, Stanford, Stanford, CA, United States, 5Bio-X Laboratory, Department of Physics, Zhejiang University, Hangzhou, China
W713  Cerebellar tDCS enhances motor learning through altered striatal-cerebellar connectivity
Elinor Tzvi1, Matthias Liebrand2, Anke Karabanov2, Daria Antonenko4, Hartwig Sieber1, Ulrike Kram2
1University of Leipzig, Leipzig, Germany, 2University of Lübeck, Lübeck, Germany, 3Danish Research Center for Magnetic Resonance, Copenhagen, Denmark, 4University Hospital Greifswald, Greifswald, Germany

W714  The neural correlates of Programming language
Chihiro Hosoda1, Masashi Hamada2, Akita Kuta1, Kazuo Okano2
1University of Tokyo, Tokyo, 2University of Tokyo, Tokyo, Japan, 3Tokyo Medical and Dental Univ., Tokyo, Japan

W715  GM longitudinal changes during training to tap in synchrony to a metronome in the Rhesus monkey
Pamela Garcia1, Cynthia De Ledin1, Luis Prado1, Yaneer Ayala1, Luis Concha1, Hugo Merchant1
1Instituto de Neurobiología, UNAM, Querétaro, Querétaro

W716  Effects of Motor Learning and tDCS on Sensorimotor GABA Levels in Older Adults
Bradley King1, Jost-Julian Rumpf2, Kirstin Heise1, Nina Dolfer1, Nicolas Puts3, Richard Edden2, Julien Doyon4, Joseph Classen1, Genevieve Albouy1, Stephan Swinnen1
1KU Leuven, Leuven, Belgium, 2University of Leipzig, Leipzig, Germany, 3The Johns Hopkins University School of Medicine, Baltimore, MD, United States, 4McGill University, Montreal, Quebec, Canada

W717  Highly dynamic changes of white matter microstructure indices after three-weeks unicycling training
Karl Koschutnig1, Bernhard Weber1, Andreas Schwerdtfeger1, Christian Rominger1, Ilona Papousek1, Elisabeth Weiss1, Markus Tilp1, Andreas Fink1
1University of Graz, Graz, Austria

W718  Lateralized pattern of functional efficiency in early and late visuomotor sequence learning
Kardelen Eryurek1,2, Cigdem Ulusoglu-Yildiz1,2, Zelila Matur1, A. Emre Oge1, Tamer Demiralp1,2
1Department of Neuroscience, Aızı Sancaır Institute of Experimental Medicine, Istanbul University, Istanbul, Turkey, 2Hulusi Behçet Life Sciences Research Laboratory, Neuroimaging Unit, Istanbul University, Istanbul, Turkey

W719  The Role of fMRI-Neurofeedback and Strategy in Regulating the Amygdala
Michael Marven1, Dirk Müller1, Stefan Posse2, Michael Smolka2
1Department of Psychiatry and Neuroimaging Center, Technische Universität Dresden, Dresden, Germany, 2Technische Universität Dresden, Dresden, Germany

W720  Adopting relevant concepts in computer programming
Andreas Lidstrom1, Sara Bengtsson1
1University of East Anglia, School of Psychology, Norwich, United Kingdom

W721  White matter tract changes following voice treatment in patients with hypokinetic dystarhria
Shelini Narayanga1, Robert Slaven1, Katherine Schiller1, Roozbeh Rezaie1, Michael Cannito1
1Univ of Tennessee Health Science Center, Memphis, TN, United States, 2University of Louisiana, Lafayette, LA, United States

W722  EEG correlates of motor adaptation in stroke
Adela Desowski1, Duncan Turner1
1University of East London, London, United Kingdom

W723  Working memory task anticipation and task performance in depressed individuals and healthy controls
Anna Maneli1, Erin Rodgers2, Holly Swartz1, Mary Phillips1
1University of Pittsburgh, Pittsburgh, PA, United States, 2University of Pittsburgh Medical Center, Pittsburgh, PA, United States

W724  Aberrant organization of working memory network in 7.5-year-old children born extremely preterm
Maksym Toman2,3, Virve Vuontela1,2, Pia Lönnberg2, Jampilii Lano1,4, Joana Perkola5, Elina Wolford6, Sture Andersson2, Marjo Metsaranta2, Synnöve Carlson2,7
1Aalto University School of Science, Espoo, Finland, 2University of Helsinki, Helsinki, Finland, 3University of Helsinki and Helsinki University Hospital, Helsinki, Finland

W725  Neural Correlates for Temporal Context in Verbal Working Memory: A Neuropsychological Study
Yingxue Tian1, Simon Fischer-Baum1
1Rice University, Houston, TX, United States

W726  Interactions between bottom-up and top-down attention during working memory encoding: a fMRI study
Mishal Qubad1, Catherine Barnes-Scheulter1, Lara Roesler1, Michael Schaum1, Bennington Peters2, Michael Wibral3, Andreas Reif1, Robert Bittner1
1University Hospital Frankfurt, Goethe University, Frankfurt, Germany, 2University Hospital Frankfurt, Frankfurt am Main, Germany, 3Department of Psychology I, Wuerzburg, Germany, 4Institute for Medical Psychology, University Hospital Frankfurt, Goethe University, Frankfurt, Germany

W727  Theta and alpha oscillatory activity reflect early working memory impairments in Multiple Sclerosis
Alejandra Figueroa1, Rodrigo Henriquez1,2, Francisco Zamorano1, Francisco Aboitz1, Claudia Carcamo1,2, Ethen Ciamp1, Macarena Vasquez1, Pablo Bilik2
1Universidad del Desarrollo, Santiago, Chile, 2Pontificia Universidad Católica de Chile, Santiago, Chile

W728  Theta:Gamma Phase Coupling Is Associated with the Fidelity of Mental Templates in Visual Perception
Charline Plevol1,2, Carola Romberg1, Elisabeth Friedrich1, Tomas Minarik3, Paul Sauseng2,3
1Ludwig-Maximilians-Universitäts Münchens, Munich, Germany, 2Graduate School of Systemic Neurosciences, Ludwig-Maximilians-Universität Münchens, Munich, Germany, 3University of Birmingham, Birmingham, United Kingdom

W729  The Effects of Adaptive Visual-spatial Span Training
Wan Zhao1, Jun Li1
1State Key Laboratory of Cognitive Neuroscience and Learning, Beijing Normal University, Beijing, China

W730  Persistent hippocampal neural firing and hippocampal-cortical coupling predict working memory load
Ece Boran1, Tommaso Fedele2, Johannes Sarnthein1
1UniversitätsSpital Zürich, Zurich, Switzerland, 2Higher School of Economics, Moscow, Russian Federation

W731  Neural Correlates of Improved Working Memory by Volitional Breathing
Seulgi Eun1, Minsung Kang1, Josiane Mukahirwa1, Jieun Kim2, Changjin Jung2, Jun-Hwan Lee2, Kyungmo Park1
1Department of Biomedical Engineering, Kyung Hee University, Yongin, Korea, Republic of, 2Clinical Medicine Division, Korea Institute of Oriental Medicine, Daejeon, Korea, Republic of
W732* Cross-task Evidence for Language Recruiting an Episodic Buffer located in the Visual Word Form Area
Long Qin1,2, Bingjiang Lyu1, Su Shu1,3, Yayan Yin1, Wai-Ting Siok1, Jia-Hong Gao1,2,4
1Department of Linguistics, the University of Hong Kong, Hong Kong, 2Center for MRI Research, Academy for Advanced Interdisciplinary Studies, Peking University, Beijing, China, 3McGovern Institute for Brain Research, Peking University, Beijing, China, 4Center for Speech, Language and the Brain, Department of Psychology, University of Cambridge, Cambridge, United Kingdom

W733 Sustained and transient gray matter volume changes after n-back training
Anna Miró-Padilla1, Elisenda Bueichekú1, Lidon Marin-Marin1, Esteban Villar-Rodriguez1, Cesar Avila1
1Universitat Jaume I, Castelló de la Plana, Spain

W734* Layer-dependent activity in human prefrontal cortex during working memory
Emily Finn1, Laurentius Huber1, David Jangraw2, Peter Bandettini3
1National Institute of Mental Health, Washington, DC, United States, 2NIMH, Bethesda, MD, United States, 3Department of Psychology, University of California, Berkeley, CA, United States

W735 Does brain functional connectome predict working memory of children?
Han Zhang1, Annie Lee2, Dilara Pecheva2, Jaan Poh3, Shirong Cai2, Michael Meaney2, Yap-Seng Chong1, Bint Broekman2, Marielle Fortier3, Anqi Qiu3
1National University of Singapore, Singapore, 2Singapore Institute for Clinical Sciences, Singapore, 3KK Women’s and Children’s Hospital, Singapore

W736 Working memory load-dependent changes in brain activity during the N-back task
Marina Tani1, Satoru Hwai1, Tomoyuki Hiroyasu1
1Doshisha University, Kyoto-nabate-shi, Kyoto, Japan

W737 Dissociating the causal roles of frontal and parietal cortex in working memory: A Registered Report
Anastasia Kiyonaga1, Jason Scimeca1, Mark D’Esposito1
1University of California, Berkeley, Berkeley, CA, United States

W738 Representations of position in spatial working memory
Nina Purg1, Julian Mohlen1, Martina Starc1, Alekjs Krajič2, Andreaž Matkovič2, Ankna Slano Ozimič1, Grega Repovš1
1Mind & Brain Lab, Department of Psychology, Faculty of Arts, University of Ljubljana, Ljubljana, Slovenia, 2Department of Philosophy, Faculty of Philosophy and Education, University of Vienna, Vienna, Austria

W739 Extracting functional network structures using low-rank matrix factorization-based matrix clustering
Yuki Furutani1, Takeru Aimoto1, Satoru Hwai1, Kensuke Tanioka2, Hiroshi Yadohisa1, Tomoyuki Hiroyasu1
1Doshisha University, Kyoto-nabate-shi, Kyoto, Japan, 2Wakayama Medical University, Wakayama, Japan

W740 Retrospective Searching for Feature Binding from within Visual Working Memory Representations
Ya-Ping Chen1, Ya-Ping Chen1, Jun Sai1, Bo-Cheng Kuo1
1Department of Linguistics, the University of Hong Kong, Hong Kong, 2Centre for Speech, Language and the Brain, Department of Psychology, University of Cambridge, Cambridge, United Kingdom

W741 MEMAT, a new paradigm to study memory and attention processes during sound sequence encoding
Salome Brain1, Anne CACLIN1, Aurélie Bidet-Caulet2
1CNRS, UMR5292, INSERM U1028 Lyon Neuroscience Research Centre, ENS de Lyon, Bron, France, 2Lyon Neuroscience Research Center, Bron, France

W742 Functional reorganization for visuo-spatial working memory in the STC of deaf individuals
Barbara Marini1, Valeria Vinogradova1, Benicj Woll1, Martin Eimer1, Donnie Cameron1, Janak Saada1, Veli Cordon1
1School of Psychology, University of East Anglia, Norwich, United Kingdom, 2School of Psychology, University of East Anglia, Norwich, United Kingdom, 3Deafness Cognition and Language Research Centre University College London, London, United Kingdom, 4Department of Psychology, Birkbeck College, University of London, London, United Kingdom, 5Norwich Medical School, University of East Anglia, Norwich, United Kingdom, 6Norfolk & Norwich University Hospital NHS, Norwich, United Kingdom

W743 Fronto-parietal effective connectivity during performance calibrated working memory
Dario Schöl1, Jolanda Malamud2, Sara Tomiello1, Jakob Heinzel1, Klaus Enos Stephan3,4, Sandra Iglesias1
1Translational Neuromodeling Unit, University of Zurich & ETH Zurich, Zurich, Switzerland, 2Wellcome Trust Centre for Neuroimaging, Institute of Neurology, University College London, London, United Kingdom, 3Max Planck Institute for Metabolism Research, Cologne, Germany

W744 Early competition of bottom-up and top-down attention during working memory encoding: an MEG study
Anna Müller1, Michael Schaum1, Catherine Barnes-Scheufler1, Mishal Qubad2, Benjamin Peters2, Andreas Reif3, Michael Wibral4, Robert Bittner3
1Goethe University, Frankfurt, Germany, 2Max Planck Institute for Psycholinguistics, Nijmegen, The Netherlands, 3Department of Nuclear Medicine, Klinikum rechts der Isar, Technische Universität München, Munich, Germany, 4Department of Medical Psychology, Frankfurt, Germany

W745 Neural coding of sentence-level syntax and prosody – an ECoG study
Johannes Gehrig1, Marie-Therese Forster1, Andrea Martin2, Antje Meyer3, Christian Alexander Kell1
1Goethe University, Frankfurt, Germany, 2Max Planck Institute for Psycholinguistics, Nijmegen, The Netherlands

W746 No transfer effects of a working memory training on resting state networks: a PET/fMRI study
Andreas Reif1, Michael Wibral4, Robert Bittner3
1Goethe University, Frankfurt, Germany, 2Max Planck Institute for Psycholinguistics, Nijmegen, The Netherlands

W747 Does working memory training impact white matter?: A longitudinal diffusion tensor imaging study
Mónica Emch1, Isabelle Ripp1, Aurore Menegaux1, Igor Yakushev2, Kathrin Koch1,2,3
1Department of Nuclear Medicine, Klinikum rechts der Isar, Technische Universität München, Munich, Germany, 2TUM-NIC Neuroimaging Klinikum Rechts der Isar, Munich, Germany, 3Technische Universität München, Munich, Germany

W748 EEG underpinnings of individual differences in working memory: the role of central executive
Yun Pavlov1, Nadezhda Pavlova1, Boris Kotchoubey1
1University of Tuebingen, Tuebingen, Germany
Voxel-based lesion analysis of brain regions underlying visual working memory and episodic memory
Selma Lugtmeijer1, Linda Geerligs1, Edward de Haan2, Frank Erik de Leeuw3, Roy Kessels4
Donders Institute, Amsterdam, Netherlands, 1Donders Institute for Brain, Cognition and Behaviour, Nijmegen, Netherlands, 2University of Amsterdam, Amsterdam, Netherlands, 3Radboudumc, Nijmegen, Netherlands, 4Donders Institute for Brain, Cognition and Behaviour, Radboud University, Nijmegen, Netherlands

Connectivity modulation in fronto-parietal networks in MS patients after working memory training
Nairo Aguiar1, Álvaro Javier Cruz-Gómez2, Anna Miró-Padilla1, Elisenda Buechek3, Ricardo Broseta-Torres4, Cora Sancho-Seguro5, Cesar Avila6, Cristina Forn6
1Jaume I University, Castellón, Spain, 2Jaume I University, Castelló de la Plana, Spain, 3ERESA, Hospital de la Plana, Castellón, Spain, 4Jaume I University, Castellón, 5Universitat Jaume I, Castelló, Spain, 6Universitat Jaume I, Castellón, Spain

Modulation of theta and alpha oscillations by salience and cue type during working memory encoding
Michael Schaun1, Anna Müller1, Catherine Barnes-Scheuerl1, Mishal Qubad2, Benjamin Peters3, Michael Wibral4, Andreas Reif5, Robert Bittner6
1MEG Unit, Brain Imaging Center, Goethe University, Frankfurt, Germany, 2Dept. of Psychiatry, University Hospital Frankfurt, Goethe University, Frankfurt am Main, Germany, 3University Hospital Frankfurt, Frankfurt am Main, Germany, 4University Hospital Frankfurt, Goethe University, Frankfurt, Germany, 5Institute of Medical Psychology, Frankfurt, Germany, 6Max Planck Institute for Dynamics and Self-Organization, Goettingen, Germany, 7University Hospital Frankfurt, Goethe University, Frankfurt, Germany

NOSIAP SNPs and working memory networks – an fMRI imaging genetics study
Eva Rospata1, Peter Hahn1, Thomas Lancaster2, David Linden3, Florian Freudenberg1, Andreas Reif1, Robert Bittner1
1University Hospital Frankfurt, Goethe University, Frankfurt, Germany, 2School of Medicine, Cardiff University, Cardiff, United Kingdom, 3School of Mental Health and Neuroscience, Maastricht University, Maastricht, Netherlands, 4University Hospital Frankfurt, Goethe University, Frankfurt, Germany

Medial temporal lobe unit activity associated with working memory maintenance and workload
Ece Boran1, Tommaso Fedele2, Peter Hilfiker1, Lennart Stieglitz3, Thomas Grunwald5, Johannes Sarnthein4, Peter Klaver5
1University of Ulm, Ulm, Germany, 2University Hospital Frankfurt, Goethe University, Frankfurt, Germany, 3School of Economics, Moscow, Russian Federation, 4Swiss School of Economics-Klinik, Zurich, Switzerland, 5Klinik for Neurochirurgie, UniversitätsSpital Zürich, Zurich, Switzerland, 6Universitätsspital Zürich, Zurich, Switzerland, 7Swiss School of Applied Sciences in Special Needs Education, Zurich, Switzerland

Multi-site direct cortical stimulation of functional network enhances working memory
Sankar Alagapan1, Justin Riddle1, Wei (Angel) Huang2, Eldad Hodar2, Hoe Won Shin3, Flavio Frohlich1
1UNC - Chapel Hill, Chapel Hill, NC, United States

Effect of medication on neural activity of ADHD children during a visuospatial working memory task
Joaquin Valdes1, Vicente Medel1, Josefina Ihnen2, Martin Irani3, Tomas Ossandon1
Pontificia Universidad Catolica de Chile, Santiago, Chile, 1Universidad de Chile, Santiago, Chile

The effects of memory load and stimulus type on alpha oscillation during working memory maintenance
Ya-Ting Chen1, Bo-Cheng Kuo1
Department of Psychology, National Taiwan University, Taipei, Taiwan

Relationship between video gaming and brain function in a large sample of children
Boder Chaarani1, Joseph Ortigara1, Jennifer Laurent2, Shana Adise3, Alexandra Potter4, Stephen Higgins1, Hugh Garavan1
1UVM Department of Psychiatry, Burlington, VT, United States, 2University of Vermont, Burlington, VT, United States

The influence of head motion on structural connectivity under different DWI processing pipelines
Odd numbers: 12:45 – 13:45; Even numbers: 13:45 – 14:45; Poster Reception: 18:15 – 19:15

Stuart Oldham1, Aurina Armatkevičiūtė1, Alex Fornito1
1Monash University, Clayton, Victoria, Australia

Succession of Statistical Parametric Maps on Reading Impairment
Bärbel Herrnberger1, Nenad Vasic2
1University of Ulm, Ulm, Germany, 2Center for Medical Image Computing, UCL, London, United Kingdom

Contextual fibre growth to generate realistic axonal packing for diffusion MRI simulation
Bader Chaarani1, Joseph Ortigara1, Jennifer Laurent2, Shana Adise3, Alexandra Potter4, Stephen Higgins1, Hugh Garavan1
1UVM Department of Psychiatry, Burlington, VT, United States, 2University of Vermont, Burlington, VT, United States

Multidimensional analysis and detection of informative features in diffusion MRI
Adam Richie-Halford1, Jason Yeatman1, Noah Simon1, Ariel Rokem1
1University of Washington, Seattle, WA, United States

Modelling conduction delays in the corpus callosum using MRI-measured g-ratio
Shai Berman1, Shir Filo1, Aviv Mezer1
1The Edmond and Lily Safra Center for Brain Sciences, The Hebrew University of Jerusalem, Jerusalem, Israel

The effects of memory load and stimulus type on alpha oscillation during working memory maintenance
Ya-Ting Chen1, Bo-Cheng Kuo1
Department of Psychology, National Taiwan University, Taipei, Taiwan
W765 Mitigation of DWI brain cropping in Fixed-Based Analysis
Robert Smith1,2, Dennis Dimad1, Signe Bray1, Alan Connelly1,2
1The Florey Institute of Neuroscience and Mental Health, Melbourne, Australia, 2The University of Melbourne, Melbourne, Australia, 3University of Calgary, Calgary, Alberta, Canada

W766 Comparing NODDI Implementations for Evaluating Brain Microstructure with ADNI3 Diffusion MRI
Talia Nir1, Julio Villalón-Reina1, Sophia Thomopoulos1, Artemis Zavalilangos-Petropuli1, Robert Reid2, Matt Bernstein3, Bret Borowski3, Clifford Jack3, Michael Weiner4, Neda Jahanbash1, Paul Thompson1
Imaging Genetics Center, Stevens Neuroimaging & Informatics Institute, Keck, USC, Marina del Rey, CA, United States, 2Department of Information Technology, Mayo Clinic and Foundation, Rochester, NY, United States, 3Department of Radiology, Mayo Clinic and Foundation, Rochester, MN, United States, 4Department of Radiology, UCSD School of Medicine, San Francisco, CA, United States, 5Imaging Genetics Center, Stevens Neuroimaging & Informatics Institute, Keck, USC, Marina Del Rey, CA, United States

W767 A Fully Atlas-driven Framework for Bundle-specific Tractography with Multi-compartment Diffusion MRI
Ryan Cabeen1, Arthur Toga1
1Laboratory of Neuro Imaging, Keck School of Medicine of USC, University of Southern California, Los Angeles, CA, United States

W768 Clustering Multimodal Connectomes
Jaewon Chung1, Benjamin Pedigo1, Carey Priebe1, Joshua Vogelstein1
1Johns Hopkins University, Baltimore, MD, United States

W769 Absence of white matter maturation in Dravet Syndrome
Robert Smith1,2, Donna Perker1, Amy Schneider1, Jacinta McMahon1, Thijss Dhollander1,2, Ingrid Schetter1,2, Alan Connelly1,2
1The Florey Institute of Neuroscience and Mental Health, Melbourne, Australia, 2The University of Melbourne, Melbourne, Australia

W770 Exploring the Gyral Bias on White Matter Tractography in Neonates
Elinor Thompson1, Emma Robinson1, Jelena Boz1, Saad Jabadi1, Matteo Bastiani4, Stamatos Sotiropoulos1
1Sir Peter Mansfield Imaging Centre, School of Medicine, University of Nottingham, Nottingham, United Kingdom, 2Division of Imaging Sciences & Biomedical Engineering, King’s College, London, United Kingdom, 3Faculty of Electrical Engineering and Computing, University of Zagreb, Zagreb, Croatia, 4Wellcome Centre for Integrative Neuroimaging - FMRI, University of Oxford, Oxford, United Kingdom

W771 Data-driven Mapping of Structural Connectivity Patterns in the Neonatal Brain
Elinor Thompson1, Saad Jabadi1, Matteo Bastiani4, Stamatos Sotiropoulos1
1Sir Peter Mansfield Imaging Centre, School of Medicine, University of Nottingham, Nottingham, United Kingdom, 2Wellcome Centre for Integrative Neuroimaging - FMRI, University of Oxford, Oxford, United Kingdom

W772 Surface integration for connectome analysis in age prediction
Noor Al-Shair1, Etienne St-Onge1, Jacob Vogel1, Guillaume Theaud1, Alan Evans1, Maxime Descoteaux1
1MNI, McGill University, Montreal, Quebec, Canada, 2Université de Sherbrooke, Sherbrooke, Quebec, Canada

W773 Changes in Anatomical and Diffusion Properties for TBI Patients with Chronic Symptoms
Xiaoqian Kang1, Keith Main2,3, Anna-Clare Milazzo1,4, Salil Soman1, Jennifer Kong1, Stephanie Kolakowsky-Hayner6, Ansarg Furst1,4, J. Wesson Ashford1,2, Maheen Adamson2
1VA Palo Alto Health Care System, Palo Alto, CA, United States, 2Department and Veterans Brain Injury, Silver Spring, MD, United States, 3Veterans Affairs Palo Alto Healthcare System, Palo Alto, CA, United States, 4Harvard Medical School, Boston, MA, United States, 5Icahn School of Medicine at Mt. Sinai, New York, NY, United States, 6Stanford University School of Medicine, Stanford, CA, United States

W774 Structural connectivity of subregions of the human dorsal premotor cortex
Benjamin Sigl1, Jan Schreiber1, Christiane Jockwitz1, Christian Rubbert1, Nikolas Teichert1, Bernd Turowsk1, Šenja Caspers2
1University Clinic Düsseldorf, Düsseldorf, Germany, 2Heinrich-Heine-Universität, Düsseldorf, Germany, 3Research Centre Juelich, Juelich, Germany

W775 Single-Shell 3-Tissue CSD (SSST-CSD) modelling of developing HCP (dHCP) diffusion MRI data
Thijs Dhollander1,2, Remika Mito1,2
1The Florey Institute of Neuroscience and Mental Health, Melbourne, Australia, 2University of Melbourne, Melbourne, Australia

W776 Individual Differences in White Matter Microstructure Predict Response Inhibition in Healthy Adults
Adam Clemente1, Annalee Cobden1, Phoebe Imms1, Derek Jones1,2, Govinda Poudel1, Juan Dominguez1,2, Karen Cooeyberghs1
1Mary MacKillop Institute for Health Research, Australian Catholic University, Melbourne, Australia, 2Cardiff University Brain Research Imaging Centre (CUBRIC), Cardiff University, Cardiff, United Kingdom, 3Cognition and Emotion Research Centre, Australian Catholic University, Melbourne, Australia

W777 The degree to which ischemic stroke affects network hubs predicts cognitive recovery
Hugo Abeni1, Yael Reijmer1, Nick Weaver1, Jacoba Spikman1, Johanna Visser-Meily1, Geert Jan Biessels1, Paul de Kort1
1Elsabeth Tweesteden Hospital Tilburg, Tilburg, Netherlands, 2University Medical Center Utrecht, Utrecht, Netherlands, 3University of Groningen, Groningen, Netherlands

W778 Promoting the clinical applicability of Diffusion Kurtosis Imaging
Jelle Veroort1, Rafael Henriques1
1Champalimaud Centre for the Unknown, Lisbon, Portugal, 2Vision Lab, University of Antwerp, Antwerp, Belgium

W779 Altered white matter microstructure in Kabuki Syndrome
Jennifer Boisgontier1, Jean Marc Tachella1, Hervé Lemaître1, Natacha Lehman2, Ana Saitovitch1, Vincent Gatinon1, Guillaume Boursier1, Elodie Sanchez1, Elza Retchmann1, Stanislas Lyonnet1, Le quang sang kim-hanh2, Geneviève Baujat1, Mariene Rio1, Odile Boute1, Laurence Faivre1, Elise Schaefer1, Damien Salavonie1, Monica Zilbovicius1, David Grévent1, David Geneviève2, Nathalie Boddart1
1INSERM U1000 - Institut Imagine - Hôpital Necker, Paris, France, 2Département de Génétique Médicale, maladies Rares et Médecine Personnalisée, CHU Montpeller, Montpellier, France, 3Service de Génétique Médicale, institut IMAGINE, AP-HP Necker Enfants Malades, Paris, France, 4Service de génétique Clinique, Hôpital Jeanne de Flandre, Lille, France, 5Fédération Hospitalo-Universitaire Médecine Translationnelle et Anomalies Du Développement -TRANSALD, Dijon, France, 6Service de génétique médicale, Institut de Génétique Médicale d’Alaise, Strasbourg, France, 7Centre de Recherche en Neurosciences de Lyon, Inserm U1028, UMR CNRS 5292, GENDEV Team, Lyon, France
W780 A diffusion MRI connectometry study of the cortico-striatal pathway integrity in Fabry Disease
Siro Coccozzi1, Matteo Battocchio1, Giuseppe Pontillo1, Simona Schiavi2, Camilla Russo2, Antonio Pisan2, Alessandro Doducci2, Arturo Brunetti1
1University Federico II, Naples, Italy; 2University of Verona, Verona, Italy

W781 DTI Derived Centrality Predicts fMRI Complexity Measured with Fractal Analysis
Josh Neudorf1, Chelsea Ekstrand1, Shaylyn Kress1, Ron Borowsky1
1University of Saskatchewan, Saskatoon, Canada

W782 Dense Mapping of Microstructural Development in the Human Brain During the First Two Years of Life
Khoi Huytn1, Ye Wu1, Kim-Han Thung1, Geng Chen1, WeiLi Lin1, Dinggang Shen1, Pew-Thian Yap1, for the UNC/UMN Baby Connectome Project Consortium
1UNC at Chapel Hill, Chapel Hill, NC, United States

W783 Microstructural Variability Along Sensorimotor Pathways Contributes to Simple Reaction Time
Esin Karahan1, Alison Costigan1, Kim Graham1, Andrew Lawrence1, Xiangxiang Zhang1
1Cardiff University Brain Research Imaging Centre, Cardiff, United Kingdom

W784 Multi-shell Diffusion Models Confer Improved Developmental Sensitivity and Specificity
1University of Pennsylvania, Philadelphia, PA, United States; 2National Institute of Mental Health, Bethesda, MD, United States

W785 Axon diameter index estimation in fixed human optic chiasm: voxel or streamline space?
Mohammad Asharaybeh1, Muhamed Barakovic2, Tobias Streubel3, Joojo Pierquin4, Andreas Pohlmenn1, Thoralf Niendorf5, Evgeniya Kiriлина6, Markus Morawski4, Carsten Jäger7, Stefan Geyer7, Alessandro Doducci, Slaawoosh Mohammd8
1Department of Systems Neurosciences, University Medical Center Hamburg-Eppendorf, Hamburg, Germany; 2Department of Diagnostic and Interventional Radiology, Leipzig University Medical Center, Leipzig, Germany; 3Department of Diagnostic and Interventional Radiology, Leipzig University Medical Center, Leipzig, Germany; 4Laboratory of Biophysical Engineering, University of Tampere, Tampere, Finland; 5Department of Diagnostic and Interventional Radiology, Leipzig University Medical Center, Leipzig, Germany; 6Department of Computer Science, University of Verona, Verona, Italy

W786 Replication and generalization in applied neuroimaging
Garkoitz Lermo-Usaibia1, Pratik Mukherjee1, Zhimei Ren1, Michael Perry2, Brian Wandell2
1Stanford University, Stanford, CA, United States; 2UCSF, San Francisco, CA, United States

W787 Standardised protocols for automated tractography and connectivity blueprints
Shaun Warrington1, Katherine Bryant1, Marina Charquero-Ballester1, Gwennaelle Douaud1, Saad Jbabdi1, Rogier Mars1, Stamatios Sotiropoulos2
1Sir Peter Mansfield Imaging Centre, University of Nottingham, Nottingham, United Kingdom; 2Donders Institute for Brain, Cognition, & Behaviour, Nijmegen, Netherlands; 3Department of Psychiatry, University of Oxford, Oxford, United Kingdom; 4Wellcome Centre for Integrative Neuroimaging-FMRIB, University of Oxford, Oxford, United Kingdom

W788 A Tractography Study of White Matter Alterations in Children with Fetal Alcohol Spectrum Disorders
Jia Fan1, Joannah Madzime1, Marcin Jankiewicz2, Paul Taylor1, Christopher Molteno1, Sandra Jacobson3, Joseph Jacobson3, Ernesta Meinjes2
1University of Cape Town, Cape Town, South Africa; 2National Institute of Mental Health, Bethesda, MD, United States; 3Wayne State University, Detroit, MI, United States

W789 Open-source algorithm for single-shell free water DTI: potentials and limitations
Marc Golub1, Rafael Henriques1, Ofer Pasternak2, Rita Nunes1
1ISR-Lisboa/LARSys and Dept. of Bioengineering, Instituto Superior Tecnico - Universidade de Lisboa, Lisbon, Portugal; 2Champalimaud Neuroscience Programme, Champalimaud Centre for the Unknown, Lisbon, Portugal; 3Depts. of Psychology and Radiology, Brigham and Women's Hospital, Harvard Medical School, Boston, MA, United States

W790 Microstructural damage of fibers connecting anterior and posterior nodes of the DMN in Fabry Disease
Siro Coccozzi1, Matteo Battocchio1, Giuseppe Pontillo1, Simona Schiavi2, Camilla Russo2, Antonio Pisan2, Alessandro Doducci2, Arturo Brunetti1
1University Federico II, Naples, Italy; 2University of Verona, Verona, Italy

W791 Axonal integrity and neurite morphology in psychogenic nonepileptic seizures following TBI
Adam Goodman1, Jane Allendorfer1, Grayson Baird1, Andrew Blum2, Mark Bolding1, Stephen Correa2, Tyler Gaston1, Leslie Grayson1, Nina Kraguljac1, Adrienne Lathe1, Martin Moore1, Noah Philip1, Frank Skidmore1, Krista Tocco1, Lawrence Ver Hoe1, Valerie Voge1, W. LaFrance, Jr.3, Jerzy Szafarski1
1University of Alabama at Birmingham, Birmingham, AL, United States; 2Brown University, Providence, RI, United States

W792 Modelling structural changes in the developing Human Connectome Project with connectivity blueprints
Matteo Bastiani1, Michiel Cottaar1, Jenelda Bozk2, Emma Robinson1, Lucilio Cordero-Grande1, Jana Hutter1, Antonios Makropoulos3, Andreas Schuh4, John Cubitt5, Daniel Rueckert1, A David Edwards1, Jo Hoina1, Stephen Smith1, Stamatios Sotiropoulos2, Saad Jbabdi1
1SPIMC, University of Nottingham, Nottingham, United Kingdom; 2FMRIB, Wellcome Centre for Integrative Neuroimaging, University of Oxford, Oxford, United Kingdom; 3Faculty of Electrical Engineering and Computing, University of Zagreb, Zagreb, Croatia; 4Centre for the Developing Brain, King's College London, London, United Kingdom; 5Biomedical Image Analysis Group, Imperial College London, London, United Kingdom

W793 White matter fibre orientation of anterior nuclei of thalamus and surrounding structures in DW-MRI
Ruhunur Ozdemir1,2, Kai Lehtimäki2, Jukka Peltoh1, Hannu Eskola2
1Department of Biomedical Science and Engineering, Tampere University of Technology, Tampere, Finland; 2Department of Radiology, Tampere University Hospital, Tampere, Finland; 3Department of Neuroscience and Rehabilitation, Tampere University Hospital, Tampere, Finland; 4The School of Medicine Tampere University, Tampere, Finland

W794 Executive Function and Structural Connectivity in Healthy Adults: Using SIFT2 as Edge Weights
Phoebe Imms1, Adam Clement1, Derek Jones2, Juan Dominguez D1, Govinda Poudel2, Karen Coeyenberghs1
1Australian Catholic University, Melbourne, Australia; 2Cardiff University, Cardiff, United Kingdom
**W795** Effects of Analytical Techniques in Comparing Diffusion Derived Metrics in Early Parkinsonis dDisease
Virendra Mishra1, Karthik Sreevansani, Xiaowei Zhuang2, Zhenghi Yang, Dietmar Cordes3, Ryan Walsh
1Cleveland Clinic Lou Ruvo Center for Brain Health, Las Vegas, NV, United States, 2Muhammad Ali Parkinson Center at Barrow Neurological Institute, Phoenix, AZ, United States

**W796** Reliability of longitudinal structural connectivity using an advanced tractography framework
Eloy Martinez-Heras1, Elisabeth Solanda1, Ferran Prados2, Carmen Montejo2, Maria Sepulveda3, Nuria Sole-Valls2, Yolanda Bianco2, Albert Sozí1, Sora Lutfiu
1Center of Neuroimmunology (ImaginEM), Hospital Clinic de Barcelona and IDIBAPS, Barcelona, Spain, 2Univ. Oberta de Catalunya, Barcelona, Spain

**W797** Serial Diffusion Tensor Imaging for Acute Cortical and Subcortical Ischemic Stroke
Yu-Jyun Peng1, Yu-Wei Chien2, Kuo-Wei Wang3, Yeh-Lin Kuo4, Jang-Zeng Tsai5, 
1National Chiao Tung University, Hsinchu, Taiwan, 2Landseed Hospital, Taoyuan, Taiwan, 3National Central University, Taoyuan, Taiwan

**W798** A generative model of realistic brain cells with application to diffusion-weighted MR simulation
Marco Palombo1, Daniel Alexander1, Hui Zhang1, 
1Centre for Medical Image Computing, University College London, London, United Kingdom

**W799** Non-invasive soma imaging with diffusion MRI
Marco Palombo1, Daniel Nunes1, Daniel Alexander1, Noam Shemesh2, Hui Zhang1, 
1Centre for Medical Image Computing, University College London, London, United Kingdom, 2Champalimaud Neuroscience Programme, Champalimaud Centre for the Unknown, Lisbon, Portugal

**W800** Independent evaluation of the reliability of major human white matter tracts mapped via brainlife.io
Jan Kurzawski1, Franco Pestilli1, Kiyraki Mikellidou1, 
1Italian National Institute of Nuclear Physics, Pisa, Italy, 2Indiana University, Bloomington, IN, United States, 3University of Cyprus, Nicosia, Cyprus

**W801** White matter microscopic anisotropy correlates with disability and cognition in multiple sclerosis
Kasper Andersen1, Samo Lasic2, Henrik Lundell1, Markus Nilsson1, Daniel Topgaard4, Filip Szczepankiewicz2,3,4, Hartwig Siebner2,3,4, Morten Blinkenberg1, Tim Dyrbj1,2,4, 
1Danish Research Centre for Magnetic Resonance, Copenhagen University Hospital Hvidovre, Hvidovre, Denmark, 2Random Walk Imaging, AB, Lund, Sweden, 3Department of Radiology, Clinical Sciences, Lund University, Lund, Sweden, 4Division of Physical Chemistry, Department of Chemistry, Lund University, Lund, Sweden, 5Medical Radiation Physics, Lund University, Lund, Sweden, 6Harvard Medical School, Boston, MA, United States, 7Radiology, Brigham and Women’s Hospital, Boston, MA, United States, 8Department of Clinical Medicine, Faculty of Health and Medical Sciences, Copenhagen, Denmark, 9Department of Neurology, Copenhagen University Hospital Bispebjerg, Copenhagen, Denmark, 10Danish Multiple Sclerosis Center, Copenhagen University Hospital Rigshospitalet, Copenhagen, Denmark, 11DTU Compute, Technical University of Denmark, Lyngby, Denmark

**W802** Structural connectivity analysis in treatment-resistant depression
Julie Colognier1, Jean-Marie Batail2,3, Dominique Drakebill1, Christian Barilott1, 
1Univ Rennes, INRIA, CNRS, IRISA, INSERM, EMPENN U1228 ERL, Rennes, France, 2Centre Hospitalier Guillaume Régnier, Academic Psychiatry Department, Rennes, France, 3Univ Rennes, Compartment et noyaux gris centraux research unit (EA 4712), Rennes, France, 4Univ Rennes, INRIA, CNRS, IRISA, INSERM, EMPENN U1228 ERL, F-35042 Rennes, France, 5Univ Rennes, France, 6Univ Rennes, France

**W803** ADHD Dimension Symptom Scores Associated with Reduced White Matter Microstructure
Christinne Gonzales Damato1, Marcel Zwiers2, Daan van Rooij3, Sophie Akkermans4, Jilly Najaer2, Barbara Franke2, Jan Buitelaar5,6, Christian Beckmann5,6, Emma Sprooten5,6, 
1Dept of Cognitive Neuroscience, Donders Institute for Brain, Cognition and Behaviour, Nijmegen, Netherlands, 2Dept of Cognitive Neuroscience, Donders Institute for Brain, Cognition and Behaviour, Radboud University, Nijmegen, Netherlands, 3Dept of Human Genetics, Donders Institute for Brain, Cognition and Behaviour, Radboud University, Nijmegen, Netherlands, 4Dept of Psychiatry, Donders Institute for Brain, Cognition and Behaviour, Radboud University, Nijmegen, Netherlands, 5Centre for Cognitive NeuroImaging, Donders Institute, Nijmegen, Netherlands, 6Centre for Functional MRI of the Brain, University of Oxford, Oxford, United Kingdom

**W804** Improved statistical power to detect differences in tissue microstructure via feature reduction
Maxime Chamberland1, Erika Raven2, Kate Duffy2, Sila Genc3,4, Greg Parker1, Chantal Tax1, Derek Jones1, 
1Cardiff University Brain Research Imaging Centre, Cardiff, United Kingdom, 2Murdoch Children’s Research Institute, Parkville, Australia

**W805** Does Epilepsy Alter Interictal Network Controllability? An Integrated IEEG-HARDI study
Ganne Chaitanya1, Xiaosong He1, Danielle Bassett2, Walter Hinds3, Murtaza Bandukwala1, Noah Sideman1, Michelle Mui1, Ellen Eline4, Mohamed Tantawi1, Anupa Vijayakumari1, Hela Saidi5, Michael Sperling1, Joseph Tracy6, 
1Thomas Jefferson University, Philadelphia, PA, United States, 2University of Pennsylvania, Philadelphia, PA, United States, 3Drexel University, Philadelphia, PA, United States

**W806** MegaTrack Atlas: An online tool for visualisation of large tractography datasets and lesion analysis
Richard Stones1, Rachel Barrett1, Robert Dallyn1, Ahmad Beyh3, Francisco De Santiago Requejo4, Daniele Cancemi1, Annoushka Lesiel1, Catherine Davison1, Claudia Cramer1, Marco Catani1, Flavio Dell’Acqua1, 
1Natbrainlab, King’s College London, London, United Kingdom

**W807** DTI vs. TDF derived fractional anisotropy in identifying white matter change in Parkinson’s disease
Michael Bornstein1, Tolvia Niri1, Paul Thompson1, Neda Jianshani1, 
1Imaging Genetics Center, Stevens Neuroimaging & Informatics Institute, Keck, USC, Marina Del Rey, CA, United States

**W808** Structural brain network controllability predicts individual cognitive variation in healthy adults
Won Hee Lee1, Danielle S. Bassett2, Sophia Frangou1, 
1Cahn School of Medicine at Mount Sinai, New York, NY, United States, 2Department of Bioengineering, Department of Neurology, University of Pennsylvania, Philadelphia, PA, United States, 3Icahn School of Medicine at Mount Sinai, New York, NY, United States

**W809** Enriching connectomes with microstructural information to predict brain age using deep learning
Moises Hernandez-Fernandez1, Jacob A. Alappatt1, Drew Parker1, Abdol A. Ould-Ismail1, Ray Pomponio1, Juliand Ponsard1, Joseph Piven1,2, Leigh MacIntyre1, Robert T. Schultz3, Birkan Tunc1, Martin Syner1, Ragini Verma1, 
1Center for Biomedical Image Computing and Analytics (CBICA), University of Pennsylvania, Philadelphia, PA, United States, 2Center for Autism Research, Children’s Hospital of Philadelphia, Philadelphia, PA, United States, 3Carolina Institute for Developmental Disabilities, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States, 4Department of Psychiatry, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States, 5McGill Centre for Integrative Neuroscience, Montreal Neurological Institute, Montreal, Quebec, Canada
W810 Biological interpretation of the “free water” increases in the substantia nigra of PD patients
Silvina Horovitz1, Shrutii Nanivadekar1, Amritha Nayak1, Ofer Pasternak1, Carlo Pieropi2
1NIHNS - NIH, Bethesda, MD, United States, 2NIBIB - NIH, Bethesda, MD, United States, 3Harvard Medical School, Boston, MA, United States

W811 Brain Microstructure Measured using Diffusion Kurtosis MRI Related to Blood Pressure and Cognition
Nadia Lahoud1, Tom Welton2, Sarah Hellewell2, Stuart Grieve3, Gemma Figtree4
1Sydney Translational Imaging Laboratory, Heart Research Institute, Sydney, NSW, 2Sydney Translational Imaging Laboratory, Heart Research Institute, Charles Perkins Centre, Sydney, Australia, 3North Shore Heart Research, Kolling Institute, University of Sydney, Sydney, Australia

W812 QuickSTEP: a toolbox for simultaneous EEG-fMRI analysis
Mark Quigg2, Tingting Zhang3
1University of Melbourne, Melbourne, Australia, 2The Florey Institute of Neuroscience and Mental Health, Melbourne, VIC, Australia, 3The Florey Institute of Neuroscience and Mental Health, Melbourne, Australia

W813 Brain Network Studies of Epileptic Seizures Using Intracranial EEG Data
Hua Zhang1, Ilijai Tanabe2, Yeatian Wang2, Ruizong Mao3, Ying Sun4, Jianhui Sun5, Guofen Yan6, Mark Quigg1, Tingting Zhang2
1University of Virginia, Charlottesville, VA, United States, 2University of Virginia, Charlottesville, VA, United States, 3University of Virginia, Charlottesville, VA, United States, 4University of Virginia, Charlottesville, VA, United States

W814 How many trials and subjects do I need for my MEG experiment? A simulation study
Maximilian Chaumen1, Aina Puce2, Nathalie George2
1Institut du Cerveau et de la Moelle Epinière, ICM, Inserm U 1127, CNRS UMR 7225, Sorbonne Université, Paris, France, 2Psychological & Brain Sciences, Indiana University, Bloomington, IN, United States

W815 Identifiability in Connectome Based Neural Mass Models
Xihe Jie1, Amy Kuceyeski2, Sudhin Shoh3, Nicholas Schiff4, Srikanth Nagarajan1, Ashish Raj1
1Weill Cornell Medicine, New York, NY, United States, 2UCSF, San Francisco, CA, United States, 3Radiology and Biomedical Imaging, University of California, San Francisco, CA, United States

W816 Decreases in resting-state and auditory attention-related brain network strength in schizophrenia
Jorne Laton1,2, Jeroen Van Schependom3, Jeroen Decoster3, Tim Moons4, Marc De Hert5, Guy Nagels1,2, Maarten De Vos1
1University of Oxford, Oxford, United Kingdom, 2Vrije Universiteit Brussel, Brussel, Belgium, 3University of Notre Dame, Indiana, United States, 4National Institute of Mental Health, Bethesda, MD, United States

W817 Limits on Improving EEG Volume Conduction Models
Simon Homölle1, Maria Carla Piastra2, Robert Oostenveld1
1Parietal Team, INRIA, GIF-sur-Yvette, France, 2ENS/CREST / Google AI, Paris, France

W818 Group level MEG/EEG source imaging: Minimum-Wasserstein estimates
Hicham Janati1, Thomas Bazeille1, Bertrand Thirion2, Marco Cuturi2, Alexandre Gramfort1
1Parietal Team, INRIA, GIF-sur-Yvette, France, 2ENS/CREST / Google AI, Paris, France

W819 Capturing MEG spectral dynamics with non-uniform biophysical networks
Jonathan Hadjileov1, Stamatios Sotropoulos2, Saad Jbabdi2, Mark Woolrich1
1University of Oxford, Oxford, United Kingdom, 2University of Nottingham, Nottingham, United Kingdom

W820 Temporally unconstrained decoding reveals consistent but time-varying stages of stimulus processing
Diego Vidaurri1, Nicholas Myers1, Mark Stokes1, Anna Nabre1, Mark Woolrich1
1University of Oxford, Oxford, United Kingdom

W821 Resting-state MEG functional connectivity correlates of cognitive symptoms in multiple sclerosis
Martin Sieland1, Vincent Wens2, Jeroen Van Schependom3, Lars Casters4, Serge Goldman1, Xavier De Tiège1, Guy Nagels2
1Vrije Universiteit Brussel, Brussels, Belgium, 2Vrije Universiteit Brussel, Brussels, Belgium

W822 Applying stochastic spike train theory for high-accuracy MEG/EEG
Niels Haumann1, Minna Huotilainen2, Peter Vuust1, Elvira Brattico1
1Aarhus University, Aarhus C, Denmark, 2University of Helsinki, Helsinki, Finland, 3Aarhus University, Aarhus, Denmark

W823 Decomposing age effects in EEG alpha power
Marius Traedel1, Andreas Pedroni1, Nicolas Langer1
1University of Zurich, Zurich, Switzerland

W824 Suicide spectrum of Major Depressive Disorder in Cortical-Striatal-Thalamo-Cortical circuit
Sai Zhang1, Rongxin Zhu1, Zhiu Chen1, Pinhua Lin2, Hongliang Zhou1, Zhijian Yao1, Qing Lu2
1School of Biological Sciences & Medical Engineering, Southeast University, Nanjing, China, 2Child Development and Learning Science, Key Laboratory of Ministry of Education, Nanjing, China, 3Department of Psychiatry, Affiliated Nanjing Brain Hospital, Nanjing Medical University, Nanjing, China, 4Nanjing Brain Hospital, Medical School of Nanjing University, Nanjing, China

W825 A model-based approach linking MEG signals to neural synchrony in early visual cortex
Eline Kupers1, Noah Benson1, Jonathan Winawer2
1Department of Psychology, New York University, New York, NY, United States, 2Department of Psychology and Center for Neural Science, New York University, New York, NY, United States

W826 A novel brain connectivity measurement based on signal phase analysis
Fabio Baselice1, Antonietta Sorriso2, Rosaria Rucco3, Carmine Grannata1, Pierpaolo Sorrentino1
1University of Naples Parthenope, Naples, Campania, 2University of Naples Parthenope, Naples, Italy, 3Institute of Applied Sciences and Intelligent Systems, Pozzuoli, Campania

W827 Assessing graph-based metrics of functional brain networks for brain-computer interface applications
Tiziana Cottini1, Stefania Colonnese2, Marie-Constance Corsi1, Daniiele Bassetti3, Gaetano Scarano5, Fabrizio De Vico Fallani2
1ARAMIS Lab, ICM, Inserm U 1127, CNRS UMR 7225, Sorbonne Université, Paris, France, 2University of Rome Tor Vergata, Rome, Italy, 3ARAMIS Lab, ICM, Inserm U 1127, CNRS UMR 7225, Sorbonne Université, Paris, France, 4School of Biological Sciences & Medical Engineering, Southeast University, Nanjing, China, 5Institute of Biomedical Engineering, University of Genoa, Genoa, Italy

W828 Suicide spectrum of Major Depressive Disorder in Cortical-Striatal-Thalamo-Cortical circuit
Sai Zhang1, Rongxin Zhu1, Zhiu Chen1, Pinhua Lin2, Hongliang Zhou1, Zhijian Yao1, Qing Lu2
1School of Biological Sciences & Medical Engineering, Southeast University, Nanjing, China, 2Child Development and Learning Science, Key Laboratory of Ministry of Education, Nanjing, China, 3Department of Psychiatry, Affiliated Nanjing Brain Hospital, Nanjing Medical University, Nanjing, China, 4Nanjing Brain Hospital, Medical School of Nanjing University, Nanjing, China

W829 Capturing MEG spectral dynamics with non-uniform biophysical networks
Jonathan Hadjileov1, Stamatios Sotropoulos2, Saad Jbabdi2, Mark Woolrich1
1University of Oxford, Oxford, United Kingdom, 2University of Nottingham, Nottingham, United Kingdom

W830 Temporally unconstrained decoding reveals consistent but time-varying stages of stimulus processing
Diego Vidaurri1, Nicholas Myers1, Mark Stokes1, Anna Nabre1, Mark Woolrich1
1University of Oxford, Oxford, United Kingdom

W831 Resting-state MEG functional connectivity correlates of cognitive symptoms in multiple sclerosis
Martin Sieland1, Vincent Wens2, Jeroen Van Schependom3, Lars Casters4, Serge Goldman1, Xavier De Tiège1, Guy Nagels2
1Vrije Universiteit Brussel, Brussels, Belgium, 2Vrije Universiteit Brussel, Brussels, Belgium

W832 Applying stochastic spike train theory for high-accuracy MEG/EEG
Niels Haumann1, Minna Huotilainen2, Peter Vuust1, Elvira Brattico1
1Aarhus University, Aarhus C, Denmark, 2University of Helsinki, Helsinki, Finland, 3Aarhus University, Aarhus, Denmark

W833 Decomposing age effects in EEG alpha power
Marius Traedel1, Andreas Pedroni1, Nicolas Langer1
1University of Zurich, Zurich, Switzerland

W834 Suicide spectrum of Major Depressive Disorder in Cortical-Striatal-Thalamo-Cortical circuit
Sai Zhang1, Rongxin Zhu1, Zhiu Chen1, Pinhua Lin2, Hongliang Zhou1, Zhijian Yao1, Qing Lu2
1School of Biological Sciences & Medical Engineering, Southeast University, Nanjing, China, 2Child Development and Learning Science, Key Laboratory of Ministry of Education, Nanjing, China, 3Department of Psychiatry, Affiliated Nanjing Brain Hospital, Nanjing Medical University, Nanjing, China, 4Nanjing Brain Hospital, Medical School of Nanjing University, Nanjing, China

W835 A model-based approach linking MEG signals to neural synchrony in early visual cortex
Eline Kupers1, Noah Benson1, Jonathan Winawer2
1Department of Psychology, New York University, New York, NY, United States, 2Department of Psychology and Center for Neural Science, New York University, New York, NY, United States

W836 A novel brain connectivity measurement based on signal phase analysis
Fabio Baselice1, Antonietta Sorriso2, Rosaria Rucco3, Carmine Grannata1, Pierpaolo Sorrentino1
1University of Naples Parthenope, Naples, Campania, 2University of Naples Parthenope, Naples, Italy, 3Institute of Applied Sciences and Intelligent Systems, Pozzuoli, Campania

W837 Assessing graph-based metrics of functional brain networks for brain-computer interface applications
Tiziana Cottini1, Stefania Colonnese2, Marie-Constance Corsi1, Daniiele Bassetti3, Gaetano Scarano5, Fabrizio De Vico Fallani2
1ARAMIS Lab, ICM, Inserm U 1127, CNRS UMR 7225, Sorbonne Université, Paris, France, 2University of Rome Tor Vergata, Rome, Italy, 3ARAMIS Lab, ICM, Inserm U 1127, CNRS UMR 7225, Sorbonne Université, Paris, France, 4School of Biological Sciences & Medical Engineering, Southeast University, Nanjing, China, 5Institute of Biomedical Engineering, University of Genoa, Genoa, Italy
W828 Learning the spatio-temporal morphology of M/EEG signals: Beyond the Fourier fallacy

Thomas Moreau1, Tom Dupré la Tour2, Mainak Jas3, Alexandre Gramfort4
1INRIA, Palaiseau, France, 2Télécom ParisTech, Paris, France, 3Massachusetts General Hospital, Charlestown, MA, United States

W829 MEG Estimates of Regional Information Transfer Stability

Stephen Robinson1, Arnold Mandell2, Allison Nugent2
1NIH/NIMH, Bethesda, MD, United States, 2University of California San Diego, San Diego, CA, United States, 3NIH, Bethesda, MD, United States

W830 Analysis of intracerebral EEG dependency on electrode type

Nicolas von Ellenrieder1, Hui Ming Kho2, François Dubeau1, Jean Gotman3
1Montreal Neurological Institute, McGill University, Montreal, Quebec, Canada, 2Department of Neurosurgery, Osaka University, Osaka, Japan

W831 Development and Test of an ERP Simulator Emulating Visual N2 Variability in Amplitude and Latency

Francesca Marturano1, Sabrina Brigadoi2, Mattia Doro2, Roberto Dell’Acqua3, Giovanni Sparacino1
1Department of Information Engineering, University of Padova, Padova, Italy, 2Department of Developmental Psychology, University of Padova, Padova, Italy, 3Padova Neuroscience Center, University of Padova, Padova, Italy

W832 Using MRI-based myelin maps to inform MEG source reconstruction

Saskia Helbling1, Sofie Meyer2,3, Martina Callaghan2, Gareth Barnes2, Nikolaus Weiskopf2
1Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, 2Wellcome Centre for Human Neuroimaging, University College London, London, United Kingdom, 3Institute of Cognitive Neuroscience, University College London, London, United Kingdom

W833 Age-related differences in white-matter integrity and control over dynamic network connectivity

Thomas Hingault1, Susan Courtney1
1Johns Hopkins University, Baltimore, MD, United States

W834 Dynamics in oscillatory waveform shape revealed by Empirical Mode Decomposition

Andrew Quinn1, Vitor Lopes de Santos1, Chi-Hung Juan2, Jia-Rong Yeh2, Wei-Kuang Liang2, David Dupret1, Norden Huang3, Anna Nobre1, Mark Woolrich1
1University of Oxford, Oxford, United Kingdom, 2National Central University, Taoyuan City, Taiwan, 3Center for Nonlinear Sciences, Qingdao, China

W835 Electrode to cortex distance predicts healthy human EEG gamma power and sex differences

Russel Butler1, Gregory Mierzwinski2, Pierre-Michel Bernier1, Maxime Descoteaux2, Guillaume Gilbert4, Kevin Whittingstall4
1University of Sherbrooke, Sherbrooke, QC, Canada, 2Université de Sherbrooke, Sherbrooke, Quebec, Canada, 3MR Clinical Science, Philips Healthcare Canada, Markham, Ontario, Canada, 4Department of Nuclear Medicine and Radiobiology, University of Sherbrooke, Sherbrooke, QC, Canada

W836 Corresponding relationships between Resting State EEG power and connectivity

Kimberly Roy1, Nicholas Griffin1, ALEX Alain1, Rochelle Stewart1, Jocelyn Labrada1, Christopher Bevers1, David Schrayer1
1University of Texas, Austin, TX, United States

W837 Differences in MEG and EEG power-law scaling: a simulation study

Christian Bénar1, Christophe Grova2, Viktor Jirsa2, Jean-Marc Lina2
1Aix-Marseille University, Marseille, France, 2Concordia University, Montreal, Quebec, Canada, 3 Université Aix-Marseille, Marseille, France, 4École de Technologie Supérieure, Montréal, Quebec, Canada

W838 Effects of improved MEG–MRI co-registration error on MEG connectivity estimates

Federico Chella1, Laura Marzetti2,3, Matti Stenroos1, Laura Pari9,3, Gian Luca Romani3, Vittorio Pizzella1,2
1Dept. of Neuroscience, Imaging and Clinical Sciences, G. d’Annunzio University of Chieti-Pescara, Chieti, Italy, 2Institute for Advanced Biomedical Technologies, G. d’Annunzio University of Chieti-Pescara, Chieti, Italy, 3Dept. of Neuroscience and Biomedical Engineering, Aalto University School of Science, Espoo, Finland

W839 On the theoretical spatial precision of EEG, MEG and OPM-MEG

Matthew Brookes1, Elena Boto2
1University of Nottingham, Nottingham, United Kingdom, 2University of Nottingham, Nottingham, United Kingdom

W840 A frequency conductivity variant atlas for EEG inverse problem based on in vivo MRI measures

Marco Castellano1, Ilaria Mazzonetto1, Francesco Tiano2, Luca Weiss3, Dante Mantini2, Alessandra Bertoldo2,3
1Padova Neuroscience Center, University of Padova, Padova, Italy, 2Department of Information Engineering, University of Padova, Padova, Italy, 3Fondazione Ospedale San Camillo IRCCS, Venice, Italy, 4KU Leuven, Leuven, Belgium

W841 Amygdala response to dynamic visual stimulation in single neuron, LFP and BOLD activity

Tommaso Fedele1, Athina Tzavara2,3, Bettina Steiger4, Thomas Gronwald1, Lennart Stieglitz1,2, Henrik Jokisch1,6, Johannes Sammet1,2
1Higher School of Economics, Moscow, Russian Federation, 2University of California, Berkeley, Berkeley, CA, United States, 3Wellcome Trust Centre for Neuroimaging, University College WC1N 3BG London, United Kingdom, 4University of Sherbrooke, Mansonville, Quebec, Canada, 5Swiss Epilepsy Centre, Zurich, Switzerland, 6University of Nottingham, Nottinghamshire, QuSpin Inc., Louisville, CO, United States

W842 Second Generation Optically-Pumped Magnetometers for Measurement of the Magnetoencephalogram

Elena Boto1, Matthew Brookes2, Niall Holmes3, Ryan Hill4, Gillian Roberts4, James Leggett4, Richard Bowtell5, Vishal Shah5
1University of Nottingham, Nottingham, United Kingdom, 2University of Nottingham, Nottingham, United Kingdom, 3University of Nottingham, Nottingham, Nottinghamshire, 4QuSpin Inc., Louisville, CO, United States

W843 Does change of frontal theta cordance predict depression treatment outcome?

Barbora Bucková1, Jaroslav Hlinka2, Martin Brunovsky2, Michal Vavrek2, Vlastimil Koudelka3
1Institute of Computer Science, The Czech Academy of Sciences, Prague, Czech Republic, 2Faculty of Electrical Engineering, Czech Technical University, Prague, Czech Republic, 3National Institute of Mental Health, Klecan, Czech Republic

W844 Decoding task information with high spatiotemporal precision in source EEG networks

Ravi Mittal1, Julia Hamilton1, Emily Winfield2, Nicole Lalta3, Richard Chen4, Marjolein Sprank1, Michael Cole1
1Rutgers University Newark, Newark, NJ, United States
W845 Neural representation of individual word properties by spatiotemporal hyperalignment of EEG signals
Sophie Arangö1,2, Annika Hulten1, Peter Hagoort1,2, Jan Mathijs Schoffelen2
1Max Planck Institute for Psycholinguistics, Nijmegen, Netherlands, 2Donders Institute for Brain, Cognition and Behaviour, Nijmegen, Netherlands, 3Aalto University, Espoo, Finland

W846 Deep brain stimulation of subthalamic nucleus: EEG microstates analysis
Martin Lamos1, Martina Bočková1, Petr Klimeš2, Alena Damborská1, Josef Halámek2, Pavel Jurdík3, Ivan Rękert4
1CEITEC MU, Brno, Czech Republic, 2Academy of Sciences of the Czech Republic, Brno, Czech Republic

W847 Dynamic Causal Modelling for EEG Pinpoints Behaviourally-Relevant Memory Circuit Dropout in AD
Ashley Tyers1, Jessica Gilbert2, Sarah Adams3, Azziza Bankole1, Ian Gilchrist1, Rosalyn Moran3
1University of Bristol, Bristol, United Kingdom, 2NIH, Bethesda, MD, United States, 3University of Virginia, Charlottesville, VA, United States, 4Virginia Tech Carilion School of Medicine, Roanoke, VA, United States, 5King’s College, London, United Kingdom

W848 Impact of regularization parameter on source localization with eLORETA
Ilaria Mazzonietto1, Dante Montin1,2, Alessandra Bertolad3,4
1Department of Information Engineering, University of Padova, Padova, Italy, 2Laboratory of Movement Control and Neuroplasticity, KU Leuven, Leuven, Belgium, 3Fondazione Ospedale San Camillo IRCCS, Venezia, Italy, 4Padova Neuroscience Center, University of Padova, Padova, Italy

W849 Motifs-based EEG analysis to describe brain network architecture after stroke
Manuela Petti1, Laura Astolfi2, Floriana Pichiorri2, Bratislav Mišić3, Febo Cincotti3,2, Donatella Mattia3, Olaf Sporns4
1Department of Computer, Control and Management Engineering, Sapienza University of Rome, Rome, Italy, 2IRCCS Fondazione Santa Lucia, Rome, Italy, 3Montreal Neurological Institute, McGill University, Montreal, Quebec, Canada, 4Department of Psychological and Brain Sciences, Indiana University, Bloomington, IN, United States

W850 Modelling the Brain as a Hybrid Dynamical System: Continuous emissions from discrete states
David Araya1, Woel El-Deredy2, Nelson Trujillo-Barreto3
1Universidad de Valparaíso, Valparaíso, Chile, 2University of Valparaíso, Valparaíso, 3University of Manchester, Manchester, United Kingdom

W851 A manifold learning approach to inter-individual variations in human brain dynamics
Hiromichi Suetani1,2, Keiichi Kitajo3,2,4
1Yonsei University, Seoul, Korea, Republic of, 2Brain Korea 21 PLUS Project for Medical Science, Yonsei University College of Medicine, Seoul, Korea, Republic of, 3Section of Self, Affect and Neuroscience, Institute of Human Complexity and Systems Science, Seoul, Korea, Republic of, 4Laboratory of Molecular Neuroscience, Department of Nuclear Medicine, Radiology, Yonsei University, Seoul, Korea, Republic of

W852 Standard fast-scale multi-scale entropy (MSE) strongly reflects low-frequency spectral power
Julian Kociessi1,2, Niels Kloosterman1,2, Douglas D Garrett1,2
1Max Planck UCL Centre for Computational Psychiatry & Aging Research, Berlin, Germany, 2Max Planck Institute for Human Development, Berlin, Germany

W853 Spatiotemporal brain dynamics during the recognition of music by Johann Sebastian Bach
Leonardo Bonetti1, Elvira Brattico2, Joana Cabral2, Angus Stever2, Niels Haumann1, Gustavo Deco2, Peter Vuust3, Morten Kringelbach1
1Center for Music in the Brain, Aarhus University, Aarhus, Denmark, 2ICVS, University of Minho, Braga, Portugal, 3Universitat Pompeu Fabra, Barcelona, Spain, 4Department of Psychiatry, University of Oxford, Oxford, United Kingdom

W854 Anti-PSICOS Beamformer immune to correlated sources
Yulia Nurulamov1, Aleksandra Kuznetsova2, Alexei Ossadtchi2
1Center for Bioelectric Interfaces, NRU Higher School of Economics, Moscow, Russian Federation, 2Center for Bioelectric Interfaces, Higher School of Economics, Moscow, Russian Federation, 3Center for Bioelectric Interfaces, NRU Higher School of Economics, Moscow, Russian Federation

W855 Nonparametric maximum likelihood estimation of the Electrophysiological Spectra Components
Hu Shiang1, Qing Wang2, Pedro Valdes-Sosa3
1MOE Key Lab for Neuroinformatics, University of Electronic Science and Technology of China, Chengdu, China, 2Cuban Neuroscience Center, Havana, Cuba

W856 Amplifying the Neural Power Spectrum
Andrew Doyle1,2, Paule-J Toussaint3,4, Alan Evans3
1Montreal Neurological Institute, McGill University, Montreal, Quebec, Canada, 2Montreal Neurological Institute, McGill University, Montreal, Quebec, Canada

W857 Surgical outcome prediction using MEG connectivity and graph theory
Hisako Fujiwara1, Jeffrey Tenney2, Darren Kado1, Brady Williamson3
1Cincinnati Children’s Hospital Medical Center, Cincinnati, OH, United States, 2University of Cincinnati, Cincinnati, OH, United States

W858 Hidden Markov Modelling reveals relationship between MEG and TMS measures of GABA
Catharina Zech1, Magdalena Nowak1, Emily Hinson2, Andrew Quinn3, Diego Vidaurre4, Mark Woolrich1, Charlotte Stagg2
1University of Oxford, Oxford, United Kingdom, 2Oxford University, Oxford, United Kingdom, 3Oxford Centre for Human Brain Activity, Oxford, United Kingdom

W859 A linear spectral graph theory of brain oscillations
Ashish Raj1, Chang Ca2, Xihe Xie2, Julia Owen3, Eva Palacios4, Pratik Mukherjee5, Srikanth Nagarajan6
1UCSF, San Francisco, CA, United States, 2UCSF, San Francisco, CA, United States, 3Weill Cornell Medicine, New York, NY, United States, 4University of Washington, Seattle, WA, United States

W860 Working Memory in Schizophrenia: An EEG Dynamic Causal Modeling
Jinseok Eo1,2, Suk Kyoon An3,4, Hae-Jeong Park5,2
1Yonsei University College of Medicine, Seoul, Korea, Republic of, 2Brain Korea 21 PLUS Project for Medical Science, Yonsei University College of Medicine, Seoul, Korea, Republic of, 3Department of Psychology, Yonsei College of Medicine, Seoul, Korea, Republic of, 4Section of Self, Affect and Neuroscience, Institute of Behavioral Science in Medicine, Yonsei University, Seoul, Korea, Republic of, 5Center for Systems and Translational Brain Sciences, Institute of Human Complexity and Systems Science, Seoul, Korea, Republic of, 6Laboratory of Molecular Neuroscience, Department of Nuclear Medicine, Radiology, Yonsei University, Seoul, Korea, Republic of

W861 Diffusion Kalman Filter estimation of the intrinsic manifold of a neural mass model
Min Li1, Pedro Valdes-Sosa2, Ying Wang3
1Key Lab for Neuroinformatics, University of Electronic Science and Technology of China, Chengdu, China, 2Cuban Neuroscience Center, Havana, Cuba, 3Key Lab for Neuroinformatics, University of Electronic Science and Technology of China, Chengdu, AS
W862  The involvement of self-prioritization effect in the time course: an explorative ERP study  
Tianyang Xu1, Yuan Yao2, Feiyao Chen1, Yuzhao Yao1  
1Bio-X Laboratory, Department of Physics, Zhejiang University, Hangzhou, China, 2Department of Psychology, Suzhou University of Science and Technology, Suzhou, China, Hangzhou, China

W863  State dependent effective connectivity in the default mode network of MEG  
Junho Son1, Chongwon Pae2, Jiyoung Kang1, Jinseok Eo3, Hae-Jeong Park4,5,6,7  
1Yonsei University, Seoul, Korea, Republic of, 2Yonsei University College of Medicine, Seoul, Korea, Republic of, 3Center for Systems and Translational Brain Science, Institute of Human Complexity and Systems Science, Seoul, Korea, Republic of, 4Yonsei University, Seoul, Korea, Republic of, 5BK21 PLUS Project for Medical Science, Yonsei University College of Medicine, Seoul, Korea, Republic of, 6Dept of Nuclear Medicine, Radiology, Yonsei University College of Medicine, Seoul, Korea, Republic of, 7Center for Systems and Translational Brain Science, Institute of Human Complexity and Systems Science, Yonsei University, Seoul, Korea, Republic of

W864  Energetics of brain plasticity in the healthy and MS brain: a quantitative fMRI study  
Eleonora Pattuccioni1, Rachael Stickland1, Hannah Chandler1, Michael Germuska1, Catherine Foster1, Shona Bhome-Dhalwal1, Sharmila Khot1, Neeraj Saxena1, Valentina Tomassini1,2,3,4, Richard Wise1  
1Cardiff University, Cardiff, United Kingdom, 2Cardiff and Vale University Health Board, Cardiff, United Kingdom, 3Division of Psychological Medicine and Clinical Neurosciences, Cardiff University School of Medicine, Cardiff, United Kingdom, 4Helen Durham Centre for Neuroinflammation, University Hospital of Wales, Cardiff, United Kingdom

W865  Cerebrovascular reactivity and its correlation with age in patients with multiple sclerosis  
Laura Pelizzari1, Maria Lagani1, Laura Mendozzi1, Niels Bergsland1,2, Chiara Pagliari1, Pietro Cecconi1, Laura Pelizzari1, Maria Laganà1, Laura Mendozzi1, Niels Bergsland1,2, Chiara Pagliari1, Pietro Cecconi1, Laura Pelizzari1, Maria Laganà1, Laura Mendozzi1, Niels Bergsland1,2, Chiara Pagliari1, Pietro Cecconi1, Laura Pelizzari1, Maria Laganà1, Laura Mendozzi1, Niels Bergsland1,2, Chiara Pagliari1, Pietro Cecconi1, Laura Pelizzari1, Maria Laganà1, Laura Mendozzi1, Niels Bergsland1,2, Chiara Pagliari1, Pietro Cecconi1, Laura Pelizzari1, Maria Laganà1, Laura Mendozzi1, Niels Bergsland1,2, Chiara Pagliari1, Pietro Cecconi1, Laura Pelizzari1, Maria Laganà1, Laura Mendozzi1

W866  Imaging hemodynamic responses in white matter tracts activated with event-related functional tasks  
Muwei Li1, Allen Newton1, Adam Anderson1, Zhaohua Ding1, John Gore1  
1Vanderbilt University Institute of Imaging Science, Nashville, TN, United States

W867  Characterization of the cerebral blood flow response to brief neural activity in human visual cortex  
Jung Hwan Kim1, Amanda Tavory1, Danny Wang2, Xiaowei Zou1, David Ross2  
1Boylor College of Medicine, Houston, TX, United States, 2University of Southern California, Los Angeles, CA, United States

W868  BOLD deactivations are not the metabolic opposite of activations: Evidence from hybrid PET/fMRI  
Lars Jonasson1,2, Jan Axelsson1,2, Filip Grill1,2, Vania Panes Lundmark1,2, Peter Young1,2, Jarkko Johansson1,2, Anna Rieckmann1,2,3  
1Department of Integrative Medical Biology, Umeå University, Umeå, Sweden, 2Umeå Center for Functional Brain Imaging (UFBI), Umeå University, Umeå, Sweden, 3Department of Radiation Sciences, Umeå University, Umeå, Sweden

W869  Towards a metabolic baseline for Default Mode Network activations and deactivations  
Samirpo Epp1, Christine Preibisch1, Jessica Andrews-Hanna2, Valentin Riedl2  
1Neuroradiology, Technische Universität München, Munich, Germany, 2Psychology, University of Arizona, Tucson, AZ, United States

W870  Does partial volume correction improve the sensitivity of arterial spin labeling to detect activity?  
Flora Kennedy McConnell1,2, Andrew Segerdahl1, Thomas Okell3,4, Melvin Mezue5, Irene Tracey1  
1Institute of Biomedical Engineering, University of Oxford, Oxford, United Kingdom, 2Welcome Centre for Integrative Neuroimaging, University of Oxford, Oxford, United Kingdom

W871  Dose-dependent effects of Methylene Blue on regional brain perfusion  
Ottavio Dippasquale1, Nisha Singh1, Karen Rondall1,2, David Lythgoe1, Ndana Mazibuko1, Pierluigi Selvaggi1, Stephanie Stephenson1, Federico Turkheimer1, Fernando Zelaya1, Alessandra Colasanto1, Department of Neuroimaging, IoPPN, King’s College London, London, United Kingdom, 3Department of Neuroscience, Brighton and Sussex Medical School, Brighton, United Kingdom

W872  The oxygen extraction fraction response during motor task in the presence of hypoxia  
Yayan Yin1,2, Long Qinq1, Jia-Hong Gao1, Jie Li1,2  
1Xiaomei Hospital, Capital Medical University, Beijing, China, 2Beijing Key Laboratory of Magnetic Resonance Imaging and Brain Informatics, Beijing, China, 3the University of Hong Kong, Hong Kong, China, 4Peking University, Beijing, China

W873  Relating Sex Differences in Cerebral Blood Flow Trajectory during Adolescence to Anxiety-Depression  
Samuel Berry1  
1Cardiff University, Cardiff, Wales

W874  Characterization of menstrual cycle-related changes in cerebral blood flow  
Samantha Cote1, Russell Butler1, Marie Anne Richard1, Adrianna Mendrek2, Jean-Francois Lepage3, Kevin Whittingstall2  
1Université de Sherbrooke, Sherbrooke, Quebec, Canada, 2Bishop’s University, Sherbrooke, Quebec, Canada

W875  The Effects of Rewarming on Cerebral Blood Flow and Oxygen Metabolism in Neonatal HIE Roschada Chowdhury1, Beatrice Desnous1, Zamzam Mahdi1, Bahdana Maranduy1, Atousa Assadi1, Imen Benhmid1, Gaylaine Aubé1, Al Birac2, Mathieu Dehais2  
1CHU Sainte-Justine, Montreal, Quebec, Canada, 2University of Montréal, Montreal, Quebec, Canada

W876  Hemodynamic modeling of aspirin effects on BOLD responses at 7T fMRI  
Cao Tri Do1, Zina-Manjaly2, Jakob Heinzler1, Dario Schöbi1, Lars Kasper1,2, Klaas Pruessmann3,4,5,6  
1Umeå Center for Integrative Neuroimaging, University of Zurich & ETH Zurich, Zurich, Switzerland, 2MR Technology Group, University of Zurich & ETH Zurich, Zurich, Switzerland

W877  Metabolic basis of (de)activation and rest in (non)default mode network areas  
Yury Koush1, Robin de Graaf1, Ron Kupers1, Laurence Dricot1, Maurice Piltz1, Douglas Rothman1, Fahmeed Hyder1  
1Yale School of Medicine, New Haven, CT, United States, 2University of Copenhagen, Copenhagen, Denmark, 3University of Louvain, Brussels, Belgium
Neurophysiology of Imaging Signals

W878 Glucose and oxygen metabolism efficiency of connector hubs using quantitative MRI / PET
Fatemeh Rozavipour1, Kangoo Lee1,2, Stephane Blinder1, Jean-Paul Soucy1,2, Stephane Grimault1, Claudine J. Gauthier1,2, Christoph Grova1,2
1PERFORM Centre, Concordia University, Montreal, Quebec, Canada, 2Multimodal Functional Imaging Lab, Dept. of Physics, Montreal, Quebec, Canada, 3Dept. of Radiology and Biomedical Imaging, Magnetic Resonance Research Centre, Yale University, New Haven, CT, United States, 4Neurology and Neurosurgery Dept., Montreal Neurological Institute, McGill University, Montreal, Quebec, Canada

W879 Perioperative Cerebral Hemodynamics and Metabolism in Neonatal d-Transposition of the Great Arteries
Rasheda Chowdhury1, Beatrice Desnous1, Zamzam Mahdi1, Bohdana Marandyuk1, Kim Anh La1, Atoosa Assadi1, Ilmen Benhmida1, Genevieve Du Pont-Thibodeau1, Alia Birca1, Mathieu Dehaes1,2, 1CHU Sainte-Justine, Montreal, Quebec, Canada, 2University of Montreal, Montreal, Quebec, Canada, 3CHU Sainte-Justine, Montreal, Quebec, Canada

W880 Establishing occipital lobe Haemodynamic Response Function (HRF) in glaucoma with 7T fMRI
Melissa Wright1,2, Krish D Singh1, Simon Rushton3, Slawomir Kusmia1, D Samuel Schwarzkopf4, Richard Wise1, Tony Redmond5
1Cardiff University Brain Research Imaging Centre (CUBRIC), Cardiff, United Kingdom, 2School of Optometry and Vision Sciences, Cardiff University, Cardiff, United Kingdom, 3School of Psychology, Cardiff University, Cardiff, United Kingdom, 4Optometry and Vision Sciences, University of Auckland, Auckland, New Zealand

W881 Hypersampling of cardiac signals by analytic phase projection without requiring cardiac waveforms
Blaise Frederic1, Serdar Asian2
1McLean Hospital, Belmont, MA, United States, 2Harvard Medical School, Boston, MA, United States

W882* The Relationship between BOLD and Neural Activity May Arise from Temporally Sparse Events
Kodi Zhang1, Wen-Ju Pan2, Sheila Keilholz1
1Georgia Institute of Technology and Emory University, Atlanta, GA, United States

W883 Stimulation of Anticipatory Haemodynamics
Gregory Mierzwinski1, Kevin Whittingstall1, Russell Butler1
1Universiteit de Sherbrooke, Sherbrooke, Quebec, Canada

W884 How does the Negative BOLD response represent inhibition of task “irrelevant” cortex?
Stephen Mayhew
1Centre for Human Brain Health (CBHH), School of Psychology, University of Birmingham, Birmingham, United Kingdom

W885* FMRI correlates of stimulus-triggered changes in systemic physiology
Catie Chang1, Pinar Ozboy2, Jacco de Zwart1, Jeff Duyn2
1Vanderbilt University, Nashville, TN, United States, 2NIH, Bethesda, MD, United States

W886 Brainstem and sensorimotor myelin levels are reciprocally correlated: A confirmatory study
Leighton Bardeen1, Zack Shorr1, Benjamin Crouch1, Richard Kwiatek1, Richard Burnet1, Peter Del Fante4
1Griffith University, Gold Coast, QLD, Australia, 2Royal Adelaide Hospital, Adelaide, SA, Australia, 3Lyell McEwin Hospital, Adelaide, SA, Australia, 4Adelaide Western General Practice Network, Adelaide, Australia

W887* Neurovascular coupling: Intra- & cross-modal Negative BOLD responses in visual & sensorimotor cortex
Ross Wilson1, Karen Mullinger2, Susan Francis3, Stephen Mayhew1
1University of Birmingham, Birmingham, United Kingdom, 2University of Nottingham, Nottingham, United Kingdom

W888 Brain correlates of linear and nonlinear autonomic outflow at rest
Gaetano Valenza1, Roberto Scocco2, Andrea Duggento3, Luca Passamonti4, Vitaly Napadow5, Riccardo Barbieri1, Nicola Toschi1
1University of Pisa, Pisa, Italy, 2Massachusetts General Hospital, Charlestown, MA, United States, 3Department of Biomedicine and Prevention, University of Rome “Tor Vergata”, Rome, VT, United States, 4Department of Clinical Neurosciences, University of Cambridge, Cambridge, United Kingdom, 5Martinos Center for Biomedical Imaging, Charlestown, MA, United States, 6Politecnico di Milano, Milan, Italy, 7Martinos Center for Biomedical Imaging (MGH) and Harvard Medical School, Boston, MA, United States

W889 Extra-neurite Perfusion Measurement with Combined Arterial Spin Labeling and Diffusion Weighted MRI
Iris Asllani1, Jan Petri2, Henk-Jan Mutsaerts3, Marco Bozzali4, Mara Cercignani5
1Neuroscience, Brighton Sussex Medical School, United Kingdom, 2Heilmolz-Zentrum Dresden-Rossendorf, Institute of Radiopharmaceutical Cancer Research, Dresden, Germany, 3Amsterdam University Medical Center, Amsterdam, Netherlands, 4Brighton Sussex Medical School, Brighton, United Kingdom, 5University of Sussex, Brighton, United Kingdom

W890 Stability of functional connectivity in mice using wide field optical mapping
Daniel Handwerker1, Sharon Kim2, Ying Ma3, Mohamed Shaik4, David Nicholas Thibodeaux5, Mary-Kate Montgomery6, Hanzhi Zhao7, Javier Gonzalez-Castillo1, Peter Molies8, Dylan Nielsen1, Elizabet Hillman1, Peter Bandettini9
1NIHM, Bethesda, MD, United States, 2Columbia University, New York, NY, United States

W891 Magnetic vestibular stimulation during resting-state imaging
Theresa Raisel1, Virginia Planagur1
1Ludwig-Maximilians-University, Munich, Germany, 2Ludwig-Maximilians-University, Munich, Bavaria

W892 Spontaneous LFP activity and functional connectivity in the rat cortex: Awake vs. anesthetized state
Kwangyeol Baek1, Chae Ri Park2, Woo Hyun Shim2, Young Kim3
1Martinos Center for Biomedical Imaging, Massachusetts General Hospital, Charlestown, MA, United States, 2University of Ulsan, College of Medicine, Seoul, Korea, Republic of

W893 Evoked activity masks endogenous time-of-day-dependent modulation of dynamics in sensory cortices
Tanzeel Khan1, Lorenzo Cordani1, Enzo Tagliazucchi2,3, Christian Alexander Kell1
1Goethe University, Department of Neurology and Brain Imaging Center, Frankfurt am Main, Germany, 2Physics department - UBA, Buenos Aires, Argentina, 3ICM Institute for Brain and Spinal Cord, Paris, France

Pharmacology and Neurotransmission

W894 Psychedelic drugs enhance the responsivity of cortex: MEG studies of ketamine, LSD and psilocybin
Suresh Muthukumaraswamy1, Levin Kuhlmann2, Robin Carhart-Harris1, David Liley2
1The University of Auckland, Auckland, New Zealand, 2Swinburne University of Technology, Melbourne, Australia, 3Imperial College London, London, United Kingdom
W895  Effects of ketamine and cocaine on multi-scale entropy of fMRI time-series
Eric Mattli1, Kaundinya Gopinath1, Leonard Howell2, Philip Sun1
1Emory University, Atlanta, GA, United States

W896  Evaluating Effects of Ketamine and Midazolam using ENIGMA Resting State MRI Pipeline
Bhim Adhikari1, Juergen Dukart1, Joerg Hipp1, Anna Forsyth1, Rebecca McMillan2, Suresh Muthukumarswamy3, L. Elliot Hong4, Neda Jahanshad5, Paul Thompson6, Laura Rowland7, Peter Kochunov8, 9, 10
1University of Maryland SOM, Catonsville, MD, United States, 2Clinical Biomarker Division, F Hoffman La Roche, Basel, Switzerland, 3University of Auckland, Auckland, New Zealand, 4University of Maryland SOM, Baltimore, MD, United States, 5Imaging Genetics Center, Stevens Neuroimaging & Informatics Institute, Keck, USC, Marina del Rey, CA, United States, 6Imaging Genetics Center, Stevens Neuroimaging & Informatics Institute, Keck, USC, Marina del Rey, CA, United States, 7University of Auckland, Auckland, New Zealand, 8University of Auckland, Auckland, Auckland, Auckland, 9University of Auckland, Auckland, New Zealand, 10University of Maryland SOM, Baltimore, MD, United States

W897  The role of body mass on resting hippocampal connectivity in normal and overweight individuals
Jed Wingrove1, Owen O’daly1, Stephanie Amiel1, Fernando Zelaya1, 2
1King’s College London, London, United Kingdom

W898  Intranasal insulin effects on resting functional connectivity: an evaluation with multi-echo BOLD
Jed Wingrove1, Owen O’daly1, Stephanie Amiel1, Fernando Zelaya1, 2
1King’s College London, London, United Kingdom

W899  Dose-dependent effects of oxytocin on amygdala and reward system vary between women and men
Jana Lieberz1, Dirk Scheele1, Franny Spengler2, Tatjana Matheissen3, Lía Schneider4, Birgit Staffel-Wagner5, 6, Rene Huriemann4
1Division of Medical Psychology, University of Bonn, Bonn, Germany, 2Institute for Psychology, University of Freiburg, Freiburg, Germany, 3Institute for Clinical Chemistry and Pharmacology, University of Bonn, Bonn, Germany, 4Department of Psychiatry and Division of Medical Psychology, University of Bonn, Bonn, Germany

W900  Dopamine-Opioid Interactions in the Human Reward System
Danielle Jongen1, Nathalie Weltens1, Patrick Dupont1, Huynh Giao Ly1, Koen Van Laere1, Elske Vrieze1, Jenny Ceccarini1, Lukas Van Oudenhove1
1KU Leuven, Leuven, Belgium

W901  Effects of opioidergic and dopaminergic antagonism on facial mimicry
Sebastian Korb1, Matthäus Willeit1, Giorgia Silani2
1University of Vienna, Vienna, Austria, 2Medical University of Vienna, Vienna, Austria, 3University of Vienna, Vienna, Austria

W902  Oxytocin-induced changes on resting brain perfusion: comparing intranasal and intravenous routes
Daniel Martins1, Ndaba Mazibuko1, Fernando Zelaya1, Stefanos Maltezos1, Mitul Mehta1, Matthew Howard1, Grinnein Mclimon1, Declan Murphy1, Steven Williams1, Aikaterini Fotopoulou1, Uwe Schuschnigg1, Yannis Paloyelis2, 3
1Department of Neuroimaging, IoPPN, King’s College London, London, United Kingdom, 2Behavioural and Developmental Psychiatry, Adult ADHD Service, South London and Maudsley NHS Trust, London, United Kingdom, 3Department of Forensic and Neurodevelopmental Science, IoPPN, King’s College London, London, United Kingdom, 4University College London, London, United Kingdom, 5PARI GmbH, Gräfelfing, Germany

W903  Temporal structure of visual cortex activity is correlated with local GABA and GABAA receptors
Neill Duncan1, Carl Gaspar2, Georg Northoff3
1Taipei Medical University, Taipei, Taiwan, 2Hangzhou Normal University, Hangzhou, China, 3The Royal Institute of Mental Health Research & University of Ottawa, Ottawa, Canada

W904  Linking variability in gut microbiome and large-scale brain network connectivity
Nils Kohn1, Silvia Papalini1, Joanna Szopinska-Tokov1, Alejandro Arias-Vasquez2, Alberto Llera2, Esther Aarts3
1Rodboud University Medical Centre, Donders Institute for Brain, Cognition and Behaviour, Nijmegen, Gelderland, 2KU Leuven, Leuven, Belgium, 3Radboud University Medical Centre, Nijmegen, Netherlands, 4Donders Institute for Brain, Cognition and Behaviour, Radboud University Nijmegen, Nijmegen, Netherlands, 5Radboud University Medical Centre, Nijmegen, Germany

W905  Towards a validation of R2’ as a measure of oxygen extraction fraction
Mara Cercignani1, Iris Astlan1, Riccardo De Marco2, Nicholas Blockley3, Alan Stone3, Alessandro Colosanti1
1CISC, Brighton and Sussex Medical School, Brighton, United Kingdom, 2School of Life Sciences, University of Nottingham, Nottingham, United Kingdom, 3Trinity Biomedical Science Institute, Trinity College Dublin, Dublin, Ireland, 4Dept of Neuroscience, Brighton and Sussex Medical School, Brighton, United Kingdom

W906  FMRI to identify neural modulators of the autonomous nervous system (ANS) stress response
Philipp Sämann1, Benedikt Brückmeier1, Immanuel Elbau2, Michael Czisch2
1Max Planck Institute of Psychiatry, Munich, Germany, 2Max Planck Institute of Psychiatry, Munich, Germany

To view full abstract text and ePosters, visit ww5.aievolution.com/hbm1901
### Direct Electrical/Optogenetic Stimulation

**Th008** Subcortical calculation mapping during parietal glioma surgery in the dominant hemisphere  
Ryoasuke Matsuda1, Kantar Tamura1, Fumihiko Nishimura1, Ichiro Nakagawa2, Yasushi Motoyama3, Young-Su Park1, Hiroyuki Nakase1  
1Nara medical university, Kashiwara, Nara

**Th009** Anterior insular cortex stimulation and its effects on emotion recognition  
Kazuya Motomura1, Yuri Terasawa2, Toshikiko Wakabayashi3, Satoshi Umeda4  
1Nagoya University Graduate School of Medicine, Nagoya, Japan, 2Keio University of Medicine, Tokyo, Japan, 3Nagoya University Graduate School of Medicine, Nagoya, Aichi, 4Department of Psychology, Keio University, Tokyo, Japan

### Invasive Stimulation Methods Other

**Th013** Infrared neural stimulation of monkey amygdala with fMRI reveals long-distance connections  
Augia Xi1, Yunyun Rui1, Jianbao Wang1, Xuemeng Song1, Katalin Gothard2, Anna Roe1  
1Interdisciplinary Institute of Neuroscience and Technology, Zhejiang University, Hangzhou, Zhejiang, China, 2University of Central Florida, Orlando, United States

**Th014** Cortico-Cortical Pathological Brain Connectivity Inferred for Direct Stimulations  
Leila Ayoubian1, Viateur Tuyisenge1, Lena Trebaul2, Maciej Jedynek2, Jean-Didier Lemarechal2, Lorella Minotti2, Philippe Kahane2, Olivier David2  
1Inserm - UGA, Grenoble, France, 2Massachusetts General Hospital and Harvard Medical School, Boston, MA, United States, 3Inserm-UGA, Grenoble, France, 4Sorbonne Universités, Paris, France, 5Laboratoire de Neurophysiopathologie de l’Épilepsie, Centre Hospitalier Universitaire, Grenoble, France

---

**BRAIN STIMULATION METHODS**

### Deep Brain Stimulation

**Th001** Modulating the human functional connectome by means of deep brain stimulation  
Andreas Harter, Gregor Wenzel1, Friederike Irmenn, Julius Hübl, Wolf-Julian Neumann1, Patricia Krause2, Ningfei Li, Georg Bohner1, Michael Scheel3, Andreas Kühn1  
1Charité – Universitätsmedizin Berlin, Berlin, Germany, 2University Medical Center of the Johannes Gutenberg-University Mainz, Mainz, Germany, 3University Hospital Würzburg, Würzburg, Germany, 4Charistyle-Albrechts-University, Kiel, Germany, 5University Hospital Würzburg, Würzburg, Germany

**Th002** Structural networks predict clinical outcome to GPI-DBS for dystonia  
Gabriel Gonzalez-Escamilla1, Muthuraman Muthuraman2, Martin Reich3, Nabin Koirala1, Christian Riedel4, Martin Glaser1, Florian Lange5, Guenter Deuschl1, Jens Volkmann2, Sergiu Groppo3  
1University of Amsterdam, Amsterdam, Netherlands, 2University Medical Center of the Johannes Gutenberg-University Mainz, Mainz, Germany, 3University Hospital Würzburg, Würzburg, Germany, 4University Medical Center of the Johannes Gutenberg-University, Mainz, Germany, 5University Hospital Bonn, Bonn, Germany

**Th003** Effective deep brain stimulation co-modulate cross-frequency coupling at gamma frequencies  
Muthuraman Muthuraman1, Manuel Bange1, Nabin Koirala1, Bogdan Pintea2, Martin Glaser3, Sergiu Groppo4  
1University Medical Center of the Johannes Gutenberg-University, Mainz, Germany, 2University Hospital Bonn, Bonn, Germany

**Th004** Structural connectivity impacts depression in Parkinson’s patients with subthalamic stimulation  
Friederike Irmenn1, Andreas Horn2, Christof Brücke3, Gerd-Helge Schneider4, Andrea Kühn5  
1Charité Universitätsmedizin Berlin, Berlin, Germany, 2Charité Universitätsmedizin Berlin, Berlin, Germany, 3University School of Mind and Brain, Humboldt-Universität zu Berlin, Berlin, Germany, 4Charité – Universitätsmedizin Berlin, Berlin, Deutschland, 5Charité Universitätsmedizin Berlin, Berlin, Germany

**Th005** Distinct functional connectivity maps reveal regional specialization within the subthalamic nucleus  
Benedetta van Wijk1, Daniel Kroneberg1, Andreas Horn2, Friederike Irmenn2, Vladimir Litvak1, Wolf-Julian Neumann1, Timmann Sander3, Qiang Wang1, Andrea Kühn5  
1University of Amsterdam, Amsterdam, Netherlands, 2Charité - University Medicine Berlin, Berlin, Germany, 3UCL Queen Square Institute of Neurology, London, United Kingdom, 4Physikalisch-Technische Bundesanstalt, Berlin, Germany

**Th006** Wireless programmable control of intracranial sensing and stimulation in freely moving humans  
Uros Topalovic1, Zahra M. Aghajani2, Leonardo Christov-Moore1, Tyler Wishard1, Diane Villaroman1, Sonja Hiller1, Nicholas Hasulak3, Dawn Eliashiv1, Itzhak Fried1,4, Nanthia Suthana1, 1Charité – Universitätsmedizin Berlin, Berlin, Deutschland, 2Berlin School of Mind and Brain, Humboldt-Universität zu Berlin, Berlin, Germany, 3University Hospital Wuerzburg, Wuerzburg, Germany, 4Charité – Universitätsmedizin Berlin, Berlin, Deutschland

**Th007** Differential Early and Late Cerebral Blood Flow Effects of Subcallosal Cingulate DBS for Depression  
Ki Sueng Chai1, Justin Rajendran1, Helen Mayberg2  
1Ichan School of Medicine at Mount Sinai, New York, NY, United States, 2NIMH, Bethesda, MD, United States

To view full abstract text and ePosters, visit ww5.aievolution.com/hbm1901
THURSDAY, JUNE 13
Odd numbers: 12:45 – 13:45; Even numbers: 13:45 – 14:45; Poster Reception: 16:00 – 17:00

Non-invasive Electrical/tDCS/tACS/TrNS

**Th015** Direct Electrical Stimulation of parieto-premotor areas during hand manipulation
Luca Forni1, Marco Rossi2, Marco Rabuffetti2, Antonella Leonetti1, Guglielmo Puglista, Luca Vigano4, Luciano Simone4, Henrietta Howells4, Andrea Bellucci5, Lorenzo Bello6, gabriella Cerrn6
1University of Milan, Milan, Milan, Italy, 2Unit of Neurosurgical Oncology, Department of Oncology and Hemato-Oncology, Università degli Studi di Milano, Italy, 3Biomedical Technology Department, IRCCS Fondazione Don Carlo Gnocchi ONLUS, Milan, Italy, 4University of Milan, Milan, Italy

**Th016** Effect of tACS on frequency-dependent cortical plasticity
Caroline Leo-Carnall1, Karen Lopez2, Nelson Trujillo-Barreto3, Alex Casson4, Laura Parkes5
1University of Manchester, Manchester, United Kingdom, 2University of Manchester, Manchester, United Kingdom

**Th017** Effect of Dual-site Transcranial Direct Current Stimulation on Hemodynamics in Language Production
Jinuk Kim1, Heegoo Kim1, Ahee Lee2, Jungsoo Lee2, Min-A Shin2, Won Hyuk Chang2, Yun-Hee Kim2,3
1Sungkyunkwan University, Seoul, Korea, Republic of Korea, 2Samsung Medical Center, Seoul, Korea, Republic of Korea

**Th018** The Influence of Multiple Transcranial Electrical Stimulation Setups on Visual Working Memory
Jonas Rauf1, Marcus Mullmann1, Guido Noiter2, Gregor Leicht2, Christoph Muiter1
1Department of Psychiatry and Psychotherapy, University Medical Center Hamburg-Eppendorf, Hamburg, Germany, 2Department of Neuropsychology and Pathophysiology, University Medical Center Hamburg-Eppendorf, Hamburg, Germany, 3Centre for Psychiatry and Psychotherapy, Justus-Liebig-University, Giessen, Giessen, Germany

**Th019** SimNIBS 3: Simulation, Optimization & Uncertainty Quantification for Transcranial Brain Stimulation
Guilherme Bicalho Saturnino1, Oula Puontt2, Kristoffer Madsen1, Axel Thielscher2
1Technical University of Denmark, Kgs. Lyngby, Denmark, 2Copenhagen University Hospital Hvidovre, Hvidovre, Denmark

**Th020** Individual differences effect on MtDCS over prefrontal and ventrolateral cortex during risk decision
Ona Martin de la Torre1, Alba Cuevas-Gonzalez2, David Gallardo-Pujol2, Diego Redolar-Ripoll3
1Universitat de Barcelona, Barcelona, Spain, 2Universitat Autònoma de Barcelona, Barcelona, Spain, 3Universitat Oberta de Catalunya, Barcelona, Barcelona

**Th021** Age-Related Differences of Motor Cortex Plasticity in Adults: A tDCS Study
Ensiyeh Ghaseemian-Shivar1, Leila Farnad1,4, Min-Fang Kuo3, Mohsen Mosayebi Samani1,3, Michael A. Nitsche1,2,6
1International Graduate School of Neuroscience, Bochum Ruhr-University, Bochum, Germany, 2Department of Psychology and Neurosciences, Leibniz Research Center for Working Environment and Human Factors, Dortmund, Germany, 3Dep. Psychology and Neurosciences, Leibniz Research Center for Working Environment and Human Factors, Dortmund, Germany, 4Institute of Biomedical Engineering and Informatics, Ilmenau University of Technology, Ilmenau, Germany, 5Department of Neurology, Ruhr-University, Bochum, Germany

**Th022** Changes in neuronal oscillations account for working memory dynamics: an EEG-tACS study
Matteo Feurra1, Maria Ermolova1, Valeria Belayaeva2, Nikita Novikov3, Tommaso Fedele4, Boris Gutkin5,6
1Institute for Cognitive Neuroscience, National Research University, 2National School of Economics, Moscow, Russian Federation, 3Institute of Cognitive Neuroscience, National Research University, Higher School of Economics, Moscow, Russian Federation, 4Institute of Cognitive Neuroscience, National Research University, Higher School of Economics, Moscow, Russian Federation, 5Higher School of Economics, Moscow, Russian Federation

**Th023** TRNS increases responsibility of motor cortex via stochastic resonance: neural evidence in humans
Werongduang1,2, Marc Bächinger1, Onno van der Groen3, Nicole Wenderoth1
1ETH Zurich, Neural Control of Movement Laboratory, Zurich, Switzerland, 2Edith Cowan University, NeuroRehabilitation and Robotics Laboratory, Joondalup, Australia

**Th024** The Training and Specific Emotion Effect of tDCS over The Right TPJ on Micro-expression
Yue Ge1, Rui Su1, Chao Liu1, Beijing Normal University, Beijing, China

**Th025** Optimizing the neuropsychological effects of cathodal tDCS over the primary motor cortex
Mohsen Mosayebi Samani1,3, Desmond Agboada1, Asif Jamil1, Min-Fang Kuo3, Michael A. Nitsche1,2,6
1Leibniz Research Center for Working Environment and Huma, Dortmund, Germany, 2Institute of Biomedical Engineering and Informatics, Ilmenau University of Technology, Ilmenau, Germany, 3Leibniz Research Centre for Working Environment and Human Factors, Dortmund, Germany, 4International Graduate School of Neuroscience, IGSN, Ruhr University Bochum, Bochum, Germany, 5Leibniz Research Centre for working environment (ifado), Dortmund, Germany, 6Department of Psychology and Neurosciences, Leibniz Research Center for Working Environment and Huma, Dortmund, Germany, 6Department of Neurology, University Hospital Bergmannsheil, Bochum, Germany

**Th026** Transspinal electrical stimulation and correction of motor skills: patients with arthrogryposis
Evgeni Blagovechenskij1, Olga Agranovich2, Elena Gabbasova2, Vladimir Rozdestvenskiy2, Margarita Savina2, Yelisaveta Kononova2, Anna Shestakova2
1Centre for Orthopedics, St Petersburg, Russian Federation

**Th027** More is better: Increased impulsivity after repeated tDCS in children with ADHD
Michael Siniatchkin1, Katrin Wonnemann2, Timo Kramer2, Karolin Waschull2, Maike Spittergerber2, Tristan Stenner3, Alexander Prehr-Kristensen1, Vera Moliade2
1Clinic of Child and Adolescent Psychiatry and Psychotherapy, Evangelical Hospital Bethel (EvKB), Bielefeld, Germany, 2Institute of Medical Psychology and Medical Sociology, Christian-Albrechts-University Kiel, Kiel, Germany, 3Department of Child and Adolescent Psychiatry and Psychotherapy, Christian-Albrechts-University Kiel, Kiel, Germany

**Th028** Optimization of Transcranial Temporal Interference Stimulation for Focal Stimulation of Hippocampus
Sangjun Lee1, Jinmin Park1, Chany Lee2, Chang-Hwan Im3
1Hanyang university, Seoul, Korea, Republic of Korea, 2Korea Brain Research Institute, Daegu, Korea, Republic of Korea

**Th029** Online modulation of ongoing brain activity by transcranial random noise stimulation
Takuro Zama1, Kaori Maeda2, Keichi Kitajo1,2,3
1RIKEN, Wako, Saitama, Japan, 2National Institute for Physiological Sciences, Okazaki, Aichi, Japan, 3The Graduate University for Advanced Studies (SOKENDAI), Okazaki, Aichi, Japan
**Th030** Reduced efields show up in schizophrenia and major depression - A prefrontal tDCS simulation study
Shun Takahashi1, Yuki Mizutani2, Temmuz Karali3, Esther Dechantsreiter2, Irina Papazova1, Eva Mezger1, Lucia Bulbas1, Sophia Stockeler1, Ai Stierle11, Frank Padberg1, Daniel Keesser2, University Hospital LMU, Munich, Germany, 2Wakayama Medical University, Wakayama, Japan, 3Copenhagen University Hospital Hvidovre, Hvidovre, Denmark, 4Technical University of Denmark, Kgs. Lyngby, Denmark

**Th031** Age dependent effects of tACS and tRNS on cortical excitability in healthy children and adults
Jan Henrik Suwelack1, Viktoria Kortzi1, Miroslava Mihaljevic1, Vera Mihaljevic1

1Institute of Medical Psychology and Medical Sociology, Christian-Albrechts-University, Kiel, Germany, 2Clinic of Child and Adolescent Psychiatry and Psychotherapy, Evangelical Hospital Bethel (EvKB), Bielefeld, Germany

**Th032** Exploring the interplay between attentional networks using non-invasive brain stimulation
Elena Olgiati1, Ines Violante2, Lucia Li1, Aara Faraji3, Toby Sinclair4, Richard Wise5, Paresh Malhotra1

1Imperial College London, London, United Kingdom, 2University of Surrey, Guildford, United Kingdom, 3Imperial College Healthcare NHS Trust, London, United Kingdom, 4Imperial College London, Deceased

**Th033** A transcranial stimulation protocol targeting processing speed in multiple sclerosis
Nena Lejka1, Andre Aleman1, Thea Heersema1, Jan Meil6, Joke Spijkman1, Inge Zijdewind1, Christoph Herrmann1, Remco Renken2, Bransilava Curic-Blake2

1Biomedical Sciences of Cells & Systems, University Medical Center Groningen, University of Groningen, Groningen, Netherlands, 2Department of Neurology, University Medical Center Groningen, University of Groningen, Groningen, Netherlands, 3MS Center Noord Nederland (MSCNN), University Medical Center Groningen, University of Groningen, Groningen, Netherlands, 4Department of Psychology, University of Oldenburg, Oldenburg, Germany

**Th034** Transcranial direct current stimulation over frontopolar cortex drives reward-based motor learning
Maria del Carmen Herrojo Ruiz1, Tom Maudrich3, Daniela Sammler2, Rouven Kenville2, Amo Villinger2, Bernhard Sehm3, Vadim Nikulin4,5

1Goldsmiths University of London, London, United Kingdom, 2Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, 3University Hospital Leipzig, Leipzig, Germany, 4National Research University Higher School of Economics, Moscow, Russian Federation, 5Charité-Universitätsmedizin Berlin, Berlin, Germany

**Th035** Exploring and modulating consciousness-related oscillatory brain activity
Tiam Hosseini1, Asif Jami1, Min-Fang Kuo1, Michael Nitsche1, Fatemeh Yavari1

1Leibniz Research Center for Working Environment and Human Factors, Dortmund, Germany, 2Leibniz Research Centre for Working Environment and Human Factors, Dortmund, Germany, 3Leibniz Research Centre for working environment (ifado), Dortmund, Germany

**Th036** Inter-areal cross-frequency synchrony improves motion discrimination: a tACS-EEG study
Roberto Salamanca-Giron1, Estelle Raffin1, Adrien Witton1, Friedhelm Hummel1

1EPFL, Geneva, Switzerland

**Th037** Modulation of Low-Frequency BOLD Signal During Simultaneous tDCS-fMRI
Amber Leaver1, Sara Gonzalez2, Mayank Jog2, Danny Wang2, Roger Woods2, Todd Parrish1, Katherine Norr1

1Northwestern University, Chicago, IL, United States, 2UCLA, Los Angeles, CA, United States, 3University of Southern California, Los Angeles, CA, United States, 4UCLA, Los Angeles, CA, United States

---

**Non-invasive Magnetic/TMS**

**Th038** Paired pulse and silent period reproducibility on motor cortical plasticity in healthy participants
Mohammed AlAdeeb1, Ali Hamza2, Aneesa Zafar2, Ghulam Murtaza2, Woo-Kyung Yoo2, Alexander Rotenberg1, Shabir Bashir3

1Kin Fahad Specialist Hospital in Dammam (KFSH-D), Dammam, Saudi Arabia, 2Hallym University, Seoul, Korea, 3Faculty of Medicine, King Saud University, Riyadh, Saudi Arabia, 4Boston Children’s Hospital, Boston, MA, United States, 5Kin Fahad Specialist Hospital Dammam, Dammam, Saudi Arabia

**Th039** Dose-dependent Synchronization of Ongoing Alpha Oscillation by repetitive TMS
Elena Zmevkina1, Walter Paulus1, Zsolt Tun1

1Georg-August-University Göttingen, Göttingen, Germany

**Th040** The Effects of Transcranial Magnetic Stimulation on Heart Rate Variability Measures
Naga Amulya Pratap2, Martin Tik1, Anna-Lisa Schuler1, Michael Woeletz1, Christian Windischberger1

1Medical University of Vienna, Vienna, Austria

**Th041** Long-term Effects of rTMS on the Functional Brain Networks of Treatment-resistant Depression
Ruiyang Ge1, Jonathan Downar2, Daniel Blumberger1, Zafiris Daskalakis1, Raymond Lam1, Fidel Vila-Rodriguez2

1University of British Columbia, Vancouver, BC, Canada, 2University of Toronto, Toronto, Ontario, Canada

**Th042** Effects of a theta burst stimulation protocol on functional recovery in orthopedic trauma patients
Marianne Jobin1, Dominique Rouleau2, Catherine Provost3, Audrey Bellemare4, Louis De Beaumont1

1University of Montreal, Montreal, Quebec, Canada, 2Montreal Sacred Heart Hospital, Montreal, Quebec, Canada, 3Hôpital du Sacré-Coeur Montréal / University of Montreal, Montreal, QC, Canada

**Th043** HF-rTMS to personalized left DLPFC
Aditya Singh1, Tracy Erwin-Grabner1, Grant Sutcliffe1, Andrea Antal2, Walter Paulus2, Roberto Goya-Maldonado3

1Department of Psychiatry and Psychotherapy of the University Medical Center Göttingen, Göttingen, Germany, 2Department of Clinical Neurophysiology of the University Medical Center Göttingen, Göttingen, Germany

**Th044** The effects of rTMS on motor signs and resting state fMRI in freezing of gait in Parkinson’s disease
Mevhibe Sarıcaoğlu1,2, Lütfü Hanoglu3, Zübeyir Bayraktaroğlu2, Halil Aziz Velioglu1, Ferda Berkman1

1Istanbul Medipol University, Vocational School, Program of Electroneurophysiology, Istanbul, Turkey, 2Clinic of Child and Adolescent Psychiatry and Psychotherapy, Evangelical Hospital Bethel (EvKB), Bielefeld, Germany, 3Istanbul University, School of Medicine, Department of Neurology, Istanbul, Turkey, 4Boston Children’s Hospital, Boston, MA, United States

**Th045** Intermittent TBS to personalized left DLPFC sites influences brain regions different from 10 Hz rTMS
Tracy Erwin-Grabner1, Aditya Singh1, Grant Sutcliffe1, Andrea Antal1, Walter Paulus2, Roberto Goya-Maldonado3

1Department of Psychiatry and Psychotherapy of the University Medical Center Göttingen, Göttingen, Germany, 2Department of Clinical Neurophysiology of the University Medical Center Göttingen, Göttingen, Germany
Th046 Effect of rTMS on brain network in chronic schizophrenia with negative symptoms
Zikang Niu1, Changming Wang2, Yanping Ren1, Xiaoli Li2
1State Key Laboratory of Cognitive Neuroscience and Learning & IDG/McGovern Beijing Normal University, Beijing, China, 2Beijing Key Laboratory for Diagnosis and Treatment of Mental Disorders, Anding Hospital, Beijing, China

Th047 Changes in slow wave activity as a potential correlate of hemispatial neglect amelioration
Aleksandra Eberhard-Moscicka1,2, Kathrin Chiffi1, Dario Cazzoli1,4, Michael Oberholzer1, Noémi Egggenberger1,3, Natalie Heyse2, Valeria Jaramillo3, Reto Huber4, Claudia Bassetti3, René Muri1,4
1Departments of Neurology and BioMedicalResearch, University Bern Hospital and University of Bern, Bern, Switzerland, 2Department of Neurology, Inselspital, Bern University Hospital, Bern, Switzerland, 3ARTORG Center for Biomedical Engineering Research, University of Bern, Bern, Switzerland, 4Gerontechology and Rehabilitation Group, University of Bern, Bern, Switzerland, 5University Children's Hospital Zurich, Zurich, Switzerland

Th048 Neuromodulation of sexual arousal
Martin Scheckmann1, Britta Obling1, Berthold Langguth1, Timm Poeppel2
1University of Regensburg, Regensburg, Germany, 2RWTH Aachen University, Aachen, Germany

Th049 Reorganization of brain after the treatment of low-frequency rTMS on post-stroke aphasia patients
Ting Lee1, Chu-Chung Huang1, Po-Yi Tsai1,4, Ching-Po Lin1
1Institute of Neuroscience, National Yang-Ming University, Taipei, Taiwan, 2Aging and Health Research Center, National Yang-Ming University, Taipei, Taiwan, 3Department of Physical Medicine and Rehabilitation, Taipei Veterans General Hospital, Taipei, Taiwan, 4National Yang-Ming University, School of Medicine, Taipei, Taiwan

Th050 Modulation effects on putamen local activity induced by rTMS targeting at primary motor cortex
Xinping Deng1, Zijian Feng1, Hongxiao Wang1, Yu Feng Zang1, Jue Wang2
1Hangzhou Normal University, Hangzhou, China

Th051 Modulating visual hallucinations induced by occipital cortex deafferentation using TMS: a case study
Brice Passera1,2, Sylvain Harque2,3, Laurent Vercueil4, Olivier David1, Alan Chavvin2
1Univ. Grenoble Alpes, Inserm, CHU Grenoble Alpes, GIN, Grenoble, France, 2Univ. Grenoble-Alpes, Univ. Savoie Mont Blanc, CNRS, LPNC, F-38000 Grenoble, France, 3Univ. Grenoble-Alpes, CNRS, CHU Grenoble Alpes, INSERM, CNRS, IRMaGe, F-38000 Grenoble, France, 4Service d’Epilepsie, CHU Grenoble Alpes, F-38000 Grenoble, France

Th052 Explaining rTMS network effects by concurrent TMS/fMRI
Martin Tik1, Michael Woeletz2, Anna-Lisa Schuler1, Matic Princic1, Naga Amulya Pratapa2, Allan Hummer1, Christian Windischberger1
1Medical University of Vienna, Vienna, Austria

Th053 Absolute and relative reliability of the motor somatotopy – how could we report the results of rTMS
Maria Nazarova1, Pavel Novikov1, Ekaterina Ivanina1, Ksenia Kazlova1, Evgeni Blagovechtchenski1, Vadim Nikulin1,2,15
1Centre for Cognition and Decision Making, Institute for Cognitive Neuroscience, NRU HSE, Moscow, Russian Federation, 2Research Center of Neurology, Moscow, Russian Federation, 1Department of Psychology, NRU HSE, Moscow, Russian Federation, 2Department of Neurology, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, 3Department of Neurology, Campus Benjamin Franklin, Charité—Universitätsmedizin Berlin, Berlin, Germany

Th054 Imaging Transcranial Magnetic Stimulation: Reconsidering Placebo Control
Martin Tik1, Michael Woeletz2, Matic Princic1, Nicole Geissberger1, Anna-Lisa Schuler1, Allan Hummer1, Christian Windischberger1, Medical University of Vienna, Vienna, Austria

Th055 Multiple superficial targets of rTMS for Modulation on Deep Brain Region
Zijian Feng1, Xinping Deng2, Na Zhao1, Hongxiao Wang1, Ying Jing1, Yu Feng Zang1, Jue Wang2
1Hangzhou Normal University, Hangzhou, China

Th056 Mapping sensorimotor activation hotspots during cortical stimulation (MOASICS) in perinatal stroke
Helen Carlson1, Hsing-Ching Kuo2, Adrianna Giuffre2, Jeffrey Grab1, Liu Shi Ganc2, Ephrem Zewdie2, Adam Kirton2
1University of Calgary, Calgary, AB, Canada, 2University of Calgary, Calgary, Alberta, 3University of Alberta, Edmonton, AB, Canada, 4University of Calgary, Calgary, Alberta, 5University of Calgary, Calgary, Canada

Th057 Mapping cortical language processing by task-locked short-train transcranial magnetic stimulation
Carolin Weiss Lucas1, Charlotte Nettekoven1, Joscha Schmehl1, Kristina Jonas1, Jari Kuru1, Roland Goldbrunner2, Christian Grefkes3
1University Hospital Cologne, Centre of Neurosurgery, Cologne, Germany, 2University of Cologne, Department of Special Education and Rehabilitation, Cologne, Germany, 3Nextstim Plc, Helsinki, Finland, 4University of Cologne, Department of Neurology, Cologne, Germany

Th058 Effects of Low Field Magnetic Stimulation on Structural Brain Connectivity of Depressed Patients
Zh-De Deng1, Jeena Thomas1, Ashly Albright2, Faith Gunning2, Conor Liston2, Marc Dubin2
1NMH, Bethesda, MD, United States, 2Weill Cornell Medical College, New York, NY, United States

Th059 Transcranial Brain Stimulation Across Species: A Comparative Modeling Study
Ivan Alekseichuk1, Kathleen Mantell1, Sina Shirinpour1, Alexander Opitz1
1University of Minnesota, Minneapolis, MN, United States

Th060 Hippocampal-network-targeted theta-burst TMS enhances hippocampal perfusion and connectivity
Arielle Tambini1, Derek Nee2, Mark D’Esposito1
1University of California, Berkeley, Berkeley, CA, United States, 2Florida State University, Tallahassee, FL, United States
BRAIN STIMULATION METHODS

**Sonic/Ultrasound**

**Th064** Altered Impulsivity by Transcranial Static Magnetic Stimulation of Orbitofrontal Cortex
Jinmin Park1, Sangjoung Lee1, Chany Lee1, Chang-Hwan Im1
1Hanyang University, Seoul, Korea, Republic of, 2Korea Brain Research Institute, Daegu, Korea, Republic of

**Th065** Augmented reality neuronavigation for transcranial magnetic stimulation
Christoph Leuze1, Supriya Sathyarayana1, Kamran Sarhadi2, Mahendra Bhati2, Brian Hargreaves2, Bruce Daniel3, Amit Etkin3, Jennifer McNab3
1Stanford University, Stanford, CA, United States

**Th066** A pilot study assessing theeta BCI training as intervention method to improve cognitive control
Dieder Smitt1, Elianne van Gijsel1, Lorena Trevino Garcia2, Oliver Tuch2, Janneke Koerts1, René Huster1, Stefanie Enriquez-Geppert1
1University of Groningen, Groningen, Netherlands, 2University of Oslo, Oslo, Norway

**Th067** Stimulation frequency affects brain response to respiratory-gated auricular vagal nerve stimulation
Roberto Scocco1, Ronald Garcia1, Norman Kettner1, Harrison Fisher1, Jessica Stowell2, Kylie Isenburg3, Nikos Makris4, Jill Goldstein2, Nicola Toschi1, Riccardo Barbieri4, Vitaly Napadow3
1Athinoula A. Martinos Center for Biomedical Imaging, Massachusetts General Hospital, Boston, MA, United States, 2Logan University, Chesterfield, MO, United States, 3Politecnico di Milano, Milan, Italy

**Th068** A wearable device for generating periodic somatosensory stimulation
Alejandro Weinstein1, Wael El-Deredy2, Pavel Prado2, Grace Whitaker1, Lucia Zepeda1, Jose Ignacio Mendez2
1Universidad de Valparaiso, Valparaiso, Valparaiso, 2University of Valparaiso, Valparaiso, 3Universidad Tecnica Federica Santa Maria, Valparaiso, Chile, 4University of Valparaiso, Viña del mar, Chile, 5CODELCO Andina, Los Andes, Chile

**Th069** Respiratory-gated Auricular Vagal Nerve Stimulation modulates the Locus Coeruleus in aged adults
Nikos Pravoulios1, Frans Verhey2, Benedikt Posen3, Vitaly Napadow3, Roberta Scocco3, Dima Ivanov3, Heidi Jacobs1,2
1Faculty of Health and Medicine, Maastricht University, Maastricht, Netherlands, 2Faculty of Psychology and Neuroscience, Maastricht University, Maastricht, Netherlands, 3Martinos Center for Biomedical Imaging, Charlestown, MA, United States, 4Massachusetts General Hospital, Charlestown, MA, United States, 5Department of Radiology, Harvard Medical School, Boston, MA, United States

**Th070** The effect of feedback latency on the effectiveness of training in neurofeedback paradigm
Anastasia Belinskaya1, Nikolai Smetanin2, Alexei Ossadtchi1
1National Research University Higher school of economics, Centre for Bioelectric Interfaces, Moscow, Russian Federation, 2National Research University Higher school of economics, Centre for Bioelectric Interfaces, Moscow, Russia

**Th071** Causal modulation of cardiovascular tone through autonomic brainstem nuclei – a 7T HR/IMRI study
Nicola Toschi1, Andrea Duggento2, Roberta Scocco3, Ronald Garcia1, Harrison Fisher1, Jessica Stowell2, Kylie Isenburg3, Nikos Makris3, Jill Goldstein2, Riccardo Barbieri4, Vitaly Napadow3
1Martinos Center for Biomedical Imaging (MGH) and Harvard Medical School, Boston, MA, United States, 2University of Rome Tor Vergata, Rome, Italy, 3Massachusetts General Hospital, Charlestown, MA, United States, 4Massachusetts General Hospital, Boston, MA, United States, 5Martinos Center, Charlestown, SC, United States, 6Psychiatry Neuroimaging Laboratory, BWH, HMS, Boston, MA, United States, 7Politecnico di Milano, Milan, Italy, 8Martinos Center for Biomedical Imaging, Charlestown, MA, United States

**Sonic/Ultrasound**

**Th072** Modeling Transcranial Nonlinear Wave Propagation on Head Models for Low-Intensity Focused Ultrasound
Shokhi Visagop1, Martin Monti1, David Shattuck1
1UCLA, Los Angeles, CA, United States

**Th073** Recovering consciousness: thalamic sonication in acute and chronic disorders of consciousness
Martin Monti1, Josh Cain1, Norman Spivak4, Manuel Buitrago-Blanco2, Paul Vespah1, Caroline Schnakers3
1UCAL Department of Psychology, Los Angeles, CA, United States, 2UCLA Department of Neurosurgery, Los Angeles, CA, United States, 3Research Institute, Casa Colina Hospital and Centers for Healthcare, Pomona, CA, United States

**Th074** A Multimodal Cortical Response to the Selective Modulation of Thalamus using Focused Ultrasound
Joshua Cain1, Norman Spivak2, Robin Blades1, Martin Monti1
1University of California, Los Angeles, Los Angeles, CA, United States, 2UCLA Department of Neurosurgery, Los Angeles, CA, United States, 3UCLA, Los Angeles, CA, United States

**TDCS**

**Th075** Glucose Metabolism-based Extrastriate Body Area and tDCS-induced Augmentation of Its Function
Yasuomi Ouchi1, Mitsuru Kikuchi2, Toru Hirosawa2, Tomoyasu Bunai3, Etsuji Yoshikawa3
1Hamamatsu University School of Medicine, Hamamatsu, Japan, 2Kanazawa University, Kanazawa, Japan, 3Hamamatsu Photonics, Hamamatsu, Japan

**Th076** Concurrent mapping of electric currents and neurophysiological changes during tDCS
Mayank Jog1,2, Kay Jann3, Lirong Yan3, Danny Wang2
1University of Southern California, Los Angeles, CA, United States, 2University of California Los Angeles, Los Angeles, CA, United States, 3University of Southern California, Los Angeles, CA, United States

**Th077** Gender Difference in the Effect of tDCS on Reading
Sagarika Bhattacharjee1, Rajan Kashyap1,2, Alison Chew1, John Desmond1, SH Annabel Chen1,2,5
1Psychology, School of Social Sciences, Nanyang Technological University, Singapore, 2Center for Research And Development in Learning, Nanyang Technological University, Singapore, 3National University of Singapore, Singapore, 4The John Hopkins University, Baltimore, MD, United States, 5LKC Medicine, Nanyang Technological University, Singapore

**Th078** The impact of chronotypes and time of the day on tDCS-induced motor cortex plasticity
Mohammad Salehinejad6, Min-Fang Kuo6, Michael Nitsche1,2
1Leibniz Research Centre for Working Environment and Human Factors / Ruhr University Bochum, Dortmund, NRW, 2Ruhr-University Bochum, International Graduate School of Neuroscience, Bochum, Germany, 3Leibniz Research Centre for working environment (Ifado), Dortmund, Germany, 4University Medical Hospital Bergmannsheil, Department of Neurology, Bochum, Germany

185

To view full abstract text and ePosters, visit www.aievolution.com/hbm1901
Th079 Differential role of prefrontal, temporal and parietal cortices in executive functioning and fluency
Doham Ghanavati1, Mohammad Ali Salehinejad2, Michael Nitsche, Vahid Nejati3
1Leibniz Research Centre for working environment (Ifod), Dortmund, Germany, 2Department of Psychology, Islamic Azad University, Science & Research Branch, Tehran, Iran, 3Islamic Republic of
2Leibniz Research Centre for working environment (Ifod), Dortmund, Germany, 4Ruhr University Bochum, International Graduate School of Neuroscience, Bochum, Bochum, Germany, 5Faculty of Psychology and Educational Sciences, Department of Psychology, Shahid Beheshti University, Tehran, Iran, 4Islamic Republic of

Th080 Towards precision brain stimulation: Is electric field simulation related to neuromodulation?
Daria Antonenko1, Axel Thielscher2, Guilherme Bicalho Saturnino1, Semiya Aydin2, Bernd Ittermann3, Ulrike Gritter4, Agnes Floel1
1Universitätsmedizin Greifswald, Greifswald, Germany, 2Copenhagen University Hospital Hvidovre, Copenhagen, Denmark, 3Technical University of Denmark, Kgs. Lyngby, Denmark, 4Physikalisch Technische Bundesanstalt, Berlin, Germany, 5Berlin Institute of Health, Berlin, Germany

Th081 Prolongation of LTP-like plasticity in the primary motor cortex with repeated anodal tDCS
Desmond Agboada1,2, Mohsen Mosayebi1, Min-Fang Kuo, Michael Nitsche3,4
1Leibniz Research Centre for Working Environment and Human Factors, Dortmund, Germany, 2IGSN, Ruhr University Bochum, Bochum, Germany, 3Institute of Biomedical Engineering and Informatics, Ilmenau University of Technology, Ilmenau, Germany, 4Department of Neurology, University Hospital Bergmannsheil, Bochum, Germany

Th082 Transcranial direct current stimulation reverses stroke induced hyperconnectivity in mice
Stefan Blaschke1,2, Susan Vlachakis1,2, Monika Rabenstein1,2, Sabine Vay1,2, Michael Diedenhofen1, Dirk Wiedermann1, Gereon Fink1,2, Michael Schreoter3,4, Mathias Hoehn5,6, Maria Ruesch5,6
1University Hospital Cologne, Department of Neurology, Cologne, Germany, 2Max Planck Institute for Metabolism Research, In-vivo-NMR Laboratory, Cologne, Germany, 3Cognitive Neuroscience, Institute of Neuroscience and Medicine (INM-3), Research Center Juelich, Juelich, Germany

Th083 The effect of multiple frontal tDCS sessions on mood in healthy older adults
Malin Freidle1, Jonna Nilsson1, Alexander Lebedev2, Martin Lövdén3
1Karolinska Institutet, Stockholm, Sweden

Th084 Functional Connectivity changes due to primary motor cortex Transcranial Direct Current Stimulation
Roya Jalali1, Davinia Fernández-Espejo1,2
1University of Birmingham, Birmingham, West Midlands, 2Centre for Human Brain Health, University of Birmingham, Birmingham, United Kingdom, 3University of Birmingham, Birmingham, United Kingdom

Th085 Cerebellar tDCS improves procedural learning in non-clinical psychosis
Maximilian Wessel1, Chang-Hyun Park1, Philipp Koch2, Estelle Cuttaz1, Jan Timmermann2, Robert Schulz3, Friedhelm Hummel4
1S Plymouth University, Plymouth, 2Institute of Brain Sciences, College of Health Sciences, City University of London, 3School of Psychology, University of Birmingham, Birmingham, United Kingdom, 4Centre for Human Brain Health, University of Birmingham, Birmingham, United Kingdom, 5Institute des Sciences du Mouvemen, Aix-Marseille Université, Marseille, France

Th086 TDCS modulates effective connectivity between thalamus, M1 and cerebellum during command following
Roya Jalali1, Peneleopse Tisley1, R Chris Miall1, Davinia Fernández-Espejo2,3
1School of Psychology, University of Birmingham, Birmingham, United Kingdom, 2Centre for Human Brain Health, University of Birmingham, Birmingham, United Kingdom, 3Institute des Sciences du Mouvemen, Aix-Marseille Université, Marseille, France

Th087 Effect of tDCS over the parietal cortex on resting state fMRI connectivity - preliminary results
Monika Pupkova1,2, Patrik Simko1, Martin Gajdos1, Irena Rektorova1, CEITEC, Masaryk University, Brno, Czech Republic, 2Faculty of Medicine, Brno, Czech Republic

Th088 Modulating internal and external networks via tDCS of the right inferior parietal lobule
Sean Coulbam1, Davinia Fernández-Espejo1,2
1University of Birmingham, Birmingham, United Kingdom

Th089 MR Imaging of Current Vector Fields: Application to Transcranial Direct Current Stimulation
Luis Hernandez-Garcia1, Jonas Schollenberger1, Eric Michielsens1, John Jonides2, Douglas Noll3
1University of Michigan, Ann Arbor, MI, United States

Th090 Effects of bifrontal tDCS on brain metabolites in patients with major depression
Eva Meeger1, Lucia Bulbous1, Andre Brunoni4, Sophia Stoecklein5, Birgit Ertl-Wagner1, Frank Padberg1, Daniel Keeser1,2
1University Hospital LMU, Munich, Germany, 2Institute of Psychiatry, University of Sao Paulo, Sao Paulo, Brazil, Sao Paulo, Brazil

Th091 Asymmetric neurophysiological responses of auditory cortices to tDCS during resting state
Reiko Matsushita1,2, Sebastian Puschmann1, Sylvain Bailliet1, Robert Zatorre1,2,3
1Montreal Neurological Institute, McGill University, Montreal, Quebec, Canada, 2International Laboratory for Brain, Music and Sound Research (BRAMS), Montreal, Quebec, Canada, 3Centre for Research on Brain, Language, and Music (CRBLM), Montreal, Quebec, Canada

Th092 Factors Associated with Antidepressant Effects of TDCS: Multimodal Baseline Imaging in ELECT-TDCS
Lucia Bulbous1,2, Frank Padberg1, Priscila Bueno1, Fabio Duran5,6, Geraldo Busatto5,6, Edson Amaro Jr1, Isabela Benseñor2, Paulo Lotufo4, Stephan Goerigk4,5, Wagner Gattoz1,4, Daniel Keeser1,2, Andre Brunoni1,2,4,3
1Department of Psychiatry and Psychotherapy, University Hospital, LMU Munich, Munich, Germany, 2International Max Planck Research School for Translational Psychiatry (IMPRS-TP), Munich, Germany, 3Service of Interdisciplinary Neuromodulation, Dept of Psychiatry, Laab of Neurosciences (LIM-27), Sao Paulo, Brazil, 4National Institute of Biomarkers in Neuropsychiatry (INBioN), Inst of Psychiatry, Univ of Sao Paulo, Sao Paulo, Brazil, 5Ctr for Interdisciplinary Research on Applied Neurosciences, Dept of Inst of Psychiatry, USP, Sao Paulo, Brazil, 6Lab of Psychiatric Neuroimaging, Dpt and Inst of Psychiatry, Univ of Sao Paulo, Sao Paulo, Brazil, 7Dept of Radiology, Clinics Hospital, Univ of Sao Paulo Medical School, Sao Paulo, Brazil, 8Hospital University, Departamento de Clinica Medica, Faculade de Medicina, Univ of Sao Paulo, Sao Paulo, Brazil, 9Department of Psychological Methodology and Assessment, LMU Munich, Munich, Germany, 10Hochschule Fresenius, University of Applied Sciences, Munich, Germany, 11Department of Clinical Radiology, University Hospital LMU Munich, Munich, Germany

Th093 Multifocal stimulation of the cerebello-cortical loop during motor skill acquisition
Maximilian Wessel1, Chang-Hyun Park1, Philipp Koch2, Estelle Cuttaz1, Jan Timmermann2, Robert Schulz3, Friedhelm Hummel4
1EPFL, Lausanne, Switzerland, 2UKE, Hamburg, Germany

Th094 Testing Interhemispheric Inhibition in Language with Transcranial Direct Current Stimulation
E. Susan Duncan1,2, A. Duke Shereen1
1Louisiana State University, Baton Rouge, LA, United States, 2Advanced Science Research Center, Graduate Center of the City University of New York, New York, NY, United States
Th095  Influence of psychological factors on pain-induced corticormotor excitability variation
Marville Martel,², Arnaud Duport,¹ Marie-Philippe Harvey¹,³, Francis Houde³,², Nathaly Gaudreau²,², Guillaume Leonard²,²
Research Centre on Aging, University of Sherbrooke, Sherbrooke, Quebec, Canada, ¹Faculty of Medicine and Health Sciences, University of Sherbrooke, Sherbrooke, Quebec, Canada, ²Institute of Health Engineering, University of Picardie Jules Verne, Amiens, France, ³Clinical Research Centre of CHUS, University of Sherbrooke, Sherbrooke, Quebec, Canada

Th096  Mapping the functional connectivity of the motor cortical representation for trunk and hand muscles
Alaa Alibhai,¹ Beth Fisher¹, Jason Kutcher¹
¹University of Southern California (USC), Los Angeles, CA, United States

Th097  A novel setup for high-precision neuronavigated TMS pulses
Roland Fischer,¹ Michael Woletz,¹ Martin Tik,¹ Christian Windischberger¹
¹Medical University of Vienna, Vienna, Austria

Th098  Semantic and phonological contributions of the left inferior frontal gyrus to language production
Jana Klaus¹, Gesa Hartwigsen¹
¹Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany

Th099  Dissociating the role of dorsal and ventral streams in object lifting and weight perception
Vonne van Polanen², Günter Rens², Marco Davare³
²Department of Movement Sciences, Movement Control and Neuroplasticity Research Group, KU Leuven, Leuven, Belgium, ³Leuven Brain Institute, KU Leuven, Leuven, Belgium

Th100  The Effect of Lateral Parietal Cortex TMS Stimulation on Memory function in Alzheimer Patients
Halil Aziz Velioğlu,¹ Lütfü Hanoglu,¹ Zübeyir Bayraktaroğlu,¹ Güven Toprak,¹ Mevhibe Sancaoğlu¹
¹Istanbul Medipol University, School of Medicine, Department of Neurology, Istanbul, Turkey, ²Istanbul Medipol University, Vocational School, Program of Electroneurophysiology, Istanbul, Turkey

Th101  Determining the stimulation site in TMS: Sensitivities with respect to uncertain model parameters
Konstantin Weise¹, Oleg Numssen¹, Axel Thielscher¹, Gesa Hartwigsen¹, Thomas Knosche¹
¹Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, ²Copenhagen University Hospital Hvidovre, Copenhagen, Denmark, ³Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany

Th102  Reproducibility of Individualized TMS Targets for Treatment of Depression Based on functional MRI
Matic Princic¹, Martin Tik¹, Michael Woletz¹, Nicole Geissberger¹, Christian Windischberger¹
¹Medical University of Vienna, Vienna, Austria, ²Center for Medical Physics and Biomedical Engineering, Medical University of Vienna, Vienna, Austria

Th103  How to compute TMS-induced electric field in realistic head model in real time?
Matti Stenroos¹, Lari Kopenen¹
¹Aalto University, Department of Neuroscience and Biomedical Engineering, Espoo, Finland

Th104  Studying stimulation-site-based changes in brain activity using TMS/fMRI & topological data analysis
Manish Srappar,¹ Jing Jiang¹, Colleen Mills-Finnerty¹, Rachael Wright¹, Carena Cornelsen¹, Amit Etkin¹
¹Stanford University, Stanford, CA, United States

Th105  Test-retest reliability of three different rTMS protocols for language mapping
Charlotte Nettekoven¹, Julia Pieczewsk¹, Volker Neuschmetling¹, Kristina Jonas², Christian Greffkes², Roland Goldbrunner³, Carolin Weiß Lucas³
¹University Hospital of Cologne, Center of Neurosurgery, Cologne, Germany, ²University of Cologne, Department of Special Education and Rehabilitation, Cologne, Germany, ³University Hospital of Cologne, Department of Neurology, Cologne, Germany

Th106  Motion reduction in concurrent TMS-fMRI using real-time feedback
Michael Woletz¹, Martin Tik¹, Naga Amulya Pratapa¹, Matic Princic¹, Anna-Lisa Schuler¹, Christian Windischberger¹
¹Medical University of Vienna, Vienna, Austria

Th107  A New Protocol for Eight Muscles Mapping using RMS
Fang Jin¹,², Sjoerd Brujin²,², Andreas Daffertshofer²,²,³
¹VU University - Human Movement Sciences, Amsterdam, Netherlands, ²Amsterdam Movement Sciences, Amsterdam, Netherlands, ³Institute of Brain and Behaviour Amsterdam, Amsterdam, Netherlands

Th108  The Difference of fMRI ALFF and MEP between Eyes-Open and Eyes-Closed
Ying Jing¹, Hai-Jiang Meng¹, Hang-Xiao Wang¹, Na Zhao¹, Zi-Jian Feng¹, Xin-Ping Deng¹, Jue Wang¹, Yu-Feng Zang¹
¹Institutes of Psychological Sciences, Hangzhou Normal University, Hangzhou, China, Hangzhou, China, ²School of Kinesiology, Shanghai University of Sport, Shanghai, China, Shanghai, China

Th109  Emotion Processing Task as Functional Localiser for TMS Treatment: A 7 Tesla fMRI Study
Matic Princic¹, Martin Tik¹, Daniela Plobigaiti,³ Georg Kraus⁴, Katharina Paul⁴, Christoph Kraus⁴, Michael Woletz¹, Bastian Auer⁴, Thomas Vaniček¹, Claus Lamm¹, Rupert Lanzenberger¹, Christian Windischberger¹
¹Medical University of Vienna, Vienna, Austria, ²University of Vienna, Vienna, Austria, ³Medical University Vienna, Vienna, Austria

Th110  Lasting improvement of associative memory and altered brain activity in older adults
Weicong Ren¹, Rui Li¹, Zhuiwei Zheng¹, Honlin Wang¹, Juan Lu¹
¹Hebei Normal University, Shijiazhuang, China, ²Institute of Psychology, Chinese Academy of Sciences, Beijing, China

Th111  Hemodynamic correlates of changes in neuronal excitability: a simultaneous TMS and fNIRS study
Zhenchuan Cai¹, Giovanni Pellegrino², Amanda Spilkin¹, Alexis Machado³, Thomas Vincent³, Chiaou Abdollah¹, Jean-Marc Lina¹, Christophe Grado²,³
¹Multimodal Functional Imaging Lab, Physics Department and PERFORMANCE Center, Concordia University, Montréal, Canada, ²Neurology and Neurosurgery Department, Montreal Neurological Institute, McGill University, Montréal, Canada, ³Centre de médecine préventive et de l’activité physique, Montreál Heart Institute, Montréal, Canada, ⁴Ecole de Technologie Supérieure, Montréal, Canada, ⁵Multimodal Functional Imaging Lab, Biomedical Engineering Department, McGill University, Montréal, Canada

Th112  Brain-state dependent TMS triggered by online beamforming-reconstructed source activity
Paolo Belardinelli¹, Christoph Zrenner¹, Paolo Gordon¹, Matti Stenroos²
¹University of Tuebingen, Tuebingen, Deutschland, ²Aalto University, Espoo, Finland

Th113  Effects of acute medial prefrontal rTMS on ASL using the H-coil
Elise Lesage¹, Elliot Stein¹, Elisabeth Caparelli¹, Emma Weiss¹, Betty Jo Salmeron⁴, Yihong Yang²
¹National Institute on Drug Abuse, Baltimore, MD, United States, ²NIH, Bethesda, MD, United States, ³National Institute on Drug Abuse, Baltimore, MD, United States, ⁴NIH/NIDA, Baltimore, MD, United States

Odd numbers: 12:45 – 13:45; Even numbers: 13:45 – 14:45; Poster Reception: 16:00 – 17:00

To view full abstract text and ePosters, visit ww5.aievolution.com/hbm1901
**Bipolar Disorder**

**Th114** FMRI-navigated repetitive transcranial magnetic stimulation in borderline personality disorder

*Pavlína Linhartová1, Tomáš Svěrák1, Adéla Látalová1, Matyáš Kuhn1, Tomáš Kašpárek1*

1Masaryk University, Faculty of Medicine, Brno, Czech Republic

**Th115** Virtual lesion in non-motor areas: skull-cortex distance and field modeling on a pain memory study

*Francis Houde1, Véronique Thivierge2, Russell Butler2, Marylne Martel3, Marie-Philippe Harvey3, Kevin Whittingstall3, Guillaume Leonard4*

1University of Sherbrooke - Research Center on Aging, Sherbrooke, Quebec, Canada, 2University of Sherbrooke, Sherbrooke, Quebec, Canada, 3Department of Nuclear Medicine and Radiobiology, University of Sherbrooke, Sherbrooke, QC, Canada, 4Research Centre on Aging, University of Sherbrooke, Sherbrooke, Quebec, Canada

**Th116** PCIe: a novel data robust index to assess neural signal complexity in TMS/EEG recordings

*Thierry Neus1, Silvia Casarotta2, Adenauer Casali2, Marcello Massimini4*

1Università degli Studi di Milano, Milan, Italy, 2University of Milan, Milan, Italy, 3Institute of Science and Technology, Federal University of Sao Paulo, Sao Jose dos Campos, Brazil, 4Department of Biomedical and Clinical Science ‘L. Sacco’, Milan, Italy

**Th117** 1000 ITBS sessions in a patient with bipolar disorder: GM volumes changes compared to the HCP S1200

*Daniel Keeser1, Tabea Nenov-Matt1, Sophia Steecklein1, Eva Megzer2, Lucia Bulabas3, Temmuz Karali3, Marco Paolini2, Matin Mortazavi Kochi4, Birgit Ertl-Wagner5, Oliver Pogarell6, Frank Padberg1*

1University Hospital LMU, Munich, Germany, 2University Hospital, LMU Munich, Munich, Germany, 3University Hospital Munich, Munich, Germany

**Th118** Motor output trial-to-trial variability: corticospinal excitability and interhemispheric inhibition

*Maria Mitina1, Vadim Nikulin1, Sofya Kulikova2, Vadim Ushakov2, Sergey Kartashov2, Evgeny Blagoveshchensky1, Pavel Novikov1, Gorin Alexey1, Maria Nazarova1*

1Centre for Cognition and Decision Making, Institute for Cognitive Neuroscience, NRU HSE, Moscow, Russian Federation, 2Department of Neurology, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, 3National Research University Higher School of Economics, Perm, Russian Federation, 4Kurchatov Institute National Research Centre, Moscow, Russian Federation

**Th119** A novel three-axis TMS coil design for multichannel stimulation systems

*Lucia Navarro de Lara1, Anthony Mascarones2, Kevin Pratt2, Douglas Paulson2, Sergey Makarov2, Yoshih Okada3, Aapo Nummenmaa4*

1University of Oxford, Oxford, United Kingdom, 2Icahn School of Medicine at Mount Sinai, New York, NY, United States, 3Department of Electrical and Computer Engineering, Worcester Polytechnic Institute, Worcester, MA, United States, 4Neurospin CEA Paris - Saclay, Gif-sur-Yvette, France

**Th120** Features of human motor cortical inhibition as measured by concurrent TMS-EEG

*Vishal Rawji1, Isabella Kaczmarczyk2, Lorenzo Rocchi2, John Rothwell2, Nikhil Sharma2*

1University College London, London, United Kingdom, 2University College London, London, United Kingdom

---

**DISORDERS OF THE NERVOUS SYSTEM**

**Th121** Altered ALFF values and Functional Connectivity of the left Caudate in Bipolar II Disorder

*Zhifang Zhang1, Qing Bo1, Yun Wang1, Feng Li1, Lei Zhao1, Yuan Zhou1, Chunyue Wang1*

1Beijing Anding Hospital, Beijing, China

**Th122** Altered anatomical network correlates of cognitive function in bipolar disorder

*Genevieve McPhiley1, Leila Nabulusi1, Liam Kilmartin2, Stefani O’Donoghue3, Giulia Tranchini4, Laura Castello1, Christopher Gregori1, Pablo Najt1*

1University of Oxford, Oxford, United Kingdom, 2University of Oxford, Oxford, United Kingdom, 3Department of Nuclear Medicine and Radiobiology, University of Sherbrooke, Sherbrooke, QC, Canada

**Th123** Bipolar Disorder and Gender are Associated with Fronto-Limbic and Basal Ganglia Dysconnectivity

*Leila Nabulusi1, Genevieve McPhiley1, Liam Kilmartin2, Denis O’Hara3, Stefani O’Donoghue3, Giulia Forcellini4, Pablo Najt1, Srinath Ambati1, Laura Castello1, Fintan Byrne1, James McCoughlin1, Brian Hallahan1, Colm McDonalld, Dara Cannon1*

1National University of Ireland Galway, NUIG, Galway, Ireland, 2Center for Neuroscience and Cognitive Systems, Istituto Italiano di Tecnologia, Rovereto, Italy

**Th124** Subgrouping of Patients with Bipolar Disorder based on DTI Data

*Pauline Favre1, Edouard Duchesnay2, Josselin Houenou2,3,4, for the ENIGMA Bipolar Disorder Working Group ENIGMA Consortium*

1Neuropsin CEA Paris - Saclay, Gif-sur-Yvette, France, 2INSERM U955, Créteil, France, 3APHP, CHU Mondor, Psychiatry Department, Créteil, France, 4University of Southern California, Los Angeles, CA, United States

**Th125** Cholinergic-Mediated Cingulate Activation during Emotion-Inhibition in Bipolar Disorder

*Leila Nabulusi1, Jennifer Farrell2, Genevieve McPhiley1, Liam Kilmartin1, Theophilus Akudjedu1, Pablo Najt1, Fiona Martyn1, James McCoughlin1, Michael Gill1, Thomas Frodl1, Colm McDonalld1, Brian Hallahan1, Dara Cannon1*

1National University of Ireland Galway, NUIG, Galway, Ireland, 2Department of Psychiatry, School of Medicine, Trinity College Dublin, Dublin, Ireland, 3Department of Psychiatry & Psychotherapy,Otto-von-Guericke-Universitat Magdeburg,University Hospital Magdeburg, Germany

**Th126** Alteration in the functional architecture of large-scale networks in mania and depression

*Daniel Russo1, Matteo Martino1, Paola Magioncalda1, Matilde Inglese2, Maria Amore3, Georg Northoff4*

1University of Genoa, Genoa, Italy, 2University of Genoa, Genoa, Italy, 3Cardiofemina, University of Sherbrooke, Sherbrooke, Quebec, Canada, 4The Royal’s Institute of Mental Health Research & Technology, Federal University of Sao Paulo, Sao Jose dos Campos, Brazil

**Th127** Ventral striatal activity during reward anticipation in mood disorders: an fMRI Study

*Lauren Atkinson1, Andrew Quinn1, Mark Woolrich2, Paul Harrison1, Catherine Harmer1, Anna Nobre2*

1University of Oxford, Oxford, United Kingdom, 2University of Oxford, Oxford, United Kingdom

---

**To view full abstract text and ePosters, visit www.aievolution.com/hbm1901**
Th129  Activation and de-activation patterns in bipolar disorder: a fMRI study on the Stroop Task
Norma Verdolini1,2,3, Marta Moreno1, Pilar Salgado-Pineda1,3, Gemma Montel2, Auria Albacete2, Paola Fuentes-Claramonte3, Ana Martínez de Aragón1, Mónica Dompablo1,5, Peter J McKenna1,5, Tomás Palomo1, Edith Pomarol-Clotet1,2, Roberto Rodríguez-Jimenez1,2, FIDMAG Germanes Hospitalàries Research Foundation, Sant Boí de Llobregat, Barcelona, Spain, 1Bipolar Disorder Unit, Institute of Neuroscience, Hospital Clinic, University of Barcelona, IDIBAPS, CIBERSAM, 170 Villarroel st, 1-2, 08036, Barcelona, Spain, 2CIBERSAM (Biomedical Research Networking Centre in Mental Health), Barcelona, Spain, 3Department of Radiology, Hospital Universitaria 12 de Octubre, Madrid, Spain, 4Department of Psychiatry, Instituto de Investigación Sanitaria Hospital 12 de Octubre (imas12), Madrid, Spain, 5CIBERSAM (Biomedical Research Networking Centre in Mental Health), Madrid, Spain, 6Department of Psychiatry, Universidad Complutense de Madrid, Madrid, Spain

Th130  A fMRI meta-analysis of bipolar disorder patients on domains of emotions, working memory and reward
Rehele Mesbah1, Manja Koenders2, Erik Gillty3, Nic van der Weel4, A. M. Van Hemert5, Max Leeuw6, 1Leiden University Medical Centre, Leiden, Netherlands, 2Leiden University, Leiden, Netherlands

Th131  Intrinsic Brain Functional Connectomes in Bipolar Disorder
Mayuresh Korgaonkar1, Cassandra Chakouch2, May Erlinger3, Isabella Breukelaar4, Philip Boyce5, Philip Hazeli, Leanne Williams6, Gin Mai7, Anthony Harris8, 1Westmead Institute for Medical Research & University of Sydney, Westmead, New South Wales, Australia, 2Westmead Institute for Medical Research, Westmead, New South Wales, Australia, 3University of Sydney, Sydney, New South Wales, Australia, 4Stanford University, Stanford, CA, United States

Th132  Augmenting CBT with Real-time fMRI amygdala neurofeedback training increases early therapy response
Kym Young1, Sarah Lazzaro1, Laurie Compere1, Ted Huppert2, Greg Siegle3, Marlene Strebge4, Scott Barb1, 1University of Pittsburgh, Pittsburgh, PA, United States, 2Virginia Tech, Blacksburg, VA, United States

Th133  Neural Substrates for Anticipation and Consumption of Social and Monetary Incentives in Depression
Zhenhong He1, Dandan Zhang2, Nils Muhlert3, Rebecca Elliott1, 1Division of Neuroscience and Experimental Psychology, University of Manchester, Manchester, United Kingdom, 2Department of Psychology, College of Psychology and Sociology, Shenzhen University, Shenzhen, China, Shenzhen, Guangdong

Th134  Transdiagnostic alterations in reward prediction error encoding
Kiana Khosravian1, Hanna Keren1, Daniel Pine2, Argyris Stringaris1, 1National Institute of Mental Health, Bethesda, MD, United States

Th135  Insula, affective temperaments, and sleep disturbances in major depressive disorder
Chao Wu1, Shenglin She2, Yingjun Zheng2, Huawang Wu2, 1Peking University, Beijing, China, 2Guangzhou Huai Hospital, Guangzhou, China

Th136  Frontopolar Activation Associated with Pessimistic Future-Thinking in Depression: An fMRI study
Nariko Katayama1, Atsuo Nakagawa2, Satoshi Umeda1, Yui Terasawa3, Chika Kurata4, Yohei Sasaki5, Toshiaki Kikuchi5, Atsuo Nakagawa1, Satoshi Umeda1, Yui Terasawa3, Chika Kurata4, Yohei Sasaki5, Toshiaki Kikuchi5, 1Department of Neuropsychiatry, Keio University of Medicine, Tokyo, Japan, 2The Clinical and Translational Research Center, Keio University Hospital, Tokyo, Japan, 3Department of Psychology, Keio University, Tokyo, Japan

Th137  The Behavioral Correlates of Resting-state Brain Entropy Changes in Late-life Depressed Elderly
Chemin Lin1, Shwu-Hua Lee2, Chih-Mao Huang3, Guan-Yen Chen4, Pei-Shan Ho5, Ho-Ling Liu5, Yao-Liang Chen5, Tatia Lee6, Shun-Chi Wu6, 1Chang Gung Memorial Hospital, keelung, Taiwan, 2Linkou Chang Gung Memorial Hospital, Linkou, Taiwan, 3Department of Biological Science and Technology, National Chiao Tung University, Hsinchu, Taiwan, Hsinchu, Taiwan, 4Department of Engineering and System Science, National Tsing Hua University, Hsinchu, Taiwan, 5Department of Imaging Physics, University of Texas MD Anderson Cancer Center, Houston, Texas, Houston, United States, 6Department of Medical Imaging and Intervention, Chang Gung Memorial Hospital, keelung, Taiwan, Ta, Keelung, Taiwan, 7Institute of Clinical Neuropsychology, The University of Hong Kong, Hong Kong, Hong Kong, Hong Kong

Th138  Mean diffusivity changes after acute SSRI administration in a major depression patient cohort
Rene Seiger1, Gregor Gryglewski2, Alexander Kautzky2, Manfred Klöbl3, Mathis Godbersen1, Lucas Rischka1, Thomas Vanicek1, Marius Hienert1, Jakob Unterhalter1, Lobo Silberbauer1, Paul Michenhof2, Patricia Handschu1, Andreas Hahn1, Siegfried Kasper1, Rupert Lanzenberger1, 1Medical University of Vienna, Vienna, Austria

Th139  Reproducibility of functional alterations in depression: a multi-site fMRI study with 1,434 subjects
Mingrui Xia1, Tianmei Si1, Xiaoay Sun2, Qing Mao2, Bangshian Liu3, Li Wang3, Jie Meng4, Mao Chang5, Xiaoqiu Huang6, Ziqi Chen6, Yaoying Tang7, Ke Xu8, Qiying Gong9, Fei Wang10, Jieang Qiu11, Peng Xie12, Lingjiang Li13, Yong He14, 1Beijing Normal University, Beijing, China, 2Peking University the Sixth Hospital, Beijing, China, 3Second Xiangya Hospital of Central South University, Changsha, China, 4Southwest University, Chongqing, China, 5The First Affiliated Hospital of China Medical University, Shenyang, China, 6West China Hospital of Sichuan University, Chengdu, China, 7Sichuan University, Chengdu, China, 8The First Affiliated Hospital of China Medical University, Chongqing, China

Th140  Trajectory of brain maturation in adolescent individuals at familial risk of mood disorder
Laura de Nooij1, Mathew Harris2, Emma Hawkins2, Xueyi Shen3, Toni-Kim Clarke1, Stella Chan1, Tim Zieman2, Andrew McIntosh1, Heather Whalley1, 1University of Edinburgh, Edinburgh, United Kingdom, 2University of Amsterdam, Amsterdamer, Netherlands

Th141  The Impacts of Anti-depressants on the Depression Functional Network: Improve or Worsen?
Qunjie Zhou1, Dan Dai1, Ningning Ma1, Jianfeng Feng1, 1Shanghai Center for Mathematical Science, Fudan University, Shanghai, China, 2Institute of Science and Technology for Brain-Inspired Intelligence, Fudan University, Shanghai, China

Th142  Converging resting state networks unravels potential remote effects of TMS for major depression
Tokuya Ishida1,2, Thomas Diersk2, Werner Strik1, Yasuke Morishima2, 1Department of Neuropsychiatry, Graduate School of Wakayama Medical University, Wakayama, Japan, 2Translational Research Center, University Hospital of Psychiatry, University of Bern, Bern, Switzerland

Th143  Hippocampus and dIPFC network profiles in Borderline Personality Disorder with comorbid depression
Tyler Attisha1, Asadur Chowdry1, Thomas Meram1, Ellanya Kallabat1, Paul Saloff2, Vaibhav Diwadkar3, 1Wayne State University School of Medicine, Detroit, MI, United States, 2University of Pittsburgh School of Medicine, Pittsburgh, PA, United States
Th144 Diagnostic Major Depressive Disorder with High-order Local Functional Connectivity
Yujie Liu1,2, Li-Ming Hsu3, Yanting Zheng4, Shijun Qiu1,2, Han Zhang1,2, Dinggang Shen1,2
1The First School of Clinical Medicine, Guangzhou University of Chinese Medicine, Guangzhou, Guangdong, China, 2Department of Radiology and BIRC, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States, 3The First Affiliated Hospital of Guangzhou University of Chinese Medicine, Guangzhou, Guangdong, China

Th145 Neuroinflammation of different regions in the brain of the depressive-like rat induced by CUMS
Jingjie Zhao1, Mei Zhao2, Xuesong Gao3, Anna Wang4, Ning Wu4, Li Li5
1Beijing Friendship Hospital, Capital Medical University, Beijing, China, 2Institute of Psychology, Chinese Academy of Sciences, Beijing, China, 3Department of Biological Sciences, Southeastern Oklahoma State University, OK, United States

Th146 Transdiagnostic Modular Brain Dysfunctions Across Psychiatric Disorders: A Connectome-based Study
Qing Ma1,2,3, Xuhong Liao4, Xiaoyi Sun2,3,4, Jia Duan5,6, Ke Xu1, Yangang Tong1,2,6, Fei Wang1,2,5,6, Yong He1,2,3, Mingxi Xia1,2,3
1National Key Laboratory of Cognitive Neuroscience and Learning, Beijing Normal University, Beijing, China, 2Beijing Key Laboratory of Brain Imaging and Connectomics, Beijing Normal University, Beijing, China, 3IDG/McGovern Institute for Brain Research, Beijing Normal University, Beijing, China, 4School of Systems Science, Beijing Normal University, Beijing, China, 5Department of Psychiatry, The First Affiliated Hospital of China Medical University, Shenyang, China, 6Brain Function Research Section, The First Affiliated Hospital of China Medical University, Shenyang, China

Th147 Behavioral and Neural Alterations in Competitive Behavior in Major Depressive Disorder
Zhuyue Cui1, Lusha Zhu1, Iris Vilares2, Pearly Chui3, Brooks King-Casas4
1Virginia Tech Carilion Fralin Biomedical Research Institute, Roanoke, VA, United States, 2Peking University School of Psychological and Cognitive Sciences, Beijing, China, 3University of Minnesota Department of Psychology, Minneapolis, MN, United States

Th148 A dual pathway model of depression: unbalanced state in the sensitivity to reward and punishment
Chao Kiel1, Tranynn Jin1, JianFeng Feng2, Estuand T. Rolls2
1Institute of Science and Technology for Brain-Inspired Intelligence, Fu Dan university, ShangHai, China, 2Oxford Centre for Computational Neuroscience, Oxford, United Kingdom

Th149 Abnormal functional connectivity between regions within the prefrontal-limbic-striatum system in MDD
Feng-Mei Liu2,2, Zong-Ling He2,2, Wei Sheng1,2, Shao-Qiang Han1,2, Yu-Yan Chen1,2, Qian Cui1,2, Hua-Fu Chen1
1The Clinical Hospital of Chengdu Brain Science Institute, MOE Key Lab for Neuroinformation, University of Electronic Science and Technology of China, Chengdu, China, 2Center for Information in BioMedicine, Key Laboratory for Neuroinformation of Ministry of Education, School of Life Science and Technology, University of Electronic Science and Technology of China, Chengdu, China, 3School of Public Administration, University of Electronic Science and Technology of China, Chengdu, China

Th150 Using rsfMRI data to select left DLPFC stimulation sites for a personalized treatment of depression
Aditya Singh1,2, Tracy Erwin-Grabner3, Grant Sutcliffe4, Andrea Antal4, Walter Paulus4, Roberta Goya-Maldonado1
1Department of Psychiatry and Psychotherapy of the University Medical Center Göttingen, Göttingen, Germany, 2Department of Clinical Neurophysiology of the University Medical Center Göttingen, Göttingen, Germany

Th151 Childhood urbanization affects prefrontal cortical responses to trait anxiety and PRS for depression
Xiao Zhang1, Hao Yan1, Hao Yu1, Xin Zhao1, Shefall Shaha1, Zheng Dong2, Guang Yang3, Xiaoli Zhang4, Qiang Chen1, Jing Li2, Si Si2, Tim Muse1, Jinnin Liao1, Yuyanan Zhang1, Weihe Yu1, Daniel Weinberger1, Dai Zhang5, Hao-Yang Tan1
1Peking University Sixth Hospital, Beijing, China, 2Jining Medical University, Jining, China, 3LiBer Institute for Brain Development, Baltimore, MD, United States

Th152 Spatial-frequency EEG characteristics of suicidal ideation and suicide attempt in depressed females
Lars Benscho1, Chris Baeken1, Marie-Anne Vanderhasselt1, Frederik Van de Steen1, Kees Van Heeringen2, Martijn Arns3
1Ghent University, Ghent, Belgium, 2Utrecht University, Nijmegen, Netherlands

Th153 Early neural responses as treatment markers in depression with combined structural and fMRI
Rebecca Williams1, Elliot Brown1, Darren Clark1, G. Bruce Pike1, Rajamannar Ramasubbu2
1University of Calgary, Calgary, AB, Canada

Th154 Emotion Self-Regulation Training in Major Depression Using Simultaneous rtfMRI and EEG Neurofeedback
Vadim Zotev1, Ahmad Mayeli2,2, Mossa Miski1, Jorzy Bodurka1,3
1Laureate Institute for Brain Research, Tulsa, OK, United States, 2Electrical and Computer Engineering, University of Oklahoma, Tulsa, OK, United States, 3Stephenson School of Bioengineering, University of Oklahoma, Norman, OK, United States

Th155 Changes in connectivity after ketamine administration in major depression
Jen Evans1, Carlos Zarate1
1NIH, Bethesda, MD, United States

Th156 Contextual valence and network profiles of the dACC & OFC in Borderline Personality Disorder
Elianya Kohabati1, Asadur Choudury2, Thomas Meram2, Tyler Atishs1, Paul Soloff1, Voibhadh Dwaikar2
1Wayne State University School of Medicine, Detroit, MI, United States, 2University of Pittsburgh School of Medicine, Pittsburgh, PA, United States

Th157 Evaluating the Antidepressant Effect of Ketamine with Resting-State Simultaneous EEG/fMRI
Rebecca McMillan1, Rachael Summer1, Anna Forsyth1, Doug Campbell1, Gemma Malpas2, Elizabeth Moxwell2,3, Carolyn Deng2, John Hay2, Rhys Ponton2, Frederick Sundram3, Suresh Muthukumaraswamy2
1School of Pharmacy, University of Auckland, Auckland, New Zealand, 2Department of Anesthesiology, Auckland City Hospital, Auckland District Health Board, Auckland, New Zealand, 3Department of Psychological Medicine, University of Auckland, Auckland, New Zealand

Th158 Functional Connectivity Neurofeedback for Depression: Towards Better Clinical Applicability
Jessica Stewart1, Takahashi Yamada1, Mitsuo Kawato1
1Wayne State University School of Medicine, Detroit, MI, United States

Th159 Changes in Prefrontal Cortex Gray Matter Volume in Major Depressive Disorder and Suicide ideation
Yanqing Tang1, Ran Zhang1, Jianyu Chen1, Fei Wang1
1First Affiliated Hospital of China Medical University, Shenyang, China
Th160 Functional connectivity of the right inferior frontal gyrus and orbitofrontal cortex in depression
Edmund Rolls1,2, Wei Cheng3, Jignan Dutt4, Jiang Qiu5, Dongtao Wei6, Peng Xie7, Jianfeng Feng2
1Oxford Centre for Computational Neuroscience, Oxford, United Kingdom, 2Institute of Science and Technology for Brain Inspired Intelligence, Fudan University, Shanghai, China, 3University of Warwick, Coventry, United Kingdom, 4Institute of Science and Technology for Brain Inspired Intelligence, Fudan University, Shanghai, China, 5Southwest University, Chongqing, China, 6The First Affiliated Hospital of China Medical University, Shenyang, China

Th161 Negative Emotion Processing and Regulation in Major Depression: a 7T fMRI-DCM Study
Sungho Tack1, Seongjun Lee1, Chan-A Park1, E-Noe Cheong2, Ji-Woo Seok3, Jin-Hun Sohn1, Cheajoon Cheong1
1Korea Basic Science Institute, Cheongju, Korea, Republic of, 2Konam University, Gwangju, Korea, Republic of, 3Chungnam National University, Daejeon, Korea, Republic of

Th162 Novel Neurofeedback Treatment for Affective Instability in Premenstrual Dysphoric Disorder (PMDD)
Maya Bleich-Cohen1, Oren Tene2, Anat Halevy2, Noam Goldlay1, Plia Barry3, Daniella Perry2, Miki Bloch2, Talma Hendler1
1Sagol Brain Institute Tel-Aviv, Tel-Aviv Sourasky Medical Center, Tel-Aviv, Israel, 2Psychiatric department, Tel-Aviv Sourasky Medical Center, Tel-Aviv, Israel

Th163 Investigating disrupted resting-state functional connectivity of brainstem subregions in depression
Lizhu Luo1, Jiaojian Wang1
1UESTC, Chengdu, China

Th164 Disrupted effective connectivity in patients with major depressive disorder during an ultimatum game
Yuan Zhou2, Yun Wang2, Dong Zheng1, Peter Zeidman3
1Institute of Psychology, Chinese Academy of Sciences, Beijing, China, 2Beijing Anding Hospital, Capital Medical University, Beijing, China, 3The Wellcome Trust Centre for Neuroimaging, University College London, London, United Kingdom

Th165 White matter microstructure is related to the mean and longitudinal variance of depressive symptoms
Xueyi Sheng1, Tuula Ritvainen1, Mark Adams1, Simon Cox2, Andrew McIntosh1, Heather Whalley1
1University of Edinburgh, Edinburgh, United Kingdom, 2Centre for Cognitive Ageing and Cognitive Epidemiology, University of Edinburgh, Edinburgh, United Kingdom

Th166 Anhedonia correlates with abnormal functional connectivity of the NAcc Subregions in MDD patients
Rui Liu1, Yun Wang2, Xiongying Chen3, Zhifang Zhang2, Yuan Zhou3
1Beijing Anding Hospital, Capital Medical University, Beijing, China, 2Key Laboratory of Behavioral Science, Institute of Psychology, Chinese Academy of Sciences, Beijing, China, 3University of Chinese Academy of Sciences, Beijing, China

Th167 Classification of mood disorders using multiple kernel learning on multimodal neuroimaging data
Benedetto Vecchi1, Sara Poletti1, Carlotta Bertocchi1, Irene Bollettini1, Cristina Colombo1, Francesco Benedetti1
1Ospedale San Raffaele, Milano, Italy, 2Ospedale San Raffaele, Milano, Italy

Th168 Assessing reward function as predictor of adolescent depression trajectory
Qi Liu1, Kailyn Bradley1, Samuel Dewitt1, Lushna Mehra1, Christine Solimene1, Carmen Alonso1, Vilma Gabby1
1Cahn School of Medicine at Mount Sinai, New York, NY, United States, 2Nathan S. Kline Institute for Psychiatric Research, Orangeburg, NY, United States

Th169 Phenotypic and Connectivity Data Discriminate Bipolar and Unipolar Depression with Machine Learning
Grant Sulcliffe1, Soeren Noack2, Roberto Goya-Maldonado3
1University Medical Center Goettingen, Goettingen, Germany, 2University Medical Center Goettingen, Goettingen

Th170 Accelerated Brain Ageing in Depression: a UK Biobank study
Heather Whalley1, Mathew Harris1, Laura de Nooy1, Riccardo Marioni1, Simon Cox2, Toni-Kim Clarke2, Liana Romanuk1, Xueyi Sheng1, Mark Adams1, Stephen Lowrie1, James Cole1, Andrew McIntosh1
1University of Edinburgh, Edinburgh, United Kingdom, 2King’s College London, London, United Kingdom

Th171 Phenome-wide association study of polygenic risk scores for depression in UK Biobank
Heather Whalley1, Xueyi Sheng1, David Howard1, Mark Adams1, Andrew McIntosh1
1University of Edinburgh, Edinburgh, United Kingdom

Th172 Structural magnetic resonance imaging for individual predictions for electroconvulsive therapy
Akihiro Takamiya1, Kuo-Ching Liang2, Shiro Nishikata3, Shunya Kurokawa4, KyoSu Ke4, Jinichi Hirano1, Bun Yamagata2, Masaru Mimura2, Taishi Yoshimoto2
1Keio University School of Medicine, Tokyo, Tokyo, Japan, 2Keio University School of Medicine, Tokyo, Japan, 3Center for Psychiatry and Behavioral Science, Komagino Hospital, Tokyo, Tokyo, 4Keio University, Tokyo, Japan

Th173 Multimodal Structural Imaging Markers Predict Durable Antidepressant Response to Serial Ketamine
Benjamin Wade1, Megha Vasavada2, Antoni Kubicki2, Joana Loureiro2, Shantanu Joshi1, Randall Espinoza1, Elza Cangod2, Katherine Naz1
1University of California, Los Angeles, Los Angeles, CA, United States, 2UCLA, Los Angeles, CA, United States

Th174 Reproducible Rumination’s Brain Network Mechanism: Repeating Scans from 3 Different Scanners
Xiao Chen1, Ning-Xuan Chen1, Yang-Qian Shen1, Hui-Xian Li1, Bin Lu2, Le Li2, Chao-Gan Yan1,2,3
1CAS Key Laboratory of Behavioral Science, Institute of Psychology, Beijing, China, 2Department of Psychology, University of Chinese Academy of Sciences, Beijing, China, 3Magnetic Resonance Imaging Research Center, Institute of Psychology, Chinese Academy of Sciences, Beijing, China, 4Department of Child and Adolescent Psychiatry, NYU Langone Medical Center School of Medicine, New York, NY, United States

Th175 Common and specific neuroanatomical deficits for depression, bipolar disorder and schizophrenia
Yue Cui1,2, Yongfeng Yang1, JING SUI1,2, Luxian Lv1, Tianzi Jiang1,2
1Brainnetome Center, Institute of Automation, Chinese Academy of Sciences, Beijing, China, 2National Laboratory of Pattern Recognition, Institute of Automation, Chinese Academy of Sciences, Beijing, China, 3University of Chinese Academy of Sciences, Beijing, China, 4The Second Affiliated Hospital of Xinxing Medical University, Xinxing, China

Th176 Common Change under Mental Loading and Social Stress and its Relation with Depression Vulnerability
Xue Zhang1, Xuesong Li1, Hua Gud1, Lihong Wang1
1Center for Biomedical Imaging Research, Department of Biomedical Engineering, Tsinghua University, Beijing, China, 2School of Computer Science and Technology, Beijing Institute of Technology, Beijing, China, 3Department of Psychiatry, University of Connecticut School of Medicine, Farmington, CT, United States
**THURSDAY, JUNE 13**

**Odd numbers: 12:45 – 13:45; Even numbers: 13:45 – 14:45; Poster Reception: 16:00 – 17:00**

**Th177** Neural stress reactivity depends on individual characteristics
Anne Kühnel1, Nils Kroemer1, Immanuel Elbou1, Michael Czisch1, Martin Walter2, Philipp Sämann1, Elisabeth Binder1
1Max Planck Institute of Psychiatry, München, Germany; 2University of Tübingen, Tübingen, Germany

**Th178** Clustering of depression subtypes – Linking symptoms and morphology
Lee Jollans2, Philipp Sämann1, Tanja Brückl1, Elisabeth Binder2
1Max Planck Institute of Psychiatry, Munich, Germany; 2Max Planck Institute for Psychiatry, München, Germany

**Th179** No evidence for cortical thickness alterations in minor depression
Maryna Polyakova1, Karsten Mueller2, Frauke Beyr2, Leonie Lampe2, Matthias Schroeter2, Peter Schoenknacht2
1Max Planck Institut for Human brain and cognitive sciences, Leipzig, Germany; 2Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany; 3Leipzig University clinic, Leipzig, Germany

**Th180** Processing and Regulating Emotional Information in Remitted Recurrent Major Depressive Disorder
Razemarijn van Kleef1, Jan-Bernard Marsman1, Claudi Bockting2, Evelien van Valen1, Saskia Nijmeijer2, Andre Alemann2, Marie-Jose van To1
1University Medical Center Groningen, Groningen, Netherlands; 2Amsterdam University Medical Center, Amsterdam, Netherlands; 3University Medical Center Utrecht, Utrecht, Netherlands; 4University Medical Center Groningen, University of Groningen, Groningen, Netherlands

**Th181** Altered Brain Response during Reward and Loss Anticipation in Adolescents with Major Depression
David Willinger1,2, Ilona Karipidis1,2, Plamia Dimanova1, Isabelle Haiserling1, Kristin Nolander1, Sophie Emery1, Gregor Berger1, Susanne Walitza1,2, Silvia Brem1,2
1University Hospital of Psychiatry Zurich, University of Zurich, Zurich, Switzerland; 2Neuroscience Center Zurich, University of Zurich and ETH Zurich, Zurich, Switzerland

**Th182** Impaired Neural and Behavioural Social Outcome Prediction in Depression
Anna Frey1, Ciara McCabe1
1University of Reading, Reading, United Kingdom

**Th183** Depression and Gray Matter Volume Alterations in amnestic Mild Cognitive Impairment
Tania Setradi1, Sander Martens1, Jan-Bernard Marsman1, Shankar Tumati1, Fransje Reesink1, Peter De Deyn1,2, Esther Opmeer1, André Alemann1
1University of Groningen, University Medical Center Groningen, Groningen, Netherlands; 2Institut Biomed-Bung, University of Antwerp, Antwerp, Belgium

**Th184** Right SMG activation during emotion discrimination distinguishes depressive from remitted subjects
Martin Tik1, Ronald Sladky1,2, Georg Kranz1, Daniela Pfäbigan1, Christoph Kraus1, Katharina Paul1, Stuart Reed1, Thomas Vanicek1, Bastian Auer1, Rupert Lanzenberger1, Claus Lamm1,2
1Medical University of Vienna, Vienna, Austria; 2University of Vienna, Vienna, Austria

**Th185** Resting-state mapping of neural signatures of vulnerability to depression relapse
Chunhong Liu1
1Beijing Hospital of Traditional Chinese Medicine, Capital Medical University, Beijing, China

**Th186** Covariates for the prediction of antidepressant treatment response from functional connectivity
Manfred Klob1, Gregor Gryglewski1, Lucas Risshka1, Mathis Godbersen1, Jakob Unterholzer1, Murray Reed1, Paul Michenthaler1, Thomas Vanicek1, Edda Winkler-Priek1, Andreas Hahn1, Siegfried Kasper1, Rupert Lanzenberger1
1Medical University of Vienna, Vienna, Austria

**Th187** Brain metastability assessed with fMRI relates to depression severity in patients with mania
Afra Wohlschlaeger1, Matthew Holland1, Harish Karne1, Amit Anand1
1Technical University Munich, Munich, Germany; 2Center for Behavioral Health, Cleveland Clinic, Cleveland, OH, United States

**Th188** Pharmaco-fMRI challenge before and after short-term treatment of MDD patients
Somayeh Jooyandy1, Thomas Baghori2, Rainer Rupprecht2, Mark Greenlee3
1Department of Psychiatry and Psychotherapy, University Regensburg, Regensburg, Germany; 2Department of Psychiatry and Psychotherapy, University Regensburg, Regensburg, Germany; 3Dept. of Experimental Psychology, University Regensburg, Regensburg, Germany

**Th189** Effect of Multi-ROI rtfMRI-based Brain-Regulation on Mood in Depression
Ishani Thakkar1, Mohit Rana1, Cesar Salinas1, Claudia Silva1, Claudia Brett1, Jaime Pereira1, Ranganatha Sarataram1, Sergio Ruiz2
1Pontificia Universidad Católica de Chile, Santiago, Chile; 2University of Tubingen, Tubingen, Germany; 3Clinica Alemana, Santiago, Chile; 4Clinica Alemana de Santiago, Santiago, Chile; 5Pontificia Universidad Católica, Santiago, Chile

**Th190** Neural and behavioral effects of antidepressant treatment on empathy
Markus Rutger1, Carolina Piet1, Martin Tik1, Christoph Kraus1, Daniela Pfäbigan1, Ronald Sladky1, Manfred Klob1, Michael Woletz1, Thomas Vanicek1, Christian Windschberger1, Rupert Lanzenberger1, Claus Lamm1,2
1University of Vienna, Vienna, Austria; 2Center for Medical Physics and Biomedical Engineering, Vienna, Austria; 3Medical University of Vienna, Vienna, Austria

**Th191** The effect of inflammation (CRP and IL-6) on white matter integrity in patients with depression
Divyaansh Raj1, Ki Sueng Choi1, Helen Mayberg2, Boadie Dunlop3
1Emory University, Atlanta, GA, United States; 2Ichan School of Medicine at Mount Sinai, New York, NY, United States

**Th192** Neural Correlates to Sympathetic Skin Conductance Fluctuations in Patients with Major Depression
Andy Schumann1, Feliberto De La Cruz1, Stefanie Köhler2, Gerd Wagner2, Karl-Jürgen Bär2
1Jena University Hospital, Jena, Germany; 2Department of Psychiatry and Psychotherapy, University Regensburg, Regensburg, Germany; 3Dept. of Experimental Psychology, University Regensburg, Regensburg, Germany

**Th193** Altered resting-state functional connectivity in major depressive disorder
Maximilian Lueckef1, Anastasia Benedyks1, Roman Kessler2, Andreas Jansen2
1Department of Psychiatry and Psychotherapy, University of Marburg, Marburg, Germany; 2Laboratory for Multimodal Neuroimaging, University of Marburg, Marburg, Germany; 3Core-Unit Brainimaging, Faculty of Medicine, University of Marburg, Marburg, Germany

**Th194** Effects of ketamine and ECT on impaired emotion processing networks in major depression
Joana Loureiro1, Amber Leaver1, Magha Vasavada1, Antoni Kubicki1, Benjamin Wade1, Stephanie Njau1, Shantanu Joshi1, Eliza Congdon1, Randall Espinoza1, Katherine Narr1
1UCLA, Los Angeles, CA, United States; 2Northwestern Medicine, Chicago, IL, United States
**Th195** Subcortical Morphometrics in Individuals with vs. without Major Depressive Disorder

Ying Chen1, 2, Bret Rutherford, Li Zhao, 2, Sigal Zilcha-Mano, 1, Lihua Yuan, 1, Xiujian Liu, 1, Ruxue Guo, 1, Zhishun Wang, 1

1Department of Psychiatry, College of Physicians and Surgeons, Columbia University, New York, United States, 2Key Laboratory of Underwater Acoustic Signal Processing, Southeast University, Nanjing, China

**Th196** Functional connectivity in Depression with and without co-morbid Borderline Personality Disorder

Marc Dubin1, Irena Iliiev1, Katharine Dunlop1, Charles Lynch1, Conor Liston1, Faith Gunnng1

1Weill Cornell Medicine, New York, NY, United States, 2Weill Cornell Medical College, New York, NY, United States

**Th197** Validating the location of hippocampal plasticity in ECT with respect to antidepressant outcome

Amber Leaver1, Megho Vasavada1, Antoni Kubicki2, Benjamin Wade1, Gerhard Hellemann1, Shantanu Joshi1, Roger Woods1, Randall Espinosa1, Katherine Harr1, 2

1Northwestern University, Chicago, IL, United States, 2UCLA, Los Angeles, CA, United States, 3UCLA, Los Angeles, CA, United States

**Th198** Functional Connectivity Mechanisms Linking Off-time Pubertal Development & Depression in Adolescence

Rajpreet Chahal1, Scott Marek1, Veronika Vilgis2, David Weissman1, Paul Hastings1, Richard Robins1, Amanda Guery1

1University of California Davis, Davis, CA, United States, 2Washington University, St. Louis, MO, United States, 3Harvard University, Cambridge, MA, United States

**Th199** DMPFC- and VMPFC-Amygdala RSFC and HPA Axis Function in Adolescents with and without Self Injury

Michelle Thai1, Kathryn Cullen1, Bonnie Klimes-Dougan2

1University of Minnesota, Minneapolis, MN, United States

**Th200** Retrieving a negative memory transiently disrupts ability to mobilize the dorsal attention network

Moussim Cherkapaou1, Andrew Westphal1, Jesse Risman1, 2

1University of California, Los Angeles, Los Angeles, CA, United States, 2University of California, San Francisco, San Francisco, CA, United States

**Th201** Repetitive Negative Thinking Styles Show Overlapping Neural Processes During Emotion Regulation

Katie Bessette1, Lisanne Jenkins1, Rebecca Easter1, Sophie DeiOonno1, Pauline Maki1, Sara Weisenbach1, Scott Langenecker1

1University of Utah, Salt Lake City, UT, United States, 2Northwestern University, Chicago, IL, United States, 3University of Illinois at Chicago, Chicago, IL, United States, 4The University of Utah, Salt Lake City, UT, United States

**Th202** Characterization of white matter signal anomalies (WMSAs) in a large cohort of healthy young adults

Ami Tsuchida1, Alexandre Laurent1, Laurent Petit1, Leonie Lampé1, Naga Begedou1, Ycheng Zhu1, Stephanie Debet1, Fabrice Crivello1, Pierre-Louis Bazin1, 2, Christophe Tzourio1, 2, Bernard Mazoyer1

1University of Bordeaux, Gironde, IMN, UMR 5293, CEA, CNRS, Bordeaux, France, 2Max Planck Institute for Human Cognitive and Brain Sciences, Department of Neurology, Leipzig, Germany, 3Peking Union Medical College Hospital, Neurology department, Beijing, China, 4University of Bordeaux, Bordeaux Population Health, INSERM U1219, Bordeaux, France, 5Universiteit van Amsterdam, Integrative Model-based Cognitive Neuroscience Unit, Amsterdam, Netherlands, 6University of Bordeaux, Bordeaux Population Health, INSERM U1219, Bordeaux, France

**Th203** Assessment of microstructural integrity and development in patients with tuberculous sclerosis complex

Te-Wei Kao1, Yung-Chin Hsu1, Pi-Chuan Fan1, Wen-Yih Tseng1, 4

1Institute of Medical Device and Imaging, National Taiwan University College of Medicine, Taipei, Taiwan, 2AcroVz Technology, Inc., Taipei, Taiwan, 3Department of Pediatrics, National Taiwan University Hospital and National Taiwan University College, Taipei, Taiwan, 4Molecular Imaging Center, National Taiwan University, Taipei, Taiwan

**Th204** A multivariate approach to mapping brain lesions associated with poor cognitive flexibility

Ayon Manda1, Rafael Romero-Garcia1, Michael Hart1, John Suckling1

1University of Cambridge, Cambridge, United Kingdom

**Th205** Exploring multi-level neuroanatomical substrates for migraine-insomnia comorbidity

Pei-Lin Lee1, Fu-Chi Yang1, Shiu-Juin Wang1, Ching-Po Lin1, Kun Hsien Chou1, 2

1Department of Biomedical Imaging and Radiological Sciences, National Yang-Ming University, Taipei, Taiwan, 2Department of Neurology, Tri-Service General Hospital, National Defense Medical Center, Taipei, Taiwan, 3Department of Neurology, Taipei Veterans General Hospital, Taipei, Taiwan, 4Institute of Neuroscience, National Yang-Ming University, Taipei, Taiwan, 5Brain research center, National Yang-Ming University, Taipei, Taiwan

**Th206** Altered functional connectivity structure in patients with glioblastoma

Kari-Heinz Nenning1, Julia Furter1, Barbara Kiesel1, Ernst Schwartz1, Thomas Rötzer1, Nikolaus Fortenbrey1, Christoph Bock1, Martha Marko1, Fritz Lutmeier1, Christine Marosi1, Hesheng Liu1, Polia Goliant1, Sophie Stücklein1, Johannes Hainfellner1, Gregor Kasprian1, Daniela Prayer1, Georg Widhalm1, Adelheid Wöhrer1, Georg Langs1

1Medical University of Vienna, Vienna, Austria, 2CeMM Research Center for Molecular Medicine of the Austrian Academy of Sciences, Vienna, Austria, 3Harvard Medical School, Boston, MA, United States, 4Massachusetts Institute of Technology, Cambridge, MA, United States, 5Ludwig-Maximilians-Universität, Munich, Germany

**Th207** Network characterisation of patients with functional dizziness

Jüli Heuber1, Virginia Flanigin1, Pauline Popp1, Peter zu Eulenburg1, Marianne Dietrich1

1Ludwig-Maximilians-Universität München, Munich, Germany

**Th208** Regional alterations of structural tissue complexity in Anti-NMDA Receptor Encephalitis

Stephan Krohn1, 2, Christopher Madan3, Josephine Heine1, Carsten Finke1, 2

1Medical University of Vienna, Department of Neurology, Clinical fMRI Study Group, Vienna, Austria, 2Department of Neurology, Medical University of Vienna, Vienna, Austria, 3School of Psychology, The University of Nottingham, Nottingham, United Kingdom

**Th209** Flashing light treatment against photophobia in migraine – an fMRI study

Tuna Aslan1, Ahmad Amini1, Eva Matt1, Maike Manecke2, Anna Szelenyi2, Paul Martin3, Stefan Seidel1, Christian Wöber1, Roland Beisteiner1

1Medical University of Vienna, Department of Neurology, Clinical fMRI Study Group, Vienna, Austria, 2Molecular Imaging Center, National Taiwan University, Taipei, Taiwan, 3Department of Neurology, National Taiwan University College, Taipei, Taiwan, 4Institute of Neuroscience, National Yang-Ming University, Taipei, Taiwan, 5Brain research center, National Yang-Ming University, Taipei, Taiwan

**Th210** Preserved individual finger representations in tetraplegia

Sanne Kikkert1, Patrick Freund1, Michaela Verling1, 3, Nicole Wenderoth1

1ETH Zürich, Neural Control of Movement Laboratory, Zürich, Switzerland, 2Spinal Cord Injury Center Balgrist, University of Zürich, Zürich, Switzerland
Th211 Task-based fMRI to Identify Brain Regions Associated with Neuropathic Pain After Spinal Cord Injury
Shana Black1, Jace King1, Jeffrey Anderson1, Christopher Buston1
1University of Utah, Salt Lake City, UT, United States

Th212 Graph Theoretic Analysis of Structural Connectivity in Chronic Migraine
Danielle DeSouza1, Yohannes Woldeamanuel1, James Bishop1, Bharati Sanjuanwala1, Robert Cowan1
1Stanford University, Palo Alto, CA, United States

Th213 Frontoparietal Network Connectivity Evolution during 2 Years of Fingolimod Therapy of MS
Jian Lin1, Lalab Bhattacharyya1, Hong Li1, Ken Sakoie1, Robert Fox1, Mark Lowe1
1The Cleveland Clinic, Cleveland, OH, United States

Th214 Multimodal MR quantification of microstructural tissue alterations in multiple sclerosis
Emile Lammers1,2, Gilles Reuter1, Jessica Simon1, Christian Degueldre1, Evelyne Balleux1, Christophe Phillips1, Pierre Maquet1,2
1GIGA CRC in vivo imaging, University of Liège, Liège, Belgium, 2Neurology Department, CHU Liège, Liège, Belgium
2Psychology and Cognitive Neurosciences Research Unit, University of Liège, Liège, Belgium

Th215 Connectome signatures of Gulf War Illness reveal brain mechanisms underlying the disorder
Kaundinya Gopiath1, Unal Sokoglu1, Bruce Crasson1, Robert Haley1
1Emory University, Atlanta, GA, United States, 2University of Houston-Clear Lake, Houston, TX, United States

Th216 Using normative probability mapping to track disease progression in childhood adrenoleukodystrophy
Gareth Ball1, Joseph Yuan-Mou Yang1,2
1Departmental Imaging, Murdoch Children’s Research Institute, Melbourne, Australia, 2Neuroscience Research, Murdoch Children’s Research Institute, Melbourne, Australia

Th217 Altered transient brain state dynamics in multiple sclerosis: treatment or pathology?
Jeroen Van Schependom1, Diego Vidalour2, Lars Costers1, Martin Siggaard1, Miguel D’Haeseleer1, Vincent Wens1, Xavier De Téger1, Serge Goldman1, Mark Woolrich2, Guy Nagels1
1Vrije Universiteit Brussel, Brussels, Belgium, 2University of Oxford, Oxford, United Kingdom, 3Vrije Universiteit Brussel, Brussels, Belgium, 4Université Libre de Bruxelles, Brussels, Belgium, 5Université Libre de Bruxelles, Brussels, Belgium

Th218 Exploring multivariate functional signature of migraine and comorbid insomnia: An fMRI study
Chen-Yuan Kuo1, Fu-Chi Yang2, Shiu-Juin Wang2, Ching-Po Lin1,4,5, Kun-Hsien Chou1,5
1Department of Biomedical Imaging and Radiological Sciences, NYMU, Taipei, Taiwan, 2Department of Neurology, Tri-Service General Hospital, National Defense Medical Center, Taipei, Taiwan, 3Department of Neurology, Taipei Veterans General Hospital, Taipei, Taiwan, 4Brain research center, National Yang-Ming University, Taipei, Taiwan, 5Institute of Neuroscience, National Yang-Ming University, Taipei, Taiwan

Th219 Mapping Cerebral Degeneration in ALS Clinical Sub-types with Texture Analysis
Abdullah Ishaq1, Daniel Ta1, Dennell Mah1, Peter Seres1, Collin Luk1, Wendy Johnsrud1, Lawrence Karmout1, Lame Zinman1, Angela Geng1, Sanjay Kalra1
1University of Alberta, Edmonton, Alberta, Canada, 2University of Calgary, Calgary, Alberta, Canada, 3University of Toronto, Toronto, Ontario, Canada, 4McGill University, Montreal, Quebec, Canada

Th220 Functional disconnection of raphe nuclei in patients with multiple sclerosis and depressive symptoms
Matteo Martin1, Paola Magioncalda2, Maria Petracco1, Mohamed Mounir El Mendilli1, Amgad Dobby1, Matilde Inglese1
1Ca’ Foscari School of Medicine at Mount Sinai, New York, NY, United States, 2University of Genoa (Italy), Genoa, Italy, 3University of Genoa, Genoa, Italy

Th221 Altered connectivity in borderline intellectual functioning: a network-based approach
Venera Blasi1, Alice Pirastu1, Mario Marcello Lagand1, Monica Cabinio1, Alice Giangiocomo1, Sofia Di Tello1, Gisella Baglio1, Monica Di Cesare1, Michela Zanette1, Mario Clerici1,2, Francesca Baglio1
1IRCCS Fondazione Don Carlo Gnocchi, Milan, Italy, 2Department of Pathophysiology and Transplantation, University of Milan, Milan, Italy

Th222 Alterations of network configurations in patients with anti-NMDA receptor encephalitis
Nina van Schwanenberg1, Stefan Koch1, Josephine Heine1, David Lydon-Staley1, Harald Pruss1, Friedemann Paul1, Danielle Bassett2, Carsten Finke1
1Charité-Universitätsmedizin Berlin, Berlin, Germany, 2Brain Research Center, Stanford University, Palo Alto, CA, United States

Th223 Rs-fMRI study of cognitive diagnostic criteria in Secondary Progressive MS
Anishe Doshi1, Gloria Castellazzi1,2, Nils Muhler1, Adnan Alothami1, Pierre Maquet1,2
1GIGA CRC in vivo imaging, University of Liège, Liège, Belgium, 2Psychology and Cognitive Neurosciences Research Unit, University of Liège, Liège, Belgium

Th224 Grey Matter Integrity Predicts White Matter Network Reorganization in Multiple Sclerosis
Angela Rodetz1, Nabin Koirala1, Muthuraman Muthuraman1, Vinzenz Fleischer1, Patrick Schiffler1, Jan-Gerd Tenberge2, Julia Kramer1, Fränke Zipp1, Sven Meuth1, Sergio Groppa1
1University Medical Center Mainz, Department of Neurology, Mainz, Germany, 2University of Münster, Department of Neurology, Münster, Germany

Th225 Neural signatures of developmental dyslexia and developmental coordination disorder
Fabien Cignetti1,2, Federico Nemmi3, Marianne Vaugoyeau2, Nadine Girard3, Yves Chaix1, Patrice Péran1, Christine Assanté1,2
1University Grenoble Alpes, CNRS, TIMC-IMAG, La Tronche, France, 2Aix Marseille Univ, CNRS, LNC, Marseille, France, 3Diagnostic Radiography Technology Department, University College London, London, United Kingdom, 4University of Milan, 5IRCCS Fondazione Don Carlo Gnocchi, Milan, Italy, 6Department of Brain and Behavioural Sciences, University of Pavia, Pavia, Italy, 7Brain MRI 3T Research Centre, IRCCS Mondino Foundation, Pavia, Italy

Th226 Lesion Mapping and Diffusivity Characterization of Brainstem Lesions in Trigeminal Neuralgia
Daniela DeSouza1,2,3, Federico Nemmi4, Marianne Vaugoyeau2,3, Nadine Girard5, Yves Chaix4, Patrice Péran1, Christophe Degueldre1, Evelyne Balteau1, Christian Degueldre1
1University Medical Center Mainz, Department of Neurology, Mainz, Germany, 2University of Münster, Department of Neurology, Münster, Germany

Th227 Lesion Mapping and Diffusivity Characterization of Brainstem Lesions in Trigeminal Neuralgia
Sara Spatafora1, Peter Shih-Ping Hung1, Joshua Cheng2, Jia Zhang3, Mojgan Hodaie1
1University of Toronto, Toronto, Ontario, Canada, 2Stony Brook University School of Medicine, Stony Brook, NY, United States, 3Krembil Research Institute, Toronto, Ontario, Canada

To view full abstract text and ePosters, visit www.aievolution.com/hbm1901
Th227 Connectivity within the brainstem is impaired in chronic fatigue syndrome
Leighton Barnden1, Zack Shan1, Donald Staines1, Sonya Marshall-Gradsisnik2, Kevin Finegan2, Timothy Ireland1, Sandeep Bhutia1
1Griffith University, Gold Coast, QLD, Australia, 2Gold Coast University Hospital, Gold Coast, QLD, Australia

Th228 Structural and Functional Alterations of Thalamus Associated with Postherpetic Neuropathia
Hong Li1, Xiaoyun Li1, Fei Gao1, Hu Li1,2, Yuzhuo Kong1,2
1CAS Key Laboratory of Behavioral Sciences, Institute of Psychology, Beijing, China, 2Department of Psychology, University of Chinese Academy of Sciences, Beijing, China

Th229 Predicting upper limb disability progression in multiple sclerosis with functional network analysis
Myrte Smit1,2, Anand Eijsbouts1, Iris Dekker1,4, Kim Meijer1,3, Joep Killestein1,2, Bernard Uitterlinden1, Scott Kalbe1,2, Jeroen Geurts1, Menno Schoonheim1
1Amsterdam UMC, department of Anatomy and Neurosciences, MS Center Amsterdam, Amsterdam Neuroscience, Amsterdam, the Netherlands, 2University of Melbourne, department of Radiology and Medicine, Melbourne, Australia, 3Amsterdam UMC, department of Neurology, MS Center Amsterdam, Amsterdam Neuroscience, Amsterdam, the Netherlands, 4Amsterdam UMC, department of Radiology and Nuclear Medicine, MS Center Amsterdam, Amsterdam, the Netherlands, 5Florey Institute of Neuroscience and Mental Health, Melbourne, Australia

Th230 Progressive retinal atrophy in patients with primary progressive multiple sclerosis
Julia Kramer1, Moritz Zimmerho1, Heinz Wiend1, Sven Meuth3
1University Hospital Münster, Department of Neurology, Münster, Germany, 2Department of Neurology with Institute of Translational Neurology, University Hospital Münster, Münster, Germany, 3University of Münster, Department of Neurology, Münster, Germany

Th231 Longitudinal changes of intrinsic functional brain network in patients with transient global amnesia
Geon Ha Kim1,2, Bori Kim1,3, Jee Hyang Jeong1, Sujung Yoon2, In Kyoon Lyoo3
1Department of Neurology, College of Medicine, Ewha W. University, Seoul, Korea, Republic of, 2Ewha Brain Institute, Ewha W. University, Seoul, Korea, Republic of, 3Ewha Brain Institute, Ewha W University, Seoul, Korea, Republic of

Th232 Disability or Disease? Connectivity Patterns in the Visual Network Following Optic Nerve Damage
Yovel Backner1, Friedemann Pahl2, Netta Levin3
1Hadassah-Hebrew University Medical Center, Jerusalem, Israel, 2Charité Universitätsmedizin, Berlin, Germany

Th233 Reduced functional connectivity of sensory-motor and vestibular cortices in subclinical agoraphobia
Iole Indovina1,2, Allegra Conti1, Francesca Lacquinti1,2,4, Jeffrey Staab1, Luca Passamonti1,2, Nicola Toschi1,2
1Saint Camillus International University of Health and Medical Sciences, Rome, Italy, 2IRCCS Foundation Santa Lucia, Laboratory of Neuromotor Physiology, Rome, Italy, 3Department of Systems Medicine, University of Rome Tor Vergata, Rome, Italy, 4Centre of Space Bio-medicine, University of Rome Tor Vergata, Rome, Italy, 5Departments of Psychiatry and Psychology and Otorhinolaryngology—Head and Neck Surgery, Mayo Clinic, Rochester, MN, United States, 6Department of Clinical Neurosciences, University of Cambridge, Cambridge, United Kingdom, 7Institute for Bioimaging and Molecular Physiology, Italian National Research Council, Milan, Italy, 8Martinos Center for Biomedical Imaging (MGH) and Harvard Medical School, Boston, MA, United States, 9Department of Biomedicine and prevention, University of Rome Tor Vergata, Rome, Italy

Th234 Local functional connectivity suggests functional immaturity in children with ADHD
Luis Marcos-Vidal1,2, Magdalena Martinez-García1,2,3, Clara Pretus1, David García1, Kenia Martínez Rodríguez1, Joast Janssen1, Oscar Vitayraya1, Manuel Desco1, Francisco Castellanos2, Daniel Martín de Blas1, Alberto Fernández-Pena1, Jorge Sepulcre1, Susanna Carmona1
1Instituto de Investigación Biomédica de Hospital Gregorio Marañón, Madrid, Spain, 2Centro de Investigación Biomédica en Red de Salud Mental, Madrid, Spain, 3Unitat de Recerca en Neurociència Cognitiva, Department of Psychiatry and Forensic Medicine, Univers, Madrid, Spain, 4Unidad de Medicina y Cirugía Experimental, Instituto de Investigación Sanitaria Gregorio Marañón, Madrid, Spain, 5Depart of Child and Adolescent Psychiatry, IISGM, Hospital General Universitario Gregorio Marañón, Madrid, Spain, 6Unidad de Recerca en Neurociència Cognitiva, Department of Psychiatry and Forensic Medicine, Univers, Barcelona, Spain, 7Fundación Centro Nacional de Investigaciones Cardiovasculares Carlos III, Madrid, Spain, 8Department of Child and Adolescent Psychiatry, Hassenfeld Children's Hospital at NYU Langone, New York, NY, New York, NY, United States, 9Instituto de Investigación Sanitaria Gregorio Marañón, Madrid, Spain, 10Massachusetts General Hospital, Harvard Medical School, Boston, MA, United States, 11Hospital General Gregorio Marañón, Madrid, Spain

Th235 Posterior Cingulate Cortex functional connectivity disruption in progressive Multiple Sclerosis
Giulia Bommartini1, Maria Giulia Preti1, Maria Petracca2,1, Majid Draby3, Mohamed Mounir El Mendili4, Matilde Inglese1, Dimitri Van De Ville6
1University of Genoa, Genoa, Italy, 2EPFL / University of Geneva, Genève, 3Icahn School of Medicine at Mount Sinai, New York, NY, United States, 4École Polytechnique Fédérale de Lausanne, Lausanne, Switzerland

Th236 Structural and Functional Brain Connectome in Different Motor Neuron Diseases: A Multicenter Study
Camilla Cividini1, Federico Agosta1, Silvia Basaia2, Francesca Trojsi1, Nilo Riva1, Cinzia Femia2, Cristina Moglia3, Maria Rosaria Monsuru1, Yuri Falzone1, Andrea Failini3, Adriano Chiò4, Gioacchino Tedeschi5, Massimo Filippa6
1San Raffaele Scientific Institute, Vita-Salute San Raffaele University, Milan, Italy, 2university of Campania Vanvitelli, Naples, Campania, 3University of Turin, Torino, Italy, 4San Raffaele Scientific Institute, Milan, Italy

Th237 White matter changes in the perforant path in patients with amyotrophic lateral sclerosis
Jeroen Mink1,2, Mariam Hemstra1, Karie Miller1, Istvan Huszar2, Mark Jenkinson1,3, Joanna Roophart1, Maximilian Wiessman1, Olaf Ansgore6, Menuka Pallebage-Gamarallage7, Anne-Marie van Cappellen van Walsum1
1Radboud University Medical Center, Nijmegen, Netherlands, 2Wellcome Centre for Integrative Neuroimaging, University of Oxford, Oxford, United Kingdom, 3University of Oxford, Oxford, United Kingdom, 4Amsterdam University Medical Center, University of Amsterdam, Amsterdam, Netherlands, 5Nuffield Department of Clinical Neurosciences, University of Oxford, Oxford, United Kingdom

Th238 Should high-frequency MRI monitoring be performed in natalizumab-treated MS patients?
Maximilian Wiessman1, Olaf Ansorge5, Menuka Pallebage-Gamarallage5, Anne-Marie van Cappellen van Walsum1
1RWTH Aachen, Aachen, NRW, 2CEDIMAT, Santo Domingo, Dominican Republic, 3University hospital RWTH Aachen University, Aachen, Germany

Th239 Brain functional alteration in Pantothenate Kinase-associated Neurodegeneration during resting state
Gianluca Mingozzi1, Peter Slater2, Rea Rodriguez-Raecke3
1University of Padova, Padova, Italy, 2University of Genoa, Genova, Italy, 3University of Pisa, Pisa, Italy, 4University of Genoa, Genoa, Italy, 5S Raffaele, Milano, Italy, 6Multiple Sclerosis Centre, Spedali Civili di Brescia, Brescia, Italy
**Th240** Revealing metabolic alterations in spinal cord injury patients with and without neuropathic pain

*Dario Pfyffer*, *Patrik Wyss*, *Eveline Huber*, *Amin Curt*, *Anke Henning*, *Patrick Freund*

1.Balgirt University Hospital, University of Zurich, Zurich, Switzerland, 2.Institute for Biomedical Engineering, University and ETH Zurich, Zurich, Switzerland

**Th241** An EEG study of Repetition Suppression in patients with Fibromyalgia

*Pooja Finol*, *Daniel Mitchell*, *Ingrid Scholtes*, *Gillian Isen*, *Giandomenico Iannetti*, *Michael Lee*

1.University of Cambridge, Division of Anaesthesia, Cambridge, United Kingdom, 2.University of Cambridge, MRC- Cognition and Brain Sciences Unit, Cambridge, United Kingdom, 3.UCL, Department of Neuroscience, Physiology and Pharmacology, London, United Kingdom

**Th242** Towards individual-level somatotopic mapping in chronic spinal cord injury using multimodal MRI

*Jungin Xu*, *Joo-woo Kim*, *Benjamin Ely*, *Matt Glasser*, *Chung-Ying Tsai*, *Miguel Escalon*, *Vincent Huang*, *Thomas Bryce*, *Pierre Asselin*, *Noam Halef*, *Ann Spungen*

1.Icahn School of Medicine at Mount Sinai, New York, NY, United States, 2.Washington University St Louis, St Louis, MO, United States, 3.James J. Peters VA Medical Center, Bronx, NY, United States

**Th243** Connectome plasticity following surgical resection of left cerebral gliomas involving language areas

*Nan Zhang*, *Xindi Wang*, *Mingrui Xiao*, *Tianming Qiu*, *Junfeng Lu*, *Yong He*, *Jinsong Wu*, *Liangfu Zhou*

1.The First Affiliated Hospital of USTC (Anhui Provincial Hospital), Hefei, China, 2.State Key Laboratory of Cognitive Neuroscience and Learning, Beijing Normal University, Beijing, China, 3.McGill Centre for Integrative Neuroscience, Montréal, Canada, 4.Fudan university Huashan Hospital, Shanghai, China

**Th244** Increased motor connectivity in glioma subjects following preoperative motor training and TDCS

*Stefan Lang*, *Liu Shi Gan*, *Oury Monchi*, *Adam Kirton*, *John Kelly*

1.University of Calgary, Department of Clinical Neurosciences, Calgary, Alberta, Canada, 2.Hotchkiss Brain Institute, Calgary, Alberta, Canada

**Th245** The Association of Spontaneous Resting Brain Activity and Abnormal Left Ventricular Heart Function

*Amanda Worker*, *Owen O’Daly*, *Danai Dima*, *Steve Williams*

1.King’s College London, London, United Kingdom

**Th246** Clinical investigation of MEG evoked field potentials and topographical mappings in arthrogryposis

*Russei Char*, *Lyia Merzori*, *Olga Agranovich*, *Maria Nazarova*, *Anna Shestakova*

1.Centre for Cognition and Decision Making, National Research University Higher School of Economics, Moscow, Russian Federation, 2.The Turn Scientific Research Institute for Children’s Orthopaedics, St.Petersburg, Russian Federation

**Th247** Identifying shared variance between resting state functional connectivity and migraine symptoms

*Samuel Krammel*, *Jennifer Haythornthwaite*, *David Seminowicz*

1.University of Maryland Baltimore, Baltimore, MD, United States, 2.Department of Psychiatry and Behavioral Science, Johns Hopkins University, Baltimore, MD, United States

**Th248** Evidence for progressive axonal damage in early multiple sclerosis by multi-shell diffusion MRI

*Nicola Toschi*, *Silvia De Santis*, *Tobias Granberg*, *Russell Ouellette*, *Constantina Treaba*, *Elena Herranz*, *Caterina Mainiero*

1.Martinos Center for Biomedical Imaging (MGB) and Harvard Medical School, Boston, MA, United States, 2.Instituto de Neurociencias de Alicante, Alicante, Spain, 3.Department of Clinical Neuroscience, Karolinska Institutet, Stockholm, Sweden

**Th249** Associations between brain reserve and subclinical risk of multiple sclerosis


1.Ludwig Maximilians University Hospital, Munich, Germany, 2.Department of Psychiatry and Psychotherapy, University Hospital, LMU Munich, Munich, Germany, 3.Ludwig Maximilians University Hospital, Institute of Clinical Neuromunology, Munich, Germany, 4.Amsterdam University Medical Centre, Amsterdam, Noord-Holland, 5.Department of Neurology, University Hospital, LMU Munich, Munich, Germany, 6.University Hospital LMU, Munich, Germany

**Th250** Restriction spectrum imaging in multiple sclerosis: correlating imaging parameters with disability

*Daniel Rinker*, *Tuva Hope*, *Mona Beyer*, *Piotr Sowa*, *Gro Nygaard*, *Einar Hagestad*, *Synne Brune*, *Elisabeth Cellius*, *Atle Bjørnrud*, *Hanne Flinstad Harbo*

1.Oslo University Hospital, Oslo, Norway

**Th251** Template-based hippocampus segmentation reveals subfield volume decreases in Motor Neurone Disease

*Thomas Shaw*, *Saskia Bollmann*, *Christine Guo*, *Jürgen Fripp*, *Olivier Salvado*, *Steffen Bollmann*, *Markus Barth*

1.Centre for Advanced Imaging, The University of Queensland, Brisbane, Australia, 2.QIMR Berghofer, Brisbane, Australia, 3.The Commonwealth Scientific and Industrial Research Organisation, Brisbane, Australia

**Th252** Metabolic changes in the Hippocampus after Spinal Cord Injury is associated with Memory Function

*Eve Huber*, *Dario Pfyffer*, *Amin Curt*, *Anke Henning*, *Patrick Freund*, *Patrik Wyss*

1.Balgirt University Hospital, Zurich, Switzerland, 2.Institute for Biomedical Engineering, University and ETH Zurich, Zurich, Switzerland, 3.Max Planck Institute for Biological Cybernetics, Tübingen, Germany, 4.Balgirt University Hospital, Zurich, Switzerland, 5.Department of Brain Repair and Rehabilitation, UCL, London, United Kingdom, 6.Wellcome Trust Centre for Neuroimaging, UCL Institute of Neurology, UCL, London, United Kingdom, 7.Department of Neurorheology, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, 8.Department of Radiology, Swiss Paraplegic Centre, Nottwil, Switzerland

**Th253** Regional homogeneity detects focal lesions in nonfatal pediatric Anoxic Brain Injury from drowning

*Shengwen Deng*, *Marim Ishaque*, *Crystal Franklinii*, *Florence Chiang*, *Peter Fox*

1.Research Imaging Institute, University of Texas Health at San Antonio, San Antonio, TX, United States, 2.Biomedical Engineering, University of Texas at San Antonio, San Antonio, TX, United States, 3.Research Imaging Institute, University of Texas Health at San Antonio, San Antonio, TX, United States

**Th254** Gray Matter Predicts Cognitive Impairment in Multiple Sclerosis: A 14-Year Observational Study


1.UCSF, San Francisco, CA, United States

**Th255** Differences in regional cerebellar volume between adults with ALS and healthy older adults

*Vincent Koppelmans*, *Robert Welsh*

1.University of Utah, Salt Lake City, UT, United States
THURSDAY, JUNE 13

Odd numbers: 12:45 – 13:45; Even numbers: 13:45 – 14:45; Poster Reception: 16:00 – 17:00

**Th265** A machine learning strategy for using rsfMRI to predict study adherence in a mental training trial
- Marzie Saghafi1
- Farshid Varno1
- Stan Matwin1
- Muhammad Hashmi2
- Jonathan Greenberg2
- Sara Lazar2
- Javeria Hashmi3
- Dalhousie University, Halifax, 1MIT Media Lab, Boston, MA, United States, 2Harvard Medical School, MGH, Boston, MA, United States, 3Dalhousie University, Halifax, NS, Canada

**Th266** Emotion is more important than cognition in deciding advantageously
- Ruijia Zhu1
- Peng Li1
- Ying Li1
- Xiaochao Zhang2
- University of Science & Technology of China, Hefei, China, 1University of Science and Technology of China, Hefei, China

**Th267** Self-controlled decision-making buffers stress response
- Ruijia Zhu1
- Wei Hong2
- Xiaochao Zhang2
- University of Science & Technology of China, Hefei, China, 1University of Science and Technology of China, Hefei, China

**Th268** The Anterior Cingulate Gyrus and Sulcus Play Different Roles in Dictator Game
- Nai-Shing Yen2
- Ying-Chun Chen2
- National Chengchi University, Taipei, Taiwan

**Th269** Genetic effects on neural encoding of computational markers of impulsivity and decision-making
- David Cole1
- Lionel Rigoux2
- Swen Schwarz2
- Andrea Diaconescu1
- Christoph Mathys2
- Zoltan Nagy2
- Katharina Wellstein1
- Andrea Schote2
- Boris Quednow2
- Klaas Enno Stephan3
- 1University of Zurich, Zurich, Switzerland, 2Max Planck Institute for Metabolism Research, Cologne, Germany, 3University of Basel, Basel, Switzerland, 4International School for Advanced Studies, Trieste, Italy, 5Translational Neuromodeling Unit, ETH & University of Zurich, Zurich, Switzerland, 6Institute of Psychobiology, University of Trier, Trier, Germany, 7Psychiatric University Hospital Zurich, Zurich, Switzerland, 8Translational Neuromodeling Unit, Zurich, Switzerland

**Th270** Individual Agreeableness Modulates Group Member Risk Taking Behavior and Brain Activity: An ERP Study
- Feng Wang1
- Xin Wang1
- Yu Pan1
- Hengyi Ruo1
- Shanghai International Studies University, Shanghai, China

**Th271** Belief structures behavioral and neural interpretations of objective sensory data
- Yi Lu1
- Kenneth Kishida2
- Terry Lohrenz3
- Iris viIares2
- Sebastien Hertz2
- P. Montaguel1
- 1Virginia Tech Carilion Research Institute, Roanoke, VA, United States, 2Wake Forest School of Medicine, Winston-Salem, NC, United States, 3Department of Psychology, University of Minnesota, Twin Cite, Minneapolis, MN, United States, 4Université de Montréal, Montréal, Canada

**Th272** Social Value Orientation Modulates Fairness Processing: Evidence From Behavior and Brain Potentials
- Xinmu Hu1
- Xiaolin Mao2
- 1Renmin University of China, Beijing, China, 2Department of Psychology, Renmin University of China, Beijing, China

**Th273** Effect of providing choice on processing of sweet drinks in the brain
- Olga Davidenko1
- Sylvie Cléjorg2
- Suzanne Higgs3
- Beatrice Claise1
- Claire Gaudichon4
- Nicolas Darce4
- Gilles Freament3
- Jean-Marie Bonny3
- 1AgroParisTech, Paris, France, 2AgroResonance, UR370 QuoPA - INRA, Saint-Genès Champanelle, France, 3School of Psychology, University of Birmingham, Birmingham, United Kingdom, 4Neurordiologie A, Plateforme Recherche IRM – CHU Gabriel – Montpied, Clermont-Ferrand, France, 5UMR914 PNCA – INRA, AgroParisTech, Université Paris-Saclay, Paris, France, 6INRA - AgroResonance, Saint-Genès Champanelle, France
**HIGHER COGNITIVE FUNCTIONS**

**Decision Making**

**Thursday, June 13**

Odd numbers: 12:45 – 13:45; Even numbers: 13:45 – 14:45; Poster Reception: 16:00 – 17:00

---

**Th274** Reward and Fictive Prediction Error signals in the Ventral Striatum  
Aníl Santos-Angles1,2,3, Paola Fuentes-Ciaramonte1,2, Isabel Argílal, Maria Guardiola Ripoll1, Carmen Almodovar1, Peter McNemar1,2, Edith Pomarol-Clotet1,2, Joaquim Rubió2,4,5,6  
1FIDMAG Research Foundation, Sant Boi de Llobregat, Barcelona, Spain, 2CIBERSAM, Barcelona, Spain, 3Universitat de Barcelona (UB), Barcelona, Spain, 4Institut d’Investigacions Biomédiques August Pi i Sunyer (IDIBAPS), Barcelona, Spain, 5Department of Clinical Neuroscience, Centre for Psychiatric Research and Education, Karolinska Institutet, Stockholm, Sweden, 6Department of Psychiatry Studies, Institute of Psychiatry, Psychology and Neuroscience, King’s College London, London, United Kingdom

---

**Th275** Stable value-based choices relate to structural connectivity between hippocampus and parietal cortex  
Manus Mois1, Rafael Polanico2, Marcus Grueschow1, Yoo Jin Lee1, Zoltan Nagyl, Christian Ruff1  
1University of Zurich, Zurich, Switzerland, 2ETH Zurich, Zurich, Switzerland

---

**Th276** Toward group classification models for rtfMRI neurofeedback using data from a decision-making task  
Mark Orlaff1, Jeffrey Soldate1, Jonathan Lisinski2, Stephen LaConte3, Brooks King-Casas4, Pearl Chiu1  
1Virginia Tech, Roanoke, VA, United States

---

**Th277** Prefrontal cortex activity is modulated by uncertainty independence of the changes in learning rate  
Gabriela Valdebenito-Oyarzo1, Maria Paz Martinez-Molina2, Josefina Larraín-Valenzuela1, Ximena Stecher1, César Salinas4, Francisco Zamorano1, Pablo Billeke1  
1CICS - Universidad Del Desarrollo, Santiago, Chile, 2Universidad Del Desarrollo, Santiago, Chile, 3Clinica Alemana de Santiago, Santiago, Chile, 4Clinica Alemana, Santiago, Chile

---

**Th278** Parietal cortex encode Value and Prediction Error in ambiguity decisions  
Gabriela Valdebenito-Oyarzo1, Maria Paz Martinez-Molina2, Josefina Larraín-Valenzuela1, Ximena Stecher1, César Salinas4, Francisco Zamorano1, Pablo Billeke1  
1Universidad Del Desarrollo, Santiago, Chile, 2Universidad Del Desarrollo, Santiago, Chile, 3Clinica Alemana de Santiago, Santiago, Chile, 4Clinica Alemana, Santiago, Chile

---

**Th279** Reward magnitude increases learning rate and the activity in value-related brain areas in adolescent  
Maria Paz Martinez-Molina1, Gabriela Valdebenito-Oyarzo1, Josefina Larraín-Valenzuela1, Ximena Stecher1, César Salinas4, Francisco Zamorano1, Pablo Billeke1  
1Universidad Del Desarrollo, Santiago, Chile, 2Clinica Alemana de Santiago, Santiago, Chile, 3Clinica Alemana, Santiago, Chile

---

**Th280** Decision making deficits in DM1 are related to the Ventral Segmental Area dysfunctions  
Marco Bozzali1, Laura Serra1, Marta Scocchiero1, Marcello D’Ameiolo1, Michela Braschini1, Silvestri Gabriellet2, Anton Petrucc3, Giovanni Meola2, Laura Petrovis1, Carlo Caltagirone1  
1Neuroimaging Lab, S. Lucia Foundation, Rome, Italy - Brighton & Sussex Medical School, Rome/University of Sussex, Brighton, Italy, 2IRCCS Fondazione Santa Lucia, Rome, Italy, 3Santa Lucia Foundation, Rome, Italy, 4Catholic University, Rome, Italy, 5S. Camillo Forlanini Hospital, Rome, Italy, 6University of Milan, Milan, Italy

---

**Th281** Neural correlates of moral learning  
Alessandro Nostre2, Kalliopi Ioumpa1, Selene Galli1, Michael Spezio2,3, Christian Keysers1, Valeria Gazzoli1  
1Netherlands Institute for Neuroscience, Amsterdam, Netherlands, 2Scripps College, Claremont, CA, United States, 3Institut für Systems Neuroscience, Hamburg, Germany, 4Faculty of Social and Behavioural Sciences, Amsterdam, Netherlands

---

**Th282** Decoding the Neural Correlates of Dynamic Decision-Making in humans  
Thomas Thiery1, Arthur Dehgan1, Tim Meehan1, Pierre Rainville2, Paul Cisek1, Karim Jerbi3  
1University of Montreal, Montreal, Quebec, Canada, 2University of Montreal, Montréal, QC, Canada

---

**Th283** Individual differences in dopamine functioning underlying model-based and model-free control  
Ying Lee1, Nils Kroemer1, Shakaar Pooseh1, Lorenz Deserno1, Liane Oehme1, Quentin Huys1, Thomas Goschke2, Michael Smolka1  
1Technische Universität Dresden, Dresden, Germany, 2University of Tübingen, Tübingen, Germany, 3University College London, London, United Kingdom

---

**Th284** The effects of reward certainty on voluntary choices: an EEG study  
Wojciech Zajkowski1, Dominik Krzeminski2, Jacopa Barone2, Sabina Baltruschat1, Lisa Evans3, Jiaxiang Zhang4  
1Cardiff University, CARDIFF, United Kingdom, 2Cardiff University, Cardiff, United Kingdom, 3UCL, London, United Kingdom, 4University of Grenada, Grenada, Spain

---

**Th285** Neuropharmacology of approach and avoidance: Disentangling value and salience processing  
Geraldine Gvozdanovic1, Lydia Heilrun1, Thorsten Kohnt, Boris Quednow1, Philippe Tobler1  
1University of Zurich, Zurich, Switzerland, 2Northwestern University, Chicago, IL, United States, 3Psychiatric University Hospital Zurich, Zurich, Switzerland

---

**Th286** Characterizing the Neural Correlates of Human Perceptual Decision Making in Dynamic Environments  
Yvonne Yau1, Matsa Dado1, Madeline Taylor2, Yashar Zeighami2, Paul Cisek1, Lesley Fellows2, Alain Dagher3  
1Montreal Neurological Institute, McGill University, Montreal, QC, Canada, 2McGill University, Montreal, Quebec, Canada, 3Montreal Neurological Institute, McGill University, Montreal, Quebec, Canada

---

**Th287** Dynamic network changes of auditorily biased decision-making  
Christine Ahrends1, Joana Cabral1, Angus Stevner1, Peter Vuust1, Morten Kringelbach4  
1Aarhus University, Aarhus, Denmark, 2ICVS, University of Minho, Braga, Portugal, 3Center for Music in the Brain, Department of Clinical Medicine, Aarhus University, Aarhus, Denmark, 4Department of Psychiatry, University of Oxford, Oxford, United Kingdom

---

**Th288** Orbitofrontal-striatal Connectivity in Reversal Learning  
Tiffany Bell1, Sophie Gibbons1, Angela Langdon2, Michael Lindner1, Anastasia Christakou1  
1University of Reading, Reading, United Kingdom, 2University of Calgary, Calgary, Alberta, Canada, 3Princeton University, Princeton, NJ, United States
Th289 Delineating Reward/Avoidance Learning in Impulsive-Compulsive Spectrum Disorders
Xiaoliu Zhang1, Chao Sud2, Ben Harrison3, Leah Braganza4, Ben Fulcher5, Leonardo Fontenelle2, Carsten Murawski1, Murat Yüce2
1Monash University, Melbourne, Australia, 2Monash University, Clayton, Australia, 3The University of Melbourne, Melbourne, Australia, 4School of Psychology, University of Sydney, Sydney, Australia, 5School of Psychological Sciences, Monash University, Melbourne, Australia, 6Brain, Mind & Markets Laboratory, Department of Finance, The University of Melbourne, Melbourne, Australia

Th290 Eye movement of saliency guided decision making strategy
Cai Chuhua1, Yu Rongjun1
1South China Normal University, Guangzhou, China

Th291 Prediction errors during a social economic game mediate age and sex differences in impulsivity
Michael Hallquist1, Alison Schreiber1, Polina Vanyukov1, Beatriz Luna2, Alexandre Dombrovski2
1Penn State University, University Park, PA, United States, 2University of Pittsburgh, Pittsburgh, PA, United States

Th292 Cortical information dynamics and the exploit/explore tradeoff
Alexandre Dombrovski2, Beatriz Luna2, Michael Hallquist2
2University of Pittsburgh, Pittsburgh, PA, United States

Th293 Neural Mechanisms Underlying Learning on Social Networks
Yaomin Jiang1, Qingtian Mi1, Lusha Zhu2
1Peking University, Beijing, China

Th294 ReHo and activity pattern of DMPFC predict individual differences in decision impulsivity
Qinghua He1, Qiang Wang3, Chenyu Lv3, Chuansheng Chen4
1University of Science, Chongqing, China, 2Beijing Normal University, Beijing, China, 3Southwest University, Chongqing, Beibei, 4University of California, Irvine, Irvine, CA, United States

Th295 Attentional prioritization transforms task-relevant rules into action-oriented representations
Carlos Gonzalez-Garcia1, Marcel Brass1
1Ghent University, Ghent, Belgium

Th296 Dynamic brain states predict inhibitory control ability in children with ADHD
WeiDong Cai1, Katherine Duberg1, Jaiil Taghio2, Stephen Hinshaw2, Vinod Menon1
1Stanford University, Palo Alto, CA, United States, 2Uppsala University, Uppsala, Sweden, 3University of California, Berkeley, Berkeley, CA, United States

Th297 Necessity of the posterior parietal cortex in response inhibition revealed by fMRI and TMS
Takahiro Osada1, Shiri Ono1, Akitoji Ogawa1, Masako Tanaka2, Akimitsu Suda2, Koji Kamogata1, Masaaki Hori1, Shigeki Aoki1, Yasushi Shimo1, Nobutaka Hattori1, Takahiro Shimizu1, Hiroyuki Enomoto1, Ruederat Keerativittayayut2, Daiki Tanaka1, Ryuta Aoki1, Kiyoshi Nakahara2, Koji Jimura3
1Department of Biosciences and Informatics, Keio University, Yokohama, Japan, 2Research Center for Brain Communication, Kochi University of Technology, Kochi, Japan, 3Research Institute for Future Design, Kochi University of Technology, Kochi, Japan

Th298 Differential Effects of Set-maintenance and Rapid-adaptive networks on Dual-task Demand: a TMS Study
Lok Hong Lam2, C. C. Chan2
1The Hong Kong Polytechnic University, Hong Kong, China, 2The Hong Kong Polytechnic University, Hong Kong, Hong Kong

Th299 Modeling the relationship of physical fitness to working memory via fMRI activation and performance
Tetu Sishikara1, Atsushi Miyazaki1, Hiroki Tanaka1, Takayuki Fujii, Muneyoshi Takahashi1, Tetsuya Matsudo1
1Tomagawa University Brain Science Institute, Machida, Japan

Th300 Common neural network for different functions: an investigation of proactive and reactive inhibition
Fan Zhang1, Sunao Iwaki1
1National Institute of Advanced Industrial Science and Technology, Tsukuba, Japan, 2AIST, Tsukuba, Japan

Th301 Left-lateralized cortical mechanisms involved in Stroop effect revealed by vocal response design
Maho Hosono1, Ruederat Keerativittayayut2, Daiki Tanaka1, Ryuta Aoki1, Kiyoshi Nakahara2, Koji Jimura3
1University of Basel, Center of Old Age Psychiatry, Psychiatric University Hospital (UPK), Basel, Switzerland, 2University of Basel, Transfuculty Research Platform Molecular and Cognitive Neurosciences, Basel, Switzerland, 3University of Basel, Centre for Chronobiology, Psychiatric University Hospital (UPK), Basel, Switzerland, 4University of Basel, Psychiatric University Hospital (UPK), Basel, Switzerland, 5Old Age Psychiatry, University Medicine of Aging, Felix Platter-Hospital, Basel, Switzerland

Th302 Neural mechanisms of visual and auditory pattern separation: a modality comparison
Marco Caviez1, Gaetan Reichen1,2, Stefano Bargawi1, Thomas Leyhe1, Tobias Melcher1
1University of Basel, Center of Old Age Psychiatry, Psychiatric University Hospital (UPK), Basel, Switzerland, 2University of Basel, Transfuculty Research Platform Molecular and Cognitive Neurosciences, Basel, Switzerland, 3University of Basel, Centre for Chronobiology, Psychiatric University Hospital (UPK), Basel, Switzerland, 4University of Basel, Psychiatric University Hospital (UPK), Basel, Switzerland, 5Old Age Psychiatry, University Medicine of Aging, Felix Platter-Hospital, Basel, Switzerland

Th303 Distributed surges in activity during task-switching
Richard Daw1, Eyal Sore1, Robert Leech2, Peter Hellyer2, Adam Hampshire3
1C3NL, Imperial College London., London, United Kingdom, 2CNS, King’s College London, London, United Kingdom

Th304 Fronto-striatal contributions to the control of response interference: a fMRI study
Claudia Schmidt1, David Timpert1, Isabel Arend1, Simone Vossei1, Gereon Fink2, Avishai Henik3, Peter Weiss4
1Forschungszentrum Jülich GmbH, Cognitive Neuroscience (INM-3), Jülich, Germany, 2University Hospital Cologne, Department of Neurology, Cologne, Germany, 3Ben-Gurion University of the Negev, Department of Psychology, Beer-Sheva, Israel, 4University of Cologne, Department of Psychology, Cologne, Germany

Th305 Functional connectivity changes in school-age children after intensive inhibitory control training
Marine Mayoral1,2,3, Mikhail Naveau4, François Orlic1,5, Lisa Delalande1,2,3, Valérie Danin-Domire1,2,3, Karel Meefout1,2,3, Nicolas Poinel1,2,3, Julie Viator2,3, Pranit Kundu1,2,3, monique Ernst4, Bernard Guillou5,6, Olivier Houd1,2,3,4, Grégoire Borst2,5,6, Arnaud Cachio1,2,3,4
1Paris Descartes University, Sorbonne Paris Cité, Paris, France, 2CNRS UMR 8240, Laboratory for the Psychologi of Child Development and Education, Paris, France, 3Biomedical imaging Platform Cytocan, Caen, France, 4Normandie Univ, UNICAEN, CNRS, UMS 3408, GIP CYCERON, Caen, France, 5Neonatal Service, CHU, Caen, France, 6Section on Advanced Functional Neuroimaging, Brain Imaging Center, Icahn School of Medicine Mt Sinai, New York, NY, United States, 7Section on Neurobiology of Fear and Anxiety, Emotion and Development Branch, NIMH, Bethesda, MD, United States, 8Institut Universitaire de France, Paris, France, 9INSERM UMR894, Imaging biomarkers for brain development and disorders, Paris, France
Th306 Congruency sequence effects and related neural processing in Parkinson’s disease
Rea Rodriguez-Raecke1, Christoph Schrader2, Pawel Tack3, Dirk Dressler3, Heinrich Lanfermann4, Matthias Wittforth4
1University hospital RWTH Aachen University, Aachen, Germany, 2Hannover medical school, Hannover, Germany, 3University of Bonn Medical Center, Bonn, Germany, 4Hannover Medical School, Hannover, Germany

Th307 Functional connectivity networks supporting attentional control differ in term and preterm children
Munir Wheelock1, Rachel Leont3, Samudragupta Bora1, Nicola Austin1, Tracy Meiler1, Adam Eggbrecht4, Chris Smyser1, Lianne Woodward4
1Washington University in St. Louis, St. Louis, MO, United States, 2The University of Queensland, South Brisbane, Australia, 3University of Otto1, Christchurch, Christchurch, New Zealand, 4Washington University in St Louis, St Louis, MO, United States, 4University of Canterbury, Christchurch, New Zealand

Th308 What executive function network is that? An image-based meta-analysis into consistency and overlap
Helene van Ettinger-Veenstra1,2, Suzanne Witt3, Taylor Salo1, Michael Riedel1, Angela Laird1
1Karolinska Institutet, Stockholm, Sweden, 2CMIV, Linköping University, Linköping, Sweden, 3CSAN, Linköping University, Linköping, Sweden, 4BrainsCAN, University of Western Ontario, London, ON, 5Department of Psychology, Florida International University, Miami, FL, United States, 6Department of Physics, Florida International University, Miami, FL, United States

Th309 Systematic violations of independence in models of response inhibition
Patrick Bissett1, Russell Poldrack1, Gordon Logan2
1Stanford University, Stanford, CA, United States, 2Vanderbilt University, Nashville, TN, United States

Th310 Two neural mechanisms underlie improved bimodal working memory in musically trained children
Leonie Kause1, Pablo Billeke2, Mary Elizabeth Sutherland1, Josefinia Larrain-Valenzuela1, Ximena Stecher1, Gattfried Schlaug1, Francisco Aboitiz3, Francisco Zamorano1
1Universidad del Desarrollo, Santiago, Chile, 2CICS, Universidad del Desarrollo, Santiago, Chile, 3Pontificia Universidad Catolica de Santiago, Chile, 4Clinica Alemana de Santiago, Santiago, Chile, 5Beth Israel Deacomens Medical Center - Harvard Medical School, Boston, MA, United States, 6Pontificia Universidad Catolica de Santiago, Chile, 7Univerisidad del Desarrollo, Santiago, Chile

Th311 Reconceptualising inhibition in ADHD: A behavioural and diffusion imaging study
Timothy Silk1, Jason He1, James Coxon2, Daryl Efron3, Vicki Anderson3, Philip Hazell4, Christian Hyde1, Emma Sciberras1, Dakanin University, Melbourne, Australia, 2Monash University, Melbourne, Australia, 3Royal Children’s Hospital, Melbourne, Australia, 4University of Sydney, Sydney, Australia

Th312 Functional and structural networks underlying response inhibition
Youngmin Huh1, Youngjo Lee1, Dong Soo Lee1, Hyejin Kang2
1Seoul National University, Seoul, Korea, Republic of

Th313 Different factorisation approaches of the Delis-Kaplan Executive System reveal a bifactor model
Julia Comillien1, Susanne Weis2, Ji Chen1, Arideitis Sotiras3, Simon B. Eickhoff1, Sarah Genon1
1ForschungszentrumJulich, Julich, Germany, 2Universitätsklinikum Düsseldorf, Institute of Systems Neuroscience, Düsseldorf, Germany, 3Mollinckrodt Institute of Radiology, School of Medicine, Washington University, St. Louis, MO, United States

Th314 Strategy switches in proactive inhibitory control
Mari Messel1, Lisa Raud1, Per Kristian Hoff1, Cecile Skafnet1, René Huster1
1University of Oslo, Oslo, Norway

Th315 Control–motivation interplay during proactive reconfiguration for novel instructed tasks
Ana Polenciano1, Carlos Gonzalez-Garcia2, Juan E. Arco1, Liz Pessoa1, Maria Ruiz1
1University of Granada, Granada, Spain, 2Ghent University, Ghent, Belgium, 3University of Maryland, College Park, MD, United States

Th316 Neural mechanisms of novel instruction processing for implementation and memorization demands
Alberto Sobrado1, Ana Polenciano1, Carlos Gonzalez-Garcia2, Maria Ruiz1
1University of Granada, Granada, Spain, 2Ghent University, Ghent, Belgium

Th317 Structural Brain Network Correlates of Attention Performance in Adolescents
Namasesi Jariwala1, Justin Yuan1, Duan Xu1, Olga Tymofiyeva1
1University of California San Francisco, San Francisco, CA, United States

Th318 Common and Distinct Control Organizations of the Prefrontal and Posterior Parietal Cortices
Derek Nee1
1Florida State University, Tallahassee, FL, United States

Th319 Photobiomodulation over the Bilateral Inferior Frontal Gyri Influence on the Interference Processing
Adina Mincic1
1University of Oradea, Oradea, Bihor

Th320 Processing of congruency effects by different parts of medial frontal cortex – an fMRI study
Jukub Wojciechowski1, Tomasz Wolak2, Patrycja Dzianok2, Ingrida Antonova2, Katarzyna Jurewicz2, Jacek Rogala1, Ewo Kubiki1
1Institute of Physiology and Pathology of Hearing, Warsaw, Poland, 2The Nencki Institute of Experimental Biology PAS, Warsaw, Poland

Th321 Stimulating stopping: a tDCS-EEG-EMG study
Christina Thunberg1, Mari Messel1, Lisa Raud1, René Huster1
1University of Oslo, Oslo, Norway

Th322 Behavioral and fMRI evidence of Emotional Valence of Abstract or Concrete words on Cognitive Control
Virginia Borga1, Eleonora Catricala1, Jubin Abutaleb2, Stefano Cappano3, Pasquala Della Rosa3
1Institute for Advanced Studies UISS, Pavia, Italy, 2NEUROFARBA (Department of Neuroscience, Psychology, Drug Research and Child Health), University of Florence, Florence, Italy, 3Centre for Neurolinguistics and Psycholinguistics, San Raffaele University, Milan, Italy, 4IRCCS Istituto Centro San Giovanni di Dio Fatebenefratelli, Brescia, Italy, 5San Raffaele Scientific Institute, Milan, Italy

Th323 A combined EEG-EMG-TMS study on the modulation of response inhibition by proactive control
Lisa Raud1, Rene Huster1, Ludovica Labruna1, Mari Messel1, Vincent Ngo2, Richard Ivory3, Ian Greenhouse3
1University of Oslo, Oslo, Norway, 2University of California, Berkeley, Berkeley, CA, United States, 3University of Oregon, OR, United States

Th324 Knowing ‘when’ and knowing ‘what’: The impact of cue information on intrinsic top-down control
Maximillian Egan1, Cyril Costines2, Mark D’Esposito2, Sepideh Sadaghiani3
1University of Illinois at Urbana-Champaign, Urbana, IL, United States, 2University of California, Berkeley, Berkeley, CA, United States, 3Beckman Institute for Advanced Science and Technology, Urbana, IL, United States
Th325 Human Theta Oscillations Connectivity Between Prefrontal and Inferotemporal Cortices During Planning
Marcos Domic-Siede1, Martin Ivan2, Brice Follet3, Samuel El Bouzaidi Tial3, Ranganatha Sitaram4, Marcela Perrone-Bertolotti5, Tomas Ossandorn6
1Pontificia Universidad Católica de Chile, Santiago, Chile, 2Universidad de Chile, Santiago, Chile, 3Pontificia Universidad Católica de Chile, Santiago, Chile, 4Univ Grenoble Alpes, Grenoble, Rhone Alpes, 5Institute for Biological and Medical Engineering, School of Engineering, Medicine and Biology, Santiago, Chile, 6Neurology Dept and GIN U836 INSERM-UJF-CEA, Grenoble, France

Th326 Flanker or Simon effect: which one is more demanding? EEG theta power versus behavioral results
Patrycja Dzianok1, Ingrida Antonova1, Jakub Wojciechowski1, Jacke Rogala1, Ewa Kublik1
1Institute of Experimental Biology PAS, Warsaw, Poland, 2Bioimaging Research Center, World Hearing Center Institute of Physiology and Pathology of Hearing, Kajetany, Poland

Th327 Attention to reward modulates dynamics in the rostral-lateral PFC during sequential monitoring
Teresa C. McKee1, Theresa Desrochers1
1Brown University, Department of Neuroscience, Providence, RI, United States

Th328 Superadditive and Divergent Effects of Cognitive Interference on Cortical Oscillations
Alex Wiesman1, Tony Wilson1
1University of Nebraska Medical Center, Omaha, NE, United States

Th329 Overlapping Lateral and Medial PFC Neural Networks Relate to Emotion and Mnemonic Suppression
Karisa Hunt1, Lindsay Knight1, Teodora Stoica1, Matthew Harper1, Farah Nada2, Brendan Depue1
1University of Louisville, Louisville, KY, United States, 2University of Louisville, Louisville, KY, United States, 3Johns Hopkins, Baltimore, MD, United States

Th330 Intrinsic activity scale-free properties are associated with occulomotor impulsivity
Tzu-Yu Hsu1, Marcus Missal2
1Mind, brain and consciousness, Taipei City, Taiwan, 2Neuroscience, Brussels, Belgium

Th331 The role of the DLPPC in dietary self-control in relation to Uncontrolled Eating: an FMRI−TMS study
Jung Eun Han1, Thomas Hinault2, Jennifer Guan1, Uku Vainik3, Travis Baker4, Alain Dagher5
1Montreal Neurological Institute, Montreal, Quebec, Canada, 2Johns Hopkins University, Baltimore, MD, United States, 3Washington University, St. Louis, MO, United States, 4Washington University, St. Louis, MO, United States, 5Montreal Neurological Institute, Montreal, Quebec, Canada

Th332 Age and Developmental Considerations in the Inhibitory Control
Scott Langenecker1, Katie Bessette1, Stephanie Pocius1
1The University of Utah, Salt Lake City, UT, United States

Th333 Structural Development and Functional Connectivity of Executive Function and ADHD in Children
Elizabeth Hawkey1, Brent Roppanport2, Sridhar Kandala3, Joon Luby4, Deanna Barch5
1Washington University, St. Louis, MO, United States, 2Washington University in St. Louis, St. Louis, MO, United States, 3Washington University in St. Louis, St Louis, MO, United States, 4Washington University in St. Louis, St. Louis, MO, United States, 5Washington University in St. Louis, St. Louis, MO, United States

Th334 Sex dependency of response inhibition network during stop-signal task performance
Alexandra Gaillard1, Susan Rossell1, Sean Carruthers1, Philip Sunner1, Erica Neill1, Wei Lin Toh1, William Woods1, Andrea Phillipou1, Pat Micheie1, Matthew Hughes1
1Swinburne University of Technology, Melbourne, Australia, 2University of Newcastle, Newcastle, NSW

Higher Cognitive Functions Other

Th335 Neural bases of external and internal attention in remembering future intentions: a MEG study
Giorgia Conci1, Patrizia Bisiacchi1, Francesco Chiassi1, Silvia Di Tommaso1, Ilaria Mancuso1, Francesco Piccione1, Giorgio Arcar1
1University of Padua, Padua, Italy, 2IRCCS Fondazione Ospedale San Camillo, Venezia, Italy

Th336 Static functional connectivity at rest associated with patterns of ongoing thought
Theodoros Karapanagiotidis1, Elizabeth Jefferies1, Jonathan Smallwood1
1University of York, York, United Kingdom

Th337 The lateral occipitotemporal cortex – A hub for action representations?
Franziska Pfanstiel1, Paul Downing1, Angelika Lingnau1
1Royal Holloway University of London, Department of Psychology, Egham, Surrey United Kingdom, 2Wales Institute of Cognitive Neuroscience, School of Psychology, Bangor University, Bangor, Wales

Th338 Neural Correlates of Spiritual Feelings
Kanay Hirano1, Yoko Katayori1, Tomohiko Muratsubaki1, Miyuki Shiratori1, Sugiko Hanawa1, Keyvan Kashkouli Nejad1, Daisaku Tamura1, Ryuta Kawashima1, Motoaki Sugira1, Shin Fukudo1, Tohoku University, Sendai, Japan

Th339 Reading comprehension and mind-wandering relate to perceptually-coupled and decoupled cognition
Meichao Zhang1, Nicola Savill1, Daniel Margulies1, Jonathan Smallwood1, Elizabeth Jefferies1
1University of York, York, United Kingdom, 2York St John University, York, United Kingdom, 3Institut du cerveau et de la moelle épinière (ICM), Paris, France

Th340 The Neurocognitive Patterns Related to Poor Details in Ongoing Thoughts
Hao-Ting Wang1, Deniz Vatansever1, Danilo Bzdok2, Elizabeth Jefferies1, Jonathan Smallwood1
1University of York, York, North Yorkshire, 2Fudan University, Shanghai, China, 3Department of Psychiatry, Psychotherapy, and Psychosomatics, RWTH Aachen University, Aachen, Germany, 4University of York, York, United Kingdom

Th341 Extremely Weak Relationship between Gyrification and Intelligence
Samuel Mathias1, Emma Knowles1, Josephine Mellon1, Amanda Rodrigue1, Marinka Koenis2, Aaron Alexander-Bloch2, Andrew Winkler2, Rene Olivera2, Ravindranath Duggiral2, Harold Goring2, Joanne Curran3, Peter Fox3, Laura Almasy3, John Bliangero4, David Glahn3
1Boston Children’s Hospital/Harvard Medical School, Boston, MA, United States, 2Olin Neuropsychiatric Research Center, Hartford, CT, United States, 3Yale University, New Haven, CT, United States, 4National Institutes of Health, Bethesda, MD, United States, 5University of Texas Health Science Center San Antonio, San Antonio, TX, United States, 6University of Texas Rio Grande Valley, Edinburg, TX, United States, 7Children’s Hospital of Philadelphia, Philadelphia, PA, United States

Th342 Neural correlates of emotional interference inhibition tested with a task battery
Anyuta Dixon1, Edoardo Pinzuti2, Michael Wibral1, Olivier Tuscher1
1MEG Labor, Brain Imaging Center, J.W. Goethe University Frankfurt, Frankfurt, Germany, 2German Resilience Center, University Medical Center Mainz, Mainz, Germany, 3German Resilience Center, University Medical Center Mainz, Mainz, Germany, 4German Resilience Center, University Medical Center Mainz, Mainz, Germany

Th343 Neural correlates of differential finger gesture imitation deficits in left hemisphere stroke
Elisabeth Achilles1, Charlotte Ballweg2, Eva Niessen2, Mona Kusch1, Jana Ant1, Gereon Fink1, 2, Peter Weiss1, 2
1University Hospital Cologne, Department of Neurology, Cologne, Germany, 2Forschungszentrum Jülich GmbH, Cognitive Neuroscience (INM-3), Jülich, Germany
Th363 Basal Ganglia-Cerebellar Impact on Performance After Motor Imagery With Real-time fMRI Neurofeedback
Owen Morgan1, Jonathan Lisinski2, Stephen LaConte2, Cherie Marvel2
1Johns Hopkins University School of Medicine, Baltimore, MD, United States, 2Systems and Biomedical Engineering Department, Cairo University, Cairo, Egypt

Th364 Distinct Mapping of Facial Motor Execution and Imagery within the Primary Motor Cortex Sectors
Teppo Sarkkola1, Aleksi Silvonen2, Vera Leo1, Tanja Linnaval1, Matti Laine2, Mari Tervaniemi1, Seppo Soinila4
1Cognitive Brain Research Unit, Department of Psychology and Logopedics, University of Helsinki, Helsinki, Finland, 2Cognitive Brain Research Unit & Department of Neurosciences, University of Helsinki, Helsinki, Finland, 3Department of Psychology, Åbo Akademi University, Turku, Finland, 4Division of Clinical Neurosciences, Turku University Hospital & University of Turku, Turku, Finland

Th365 Attenuating Neural Threat Expression with Imagination
Marianne Reddan1, Tor Wager2, Daniela Schiller1
1University of Colorado, Boulder, Boulder, CO, United States, 2University of Colorado Boulder, Boulder, CO, United States

Th366 Basal Ganglia-Cerebellar Impact on Performance After Motor Imagery With Real-time fMRI Neurofeedback
Owen Morgan1, Jonathan Lisinski2, Stephen LaConte2, Cherie Marvel2
1Johns Hopkins University School of Medicine, Baltimore, MD, United States, 2Systems and Biomedical Engineering Department, Cairo University, Cairo, Egypt, 3The John B. Pierce Laboratory, New Haven, CT, United States, 4Department of Biomedical Engineering, Kyung Hee University, Yongin, Korea, Republic of

Th367 The prediction game: how music balances predictability and uncertainty to engage the reward system
Benjamin Gold1, Marcus Pearse2, Ernest Mas-Herrer0, Alain Dogher1, Robert Zatorre1
1Montreal Neurological Institute, Montreal, Quebec, Canada, 2Queen Mary University of London, London, United Kingdom

Th368 Music-induced Analgesia: Evidence from An EEG Study
Xuejing Lu1, Li Hu1
1CAS Key Laboratory of Mental Health, Institute of Psychology, Beijing, China

Th369 The neuroanatomy of musical expertise: A systematic review and meta-analysis of neuroimaging studies
Antonio Criscuolo1,2, Elvira Brattico2, Leonardo Bonetti2, Victor Pando-Naude3, Peter Vuust2
1Maastricht University, Maastricht, Netherlands, 2Aarhus University, Aarhus, Denmark

Th370 Songs as a verbal learning tool after stroke: behavioural and structural neuroimaging evidence
Teppo Sarkkola1, Aleksi Silvonen2, Vera Leo1, Tanja Linnaval1, Matti Laine2, Mari Tervaniemi1, Seppo Soinila4
1Cognitive Brain Research Unit, Department of Psychology and Logopedics, University of Helsinki, Helsinki, Finland, 2Cognitive Brain Research Unit & Department of Neurosciences, University of Helsinki, Helsinki, Finland, 3Department of Psychology, Åbo Akademi University, Turku, Finland, 4Division of Clinical Neurosciences, Turku University Hospital & University of Turku, Turku, Finland

Th371 Neural Correlates of Rhythm Processing: ERP and oscillatory response
Mohammadreza Edalati Sharba1, Mahdi Mahmoudzadeh2, Fabrice Wallois3, Sahar Moghimi1
1 Ferdowsi University of Mashhad, Mashhad, Iran, Islamic Republic of, 2Institut National de la Santé et de la Recherche Médicale (INSERM) U1105, Amiens, France, 3INSERM U1105, Unit Exploration Fonctionnelles du Système Nerveux Pédiatrique, South University Hospital, Amiens, France

Th372 Music-induced Analgesia: Evidence from An EEG Study
Xuejing Lu1, Li Hu1
1CAS Key Laboratory of Mental Health, Institute of Psychology, Beijing, China

Th373 The feature-based neural correlates of music listening
Sarah Faber1, Anthony McIntosh2, Sadia Shakhil2
1Baycrest Health Sciences Centre/University of Toronto, Toronto, Ontario, Canada, 2Baycrest Health Sciences Centre, Toronto, Ontario, Canada

Th374 Differential sensitivity to spectrottemporal cues supports brain asymmetry for speech and music
Philipp Alouy1, Lucas Benj1, Benjamin Morillon2, Robert Zatorre3
1Montreal Neurological Institute - McGill University, Montreal, Quebec, Canada, 2INSERM- Aix Marseille University, Marseille, France

Th375 Dynamic functional connectivity reflects changes in emotional experience in response to music
Matthew Sachs1, Assal Habbib1, Jonas Kaplan1, Antonio Damasio1
1University of Southern California, Los Angeles, CA, United States

Th376 Musical Beat Salience Modulates Functional Network Centrality
Petri Toiviainen1, Vinoo Alluri2, Ilabia Burunat3, Elvira Brattico1
1University of Jyväskylä, Jyväskylä, Finland, 2International Institute of Information Technology, Hyderabad, Telangana, 3Aarhus University, Aarhus, Denmark

Th377 Resting-state connectivity in absolute pitch: a direct and conceptual replication attempt
Marielle Greber1, Simon Leipold1, Silvano Sele1, Lutz Jäncke1
1Division Neuropsychology, Department of Psychology, University of Zurich, Zurich, Switzerland, 2University Research Priority Program (URPP), Dynamics of Healthy Aging, University of Zurich, Zurich, Switzerland

Th378 Use it or lose it: Smaller age-related differences in cortical thickness associated with musicality
Nora Bittner1,2, Isabel Klein3, Christiane Jockwitz2,4, Svenja Caspers1,2
1Institute of Anatomy I, Medical Faculty, Heinrich Heine University Duesseldorf, Duesseldorf, Germany, 2Institute of Neuroscience and Medicine (INM-1), Research Center Juelich, Juelich, Germany, 3Department of Psychiatry, Psychotherapy and Psychosomatics, RWTH Aachen University, Aachen, Germany, 4JARA-BRAIN, Juelich-Aachen Research Alliance, Juelich, Germany

Th379 Nothing compares to you - music genre perception across space and time
Philippe Alouy1, Lucas Benj1, Benjamin Morillon2, Robert Zatorre3
1Montreal Neurological Institute - McGill University, Montreal, Quebec, Canada, 2INSERM- Aix Marseille University, Marseille, France

Th380 Inter-subject correlation analysis of EEG data during listening to popular music
Fuyu Uno1, Yuta Inagaki1, Sotaro Shimada1
1Meiji University, Kawasaki, Kanagawa
**Th381** The neural correlates of musical improvisation in trained and untrained singers  
Boris Kleber1, Davide Ligato1, Ole Heggil1, Anna Zamorano2, Peter Vuust3  
1Aarhus University, Aarhus, Denmark, 2Aalborg University, Aalborg, Denmark

**Th382** Neural determinants of beauty judgments of music during naturalistic listening  
Elvira Brattico1, Alessandra Brusa2, Henrique Fernandes3, Thomas Jacobsen4, Petri Toivainen5, Alice Mado Proverbo2  
1Aarhus University, Aarhus C, 2University of Milano Bicocca, Milano, Italy, 3Aarhus University, Aarhus C, 4Helmut Schmidt University / University of the Federal Armed Forces, Hamburg, Germany, 5University of Jyväskylä, Jyväskylä, Finland

**Th383** Effect of Active vs Passive Experience on Functional Network Centrality During Music Listening  
Virno Alluri2, Petri Toivainen3, Iballa Burunat4, Elvira Brattico2  
2International Institute of Information Technology, Hyderabad, Hyderabad, Telangana, 4Aarhus University, Aarhus C, Denmark, 4University of Jyväskylä, Jyväskylä, Finland

**Th384** Timbre-processing as a function of instrumental training?  
Corina Klein1, Nicole Hedinger1, Simon Leipold1, Marielle Greber1, Lutz Jäncke1,2  
1Division Neuropsychology, Department of Psychology, University of Zurich, Zurich, Switzerland, 2University Research Priority Program (URPP), Dynamics of Healthy Aging, University of Zurich, Zurich, Switzerland

**Th385** Multivariate analyses of EEG patterns reveal single-trial information on absolute and relative pitch  
Simon Leipold1, Marielle Greber1, Silvano Sei1,2, Lutz Jäncke1,2  
1Division Neuropsychology, Department of Psychology, University of Zurich, Zurich, Switzerland, 2University Research Priority Program (URPP), Dynamics of Healthy Aging, University of Zurich, Zurich, Switzerland

**Th386** Functional connectivity in the dorsal stream during word learning in absolute pitch musicians  
Matthias Kob1, Stefan Elmer1, Lutz Jäncke1,2  
1Division Neuropsychology, Department of Psychology, University of Zurich, Zurich, Switzerland, 2University Research Priority Program (URPP) “Dynamic of Healthy Aging”, University of Zurich, Zurich, Switzerland

**Th387** Impaired short-term memory in congenital amusia: encoding and retrieval of music and speech  
Lesly Foran1, Anne Caci1, Yohana Lévéque1, Barbara Tillmann1  
1Lyon Neuroscience Research Center, Lyon, France

**Th388** Cortical and cerebellar differences between early-trained and late-trained musicians  
Joseph (Jake) Shenker1, Robert Zatorre2, Virginia Penhune1  
1Concordia University, Montreal, Quebec, Canada, 2Montreal Neurological Institute, Montreal, Quebec, Canada

**Th389** Percussing the Brain: Functional Neuroplasticity of Rhythm Training in Percussionists  
Ching-Ju Yang1,2, Hsin-Yen Yu3, Tzu-Yi Hong1,2, Li-Fen Chen1,2, Jen-Chuen Hsieh1,2  
1Institute of Brain Science, National Yang-Ming University, Taipei, Taiwan, 2Integrated Brain Research Unit, Department of Medical Research, Taipei Veterans General Hospital, Taipei, Taiwan, 3Graduate Institute of Arts and Humanities Education, Taipei National University of the Arts, Taipei, Taiwan

**Th390** Effect of musicianship on resting-state functional connectivity in auditory and motor networks  
Brian Gunther1, Paul-Noël Rousseau2, Lucia Vaquer1, Denise Klein1, Virginia Penhune4  
1Concordia University, Montreal, QC, 2McGill University, Montreal, QC, Canada, 3McGill University, Montreal, Quebec, Canada, 4Concordia University, Montreal, Quebec, Canada

**Th391** Early postnatal music intervention in preterm birth reorganizes salience network interactions  
Djalel-Eddine Meskaladj2,1, Lara Lordier2, Marie Pascale Pittet2, Cristina Borroldari-Tolsa3, Francois Lazeyras1, Didier Grandjean1, Dimitri Van De Ville1,2, Petra Huppi3  
1Swiss Federal Institute of Technology, Lausanne, Switzerland, 2University of Geneva, Geneva, Switzerland, 3University of Geneva, Geneva, Switzerland

**Th392** Increased insula connectivity with speech motor regions in trained singers during resting-state  
Anna Zamorano1, Robert Zatorre2, Peter Vuust3, Niels Birbaumer4, Boris Kleber1  
1Aalborg University, Aalborg, Denmark, 2Montreal Neurological Institute, Montreal, Quebec, 3Aarhus University, Aarhus, Denmark, 4Wiss Center, Geneva, Switzerland

**Th393** Children Sensitive to Rhythm Violation Perform Better in Judging Speech Intonation  
Chen Sun1,2, Xiang-yun Meng1,2, Yun Nan1,2  
1State Key Laboratory of Cognitive Neuroscience and Learning, Beijing Normal University, Beijing, China, 2IDG/McGovern Institute for Brain Research, Beijing Normal University, Beijing, China

**Reasoning and Problem Solving**

**Th394** Resting-state brain rhythms predict fluid intelligence in young adults  
Xiaoping Song1,2, Fei Du1, Antao Chen1  
1McLean Hospital, Harvard Medical School, Belmont, MA, United States, 2David Geffen School of Medicine, University of California Los Angeles, Los Angeles, CA, United States, 1Faculty of Psychology, Southwest University, Chongqing, China

**Th395** Brain state-dependent enhancement of creative cognition  
Amna Ghani1,2,3, Caroline Di Bernardi Luft4, Joydeep Bhattacharya1  
1Charité – Universitätsmedizin Berlin, Berlin, Germany, 2Technical University of Berlin, Berlin, Germany, 3Goldsmiths University of London, London, United Kingdom, 4Queen Mary University of London, London, United Kingdom

**Th396** The Effect of Conflict Processing on Reasoning Networks  
Yanjun Wei1  
1Beijing Language and Culture University, Beijing, China

**Space, Time and Number Coding**

**Th397** Numerical and non-numerical representations are separable and independently modulated by attention  
Elisa Costaldi1, Manuela Piazza2, Stanislas Dehaene3, Alexandre Vignaud1, Evelyn Eger1  
1University of Florence, Florence, Italy, 2Center for Mind/Brain Sciences, University of Trento, Trento, Italy, 3Neurospin, Paris, France

**Th398** Left hemispheric lateralization for temporal order processing  
Margone Chassignolle1, Franck Vidal1, Anne Giersch1, Jennifer Coull1  
1Labeatoire de Neurosciences Cognitives, Marseille, France, 2INdREU U 1114, Strasbourg, France

**Th399** EEG correlates of temporal belief updating and surprise: a Bayesian computational approach  
Antonino Visalli1, Mariagrazia Capizzi1, Ettore Ambrosini2,3, Bruno Kopp4, Antonino Vallesi2,5  
1Department of Neurosciences, University of Padova, Padova, Italy, 2Department of Neurosciences & Padova Neuroscience Center, University of Padova, Padova, Italy, 3Faculty of Psychology, University of Padova, Padova, Italy, 4Department of Neurology, Hannover Medical School, Hannover, Germany, 5Fondazione Ospedale San Camillo IRCCS, Venezia, Italy
Th400  A Hierarchy of Topographic Maps for Visual Event Timing in Human Association Cortex
Ben Harvey1, àSerge Dumoulin2, Alessio Fracasso3, Jacob Paul4
1Experimental Psychology, Helmholtz Institute, Utrecht University, Utrecht, Netherlands, 2Spinoza Center for Neuroimaging, Amsterdam, Netherlands, 3Institute of Neuroscience, University of Glasgow, Glasgow, United Kingdom

Th401  Are there distinct systems for time perception in the sub- and supra-second range?
Kenneth Yuen1, Wong On Li2
1University Medical Center Moinz, Mainz, Germany, 2Department of Counselling and Psychology, Hong Kong Shue Yan University, Hong Kong, Hong Kong

Th402  Developmental Number Perception Differences Between Children and Young Adults Assessed with fMRI
Gözde Vatansever1, Sertaç Üstün2, Nazife Ayyıldız1, Metehan Çiçek1,2,3
1Department of Interdisciplinary Neuroscience, Ankara University, Ankara, Turkey, 2Department of Physiology, School of Medicine, Ankara University, Ankara, Turkey, 3Brain Research Center, Ankara University, Ankara, Turkey

Th403  The Neural Substrates of Time Perception: A Meta-analysis of Neuroimaging Research
Andrea Nani1, Jordi Manuelli1, Donato Liloia1, Tommaso Costa1, Lorenzo Mancuso2, Alessia Teneggi3, Greta Poich1, Linda Picca1, Sergio O. Dumoulin1,2,3
1Department of Psychology, University of Turin, Turin, Italy, 2University of Turin, Turin, Italy, 3University of Turin, Department of Psychology, Turin, Italy, 4Koelker Hospital, Turin, Italy

Th404  Cognitive neuroscience needs 7T: comparing numerosity maps at 3T and 7T MRI
Yuxuan Cai1, Wietse Szende1, Wietse van der Zwaag2, Shi HoStetter1, Serge O. Dumoulin1,2,3
1Spinacea Centre for Neuroimaging, Amsterdam, Netherlands, 2Experimental and Applied Psychology, VU University Amsterdam, Amsterdam, Netherlands, 3Experimental Psychology, Helmholtz Institute, Utrecht University, Amsterdam, Netherlands

Th405  Monotonic responses to numerosity in visual cortex are eccentricity dependent
Jacob Paul1, Tuomas ten Cate1, Ben Harvey1
1Experimental Psychology, Helmholtz Institute, Utrecht University, Utrecht, Netherlands

Th406  Grid-like representation in Human entorhinal cortex during freely visual view
Zhao Qings1, Tao Wang1, Jinxia Wang1, Sichu Wu1, Xin Wang2, Xin Zhang2, Bing Zhang2
1The Affiliated Drum Tower Hospital of Nanjing University Medical School, Nanjing, China, 2Nanjing University, Nanjing, China

Th407  A Pilot Study for Human Brain Activations During Virtual Reality-based Maze Navigation Using fMRI
Chia Ho Hung1, Chu-Chung Huang1, Li-Hung Chang1, Ching-Po Lin1
1Department of Biomedical Imaging and Radiological Sciences, National Yang-Ming University, Taipei, Taiwan, 2Aging and Health Research Center, National Yang-Ming University, Taipei, Taiwan, 3School of Humanities and Social Sciences, National Yang-Ming University, Taipei, Taiwan, 4Institute of Neuroscience, National Yang-Ming University, Taipei, Taiwan

Th408  Is the PPA a visual area? BOLD responses to incidental spatial cues in naturalistic stimulation
Christian Häusler1, Michael Hanke2
1Institute of Neuroscience and Medicine, Brain & Behaviour (INM-7), Research Centre Jülich, Jülich, Germany, 2Institute of Systems Neuroscience, Medical Faculty, Heinrich Heine University, Düsseldorf, Germany

Th409  Approximate and exact arithmetic depend similarly on semantic processing
Wei Wei1, Yu Liang1
1Zhejiang University, Hangzhou, China

Th410  Tracking numerical and continuous magnitude processing by frequency-tagged neuromagnetic responses
Amandine Van Rinsveld1, Vincent Wens2,3, Mathieu Guillaume1, Anthony Beue1, Wim Gevers1, Xavier De Tiége2,3, Alain Content1
1Center for Research in Cognition and Neurosciences, UNIL, Université Libre de Bruxelles, Brussels, Belgium, 2Laboratoire de Cartographie fonctionnelle du Cerveau, ULB Neuroscience Institute, Brussels, Belgium, 3Magnetocencephalography Unit, Department of Functional Neuroimaging, Service of Nuclear Medicine, CUB Hôpital Erasme, Brussels, Belgium

Th411  Investigating the link between bodily self-consciousness (BSC) and spatial navigation system
Hyuk-June Moon1, baptiste gauthier2, Hyeong-Dong Park1, Nathan Faivre2, Olaf Bionke1
1EPFL, Geneva, Switzerland, 2EPFL, Geneva, Switzerland, 3EPFL, Lausanne, Switzerland

Th412  Rule-based or fact retrieval: one and zero multiplications are not equally processed
Silvia Benavides-Varela1, Antonino Vallesi2,3, Luca Weis1, Ilaria Mazzonetto3, Tim Shallice4, Carlo Semenza3
1Dipartimento di Psicologia dello Sviluppo e della Socializzazione, University of Padova, Padova, Italy, 2Department of Neuroscience & Padova Neuroscience Center, University of Padova, Padova, Italy, 3Fondazione Ospedale San Camillo IRCCS, Venezia, Italy, 4Dipartimento di Ingegneria dell’Informazione, University of Padova, Padova, Italy, 5University College London, London, United Kingdom

Th413  Subitzing and Counting: A fMRI Experiment and a Neural Network Model
Roy Lee1
1Columbia University, New York, NY, United States
Th416  Patterned Functional Network Disruption in Amyotrophic Lateral Sclerosis
Stefan Ducic1, Roisin McMackin1, Teresa Buxo1, Antonio Fasan2, Rangarajyashe Chipika4, Marta Pinto-Grau1, Emmet Costello2, Christina Schuster2, Michael Broderick2, Parameswaran Iyer2, Kieran Mah1, Amina Coffey1, Brigid Gavrin1, Mark Heverin1, Niall Pender1, Peter Bede1, Muthuraman Muthuraman1, Bahman Nasseroleslami4, Edmund Lalor4, Orla Hardiman4,6,8
1Academic Unit of Neurology, Trinity College Dublin, Dublin, Ireland, 2Department of Neurology, University of Utrecht, Utrecht, Netherlands, 3Computational Neuroimaging Group, Trinity College Dublin, Dublin, Ireland, 4Trinity Centre for Bioengineering, Trinity College Dublin, Dublin, Ireland, 5Johannes-Gutenberg-University Hospital, Mainz, Germany, 6Trinity College Institute of Neuroscience, Trinity College Dublin, Dublin, Ireland, 7Department of Biomedical Engineering and Department of Neuroscience, University of Rochester, Rochester, NY, United States, 8Beaumont Hospital, Dublin, Ireland

Th417  Frequency-specific connectivity patterns in the default mode network
Jessica Samogin1, Liu Quanying2,3,4, Marco Marino5,6,7, Nicole Wendener1,4, Dante Mantini2
1Research Center for Motor Control and Neuropasticity, KU Leuven, Leuven, Belgium, 2Division of Engineering and Applied Science, California Institute of Technology, Pasadena, CA, United States, 3Molecular Neurology Program, Huntington Medical Research Institutes, Pasadena, CA, United States, 4Neural Control of Movement Laboratory, ETH Zurich, Zürich, Switzerland, 5Functional Neuroimaging Laboratory, IRCCS San Camillo Hospital Foundation, Venice, Italy, 6Department of Experimental Psychology, Oxford University, Oxford, United Kingdom

Th418  Mapping motor-related modulations of neural activity using high-density electroencephalography
Mingqi Zhao1, Marco Marinoa, Jessica Samogin1, Stephan Swinnen1,2, Dante Mantini1,2
1Research Center for Motor Control and Neuropasticity, KU Leuven, Leuven, Belgium, 2Functional Neuroimaging Laboratory, Fondazione Ospedale San Camillo - IRCCS, Venice, Italy, 3Leuven Brain Institute, KU Leuven, Leuven, Belgium

Th419  The influence of the beliefs about the type of the second player in the Ultimatum Game: an ERP study
Natalia Jakubowskia, Łukasz Okruszeka, Katarzyna Pociarka
1University of Warsaw, Warsaw, Poland, 2SWPS University of Social Sciences and Humanities, Warsaw, Poland, 3Institute of Psychology, PAS, Warszawa, Poland

Th420  Behavioral and ERP evidences of impaired inhibitory control in test anxiety
Renjia Zhou1, Hua We2
1Nanjing University, Nanjing, Jiangsu, 2School of Biological Sciences & Medical Engineering, Southeast University, Nanjing, China

Th421  Intelligence and Complexity of Resting Brain: Gender matters
Joanna Dreszer1,2, Tomasz Piatrowski1,3, Jan Nikadon1, Marek Grachowski4, Joanna Gorgol4, Bibianna Batoj1, Monika Lewandowska2
1Centre for Modern Interdisciplinary Technologies, Nicolaus Copernicus University, Toruń, Poland, 2Faculty of Humanities, Nicolaus Copernicus University, Toruń, Poland, 3Faculty of Physics, Astronomy, and Informatics, Nicolaus Copernicus University, Toruń, Poland, 4Faculty of Psychology, Warsaw University, Warsaw, Poland

Th422  Diminished Engagement of Attentive Brain States to Faces Predicts Later Autism Spectrum Disorder
Anna Guri1, Giorgia Bussu2,3, Charlotte Tye2, Mayada Elshabbagh4, Greg Pasco4, Tony Charman5, Mark Johnson1, Emily Jane1
1Centre for Brain and Cognitive Development, Birkbeck, University of London, London, United Kingdom, 2Donders Institute for Brain, Cognition and Behaviour, Radboud University Medical Center, Nijmegen, Netherlands, 3Department of Child & Adolescent Psychiatry, Social, Genetic & Developmental Psychiatry Centre, London, United Kingdom, 4Department of Psychiatry, Faculty of Medicine, McGill University, Montreal, United Kingdom, 5Department of Psychology, Institute of Psychiatry, Psychology & Neuroscience, King’s College London, London, United Kingdom, 6Department of Psychology, Cambridge University, Cambridge, United Kingdom

Th423  The estimation of Granger causality on single EEG trials by means of penalized regressions
Yuri Antonacci1,2, Jiena Topi2, Antonio Pietrabissa3, Donatella Mattia2, Laura Astolfi2
1Department of Computer, Control, and Management Engineering, Sapienza University of Rome, Rome, Italy, 2IRCCS Fondazione Santa Lucia, Rome, Italy

Th424  The cortical oscillatory patterns associated with varying levels of cognitive effort
Adam Byrne1,1 Aikaterini Kokmato1, Hannah Roberts1, Vicente Sato1, John Tyson-Carr1, Timo Giestbrecht2, Andrej Stanoc1
1University of Liverpool, Liverpool, Merseyside, 2Unilever Research and Development, Liverpool, Merseyside

Th425  EEG Microstate Profiles Identify Psychometrically Distinct Cognitive Components of Fluid Reasoning
Filippo Zapposodi1, Maura Gianni Perrucci1, Aristide Saggino1, Pierpaolo Croce1, Pasqua Mercuri2, Roberto Romanelli1, Roberto Colom2, Sjoerd Ebisch1
1Department of Neuroscience, Imaging and Clinical Sciences, G. d’Annunzio University Chieti-Pescara, Chieti, Italy, 2School of Medicine and Health Sciences, G. d’Annunzio University Chieti-Pescara, Chieti, Italy, 3Università Autónoma de Madrid, Madrid, Spain

Th426  Interhemispheric auditory connectivity and language lateralization: A combined EEG-DTI study
Saskia Steinmann1, Rom Anseelbe1, Bastian Cheng1, Gotz Thomol1, Andreas Engel2, Gregor Leicht1, Christoph Muer1
1Psychiatry Neuroimaging Branch, University Medical Center Hamburg-Eppendorf, Hamburg, Germany, 2Department of Neurology, University Medical Center Hamburg-Eppendorf, Hamburg, Germany, 3Department of Neurology, University Medical Center Hamburg-Eppendorf, Hamburg, Germany, 4Department of Neurophysiology and Pathophysiology, University Medical Center Hamburg-Eppendorf, Hamburg, Germany, 5Centre for Psychiatry and Psychotherapy, Justus-Liebig-University, Giessen, Giessen, Germany

Th427  Mind-act-upon-mind: Brain-to-brain synchrony in lover-lover dyads revealed by EEG-based hyperscanning
Shen Li1, YiQu Chen1, XiaoChao Zhang1
1University of Science and Technology of China, Hefei, China

Th428  Neural basis of social comparisons in depression/social anxiety using Electroencephalography
Valentina Paz1, Eliana Nicolaissen-Sobesky1, Gabriela Fernandez-Theodoloz1, Alfonso Perez2, Francisco Cervantes Constantina, Dominique Kessela, Álvaro Cabana1, Victoria Gradin1
1Universidad de la Republica, Montevideo, Uruguay, 2Universidad Autónoma de Madrid, Madrid, Spain

Th429  Inter-brain synchronization during a cooperative task under shared mixed reality environment
Yutaro Ogawa1, Satoko Shimada2
1Meiji University, Kawasaki, Kanagawa, 2Meiji University, Kawasaki, Kanagawa
Th430  Weighting of neural prediction error by rhythmic complexity: a predictive coding account using MMN
Massimo Lumaca1, Niels Haumann1, Elvira Brattico2, Manon Grube3, Peter Vuust4
1Center for Music in the Brain Institut for Klinisk Medicin, Health Aarhus Universitet, Aarhus C, Denmark, 2Center for Music in the Brain Institut for Klinisk Medicin, Health Aarhus Universitet, Aarhus, Denmark, 3Aarhus University, Aarhus, Denmark

Th431  Understanding EEG Global Signal: A Large-scale Brain Network Perspective
Xu Lei1,2, Duon Wei1
1Sleep and Neuroimaging Center, Faculty of Psychology, Southwest University, Chongqing, China, 2Key Laboratory of Cognition and Personality of Ministry of Education, ChongQing, China

Th432  A computational trial-by-trial EEG analysis of hierarchical prediction errors during reward learning
Sara Tomiello1, Dario Schob1, Lilian Aline Elizabeth Weber2, Sandra Iglesias1, Klaas Enno Stephan1
Translational Neuromodeling Unit, Institute for Biomedical Engineering, University of Zurich & ETH Z, Zurich, Switzerland

Th433  EEG Cross-Frequency Phase Coupling as an Index of Memory Matching in Visual Search
Anna Lena Biel1, Thomas Minarik1, Paul Sauseng1
1Ludwig-Maximilians-Universität München, Munich, Germany, 2University of Birmingham, Birmingham, United Kingdom

Th434  Improving inhibitory control using neurofeedback to modulate the brain’s beta rhythm
Nadja Eng1, Jenima Schmidt2, Kate Nolan3, Emma Wall4, Aisling Martin5, Magdalena Gippert1, Matthew Mitchell1, Laura Rueda-Delgado6, Robert Whelan1, Kathy Rudy1
1Institute of Neuroscience, Trinity College Dublin, Dublin, Ireland, 2EEG and Epilepsy Unit, University Hospital of Geneva, Geneva, Switzerland, 3Sleep and NeuroImaging Center, Faculty of Psychology, Southwest University, Chongqing, China

Th435  Spatial and temporal validation of Ocular Artifact Obtained through a Automatic Extraction Method
Rui Sun1, Cynthia Charn2, Guang Ouyang3, Janet Hxiao1, Akaysha Tang1
1The University of Hong Kong, Hong Kong, Hong Kong, 2Department of Psychology, the University of Hong Kong, Hong Kong, Hong Kong

Th436  Interhemispheric transfer during reading in good and poor readers: an EEG study
Hazal Artuvan1,2, Fikret Ari1,2, Canan Kalaycioglu1,2
1Ankara University Faculty of Medicine, Ankara, Turkey, 2Ankara University Brain Research Center, Ankara, Turkey, 3Ankara University Faculty of Engineering, Ankara, Turkey

Th437  Robust correlation between functional and structural connectivity in resting state EEG
Katharina Glomb1, Emeline Muller1, Gianinara iannotti1, Sebastien Tourbier1, Maria Rubeget1, Maria Carboni2, Martin Seebert1, Sergio Vuliemoz1, Patrick Hagmann1
1University Hospital of Lausanne, Lausanne, Switzerland, 2Functional Brain Mapping Lab, Department of Fundamental Neurosciences, University of Geneva, Geneva, Switzerland, 3University of Geneva, Geneva, Switzerland, 4Center for Biomedical Imaging, Geneva, Switzerland

Th438  Time-varying effective EEG source connectivity: the optimization of model parameters
Maria Rubeget1, David Pascucci1, Margherita Carboni2, Martin Seebert1, Sebastien Tourbier1, Pierre Van Mierlo3, Patric Hagmann1, Gijs Plomp1, Serge Vuliemoz1, Christoph Michel1
1Functional Brain Mapping Lab, Department of Fundamental Neurosciences, University of Geneva, Geneva, Switzerland, 2Perceptual Networks Group, Department of Psychology, University of Fribourg, Fribourg, Switzerland, 3EEG and Epilepsy Unit, University Hospital of Geneva, Geneva, Switzerland, 4Department of Radiology, University Hospital of Lausanne, Lausanne, Switzerland, 5Medical Image and Signal Processing Group, Department of Electronics, Ghent University, Ghent, Belgium, 6Lemanic Biomedical Imaging Centre (CIBM), Lausanne and Geneva, Switzerland

Th439  TMS based neurofeedback training allows to decode movement intentions for single fingers
Ernest Miheli1, Marc Bächinger2, Kathy Rudy3, Nicole Wenderoth1
1ETH Zürich, Neural Control of Movement Lab, Zurich, Switzerland, 2ETH Zürich, Zurich, Switzerland, 3Institute of Neuroscience, Trinity College Dublin, Dublin 2, Ireland

Th440  High test-retest reliability of EEG connectivity supports suitability as infant autism biomarker
Rianne Haartsen1, Bauke van der Velde2, Emily Jones3, Mark Johnson4, Chantal Kemner1
1Centre for Brain and Cognitive Development, Birkbeck, University of London, London, United Kingdom, 2Universiteit Utrecht, Utrecht, Netherlands, 3Department of Psychology, Cambridge University, Cambridge, United Kingdom

Th441  Effective connectivity in Cheyne-Stokes respiration from low-density EEG: a methodological framework
Alejandro Collgara1, Maria Sole Morelli2, Valentina Hartwig3, Alberto Giannoni1, Luigi Landini4, Claudia Passino2, Michele Emdin1, Nicolo Vanello2
1Department of Ingegneria dell’Informazione, University of Pisa, Pisa, Italy, 2Institute of Life Science, Scuola Superiore Sant’Anna, Pisa, Italy, 3Institute of Clinical Physiology, National Research Council, Pisa, Italy, 4Fondazione Toscana G. Monasterio, National Research Council, Pisa, Italy

Th442  Brain connectivity modulation after exoskeleton gait in chronic stroke survivors: a pilot study
Emanuela Formaggio1, Alessandra Del Felice1, Franco Molteni1, Anna Bosco1, Elena Guanzillo1, Francesco Piccione1, Stefano Masiero2
1Department of Neuroscience, University of Padova, Padova, Italy, 2Ospedale Valduce Villa Beretta, Costa Masnaga, Lecco, Italy, 3IRCCS Fondazione Ospedale San Camillo, Venezia, Italy

Th443  Face recognition ability is manifest in early dynamic decoding of face-orientation selectivity
Ines Mares1, Louise Ewing1, Michael Papasavv1, Fraser Smith1, Marie Smith1
1Birkbeck College, London, United Kingdom, 2University of East Anglia, Norwich, United Kingdom

Th444  Response inhibition deficits predictive of substance use relapse in an incarcerated sample
J. Maurel1,2, Nathaniel Anderson1, Vaughn Steele1, Eric Claus1, Brandi Fin1, Vincent Clark1,2, Vince Calhoun1,2, Kent Kiehl1,2
1Department of Psychology, University of New Mexico, Albuquerque, NM, United States, 2The Mind Research Network (MRN) & Lovelace Biomedical and Environmental Research Institute (LBERI), Albuquerque, NM, United States, 3Neuroimaging Research Branch, National Institute on Drug Abuse, Baltimore, MD, United States, 4Department of Psychiatry and Behavioral Sciences, University of New Mexico, Albuquerque, NM, United States, 5Department of Electrical and Computer Engineering, University of New Mexico, Albuquerque, NM, United States

Th445  Effects of hypoxia on N100 and P300 event related potentials during visuospatial attention control
Evon Hutcheon1, Adonay Nunes1, Urs Ribary2, Sherri Ferguson1, Victoria Claydon1, Sam Doesburg1, Simon Fraser University, Vancouver, BC, Canada

Th446  Simultaneous EEG-fMRI-Eye Tracker Study for Measuring Subject’s Vigilance during Resting-State
Ahmad Mayeli1,2, Obada Al Zoubi1,2, Masaya Misaki1, Aki Tsuchiyagaito1,3, Hazem Refai2, Martin Paulus1, Jerzy Bodurka4
1Laureate Institute for Brain Research, Tulsa, OK, United States, 2Dept. of Electrical and Computer Engineering, University of Oklahoma, Tulsa, OK, United States, 3Japan Society for the Promotion Science, Tokyo, Japan, 4Stephenson School of Biomedical Engineering, University of Oklahoma, Tulsa, OK, United States

To view full abstract text and ePosters, visit www.aievolution.com/hbm1901
Th447 Relationship of Brain States and Music Perception with Uniform Manifold Approximation and Projection
Sadia Shakil1, Sarah Faber1, Andrea McCulloch1, Tanya Brown1, Kelly Shen1, Anthony McIntosh1
1Rotman Research Institute, Toronto, Ontario, Canada, 2Institute of Space Technology, Islamabad, Pakistan

Th448 An ERPs study on response inhibition of schizophrenia and obsessive-compulsive patients
Fengjiong Yu1, Xingui Chen1, Yudan Luo1, Chunyan Zhu1, Kai Wang1
1Anhui Medical University, Hefei, China

Th449 The time course of single-trial EEG classification in clinical neuroscience
Andrea Biasucci1, Benedetta Franceschietti1,2, Serafeim Dikikis1, José del R. Millán2, Micah Murray2,3,4
1The Laboratory for Investigative Neurophysiology (The LINE), University Hospital of Canton Vaud, Lausanne, Switzerland, 2Ophthalmology Department, University of Lausanne, Fondation Asile des Aveugles, Lausanne, Switzerland, 3Deftech Foundation Chair in Brain-Machine Interface, École Polytechnique Fédérale de Lausanne, Geneva, Switzerland, 4EEG Brain Mapping Core, Center for Biomedical Imaging (CIBM) of Lausanne and Geneva, Lausanne, Switzerland, 5Department of Hearing and Speech Sciences, Vanderbilt University Medical Center, Nashville, TN, United States

Th450 Correlation of Brain Rhythmic Activity in Resting State and Behaviors in Sustained Attention Task
Yao Yao Wang1,2, Yi Wei Liu1, Jia Hui Pan1, Yu Ming Zheng1, Yu Feng Zang1,2, Hong Zhang1,2
1Institutes of Psychological Sciences, Hangzhou Normal University, Hangzhou, China, 2Zhejiang Key Laboratory for Research in Assessment of Cognitive Impairments, Hangzhou, China

Th451 The influence of music assisted therapy on college students with left-behind experience
Yin Tian1
1Chongqing University of Posts and Telecommunications, Chongqing, Chongqing, China

Th452 Effect of Emotional Stimuli on Cognitive Functions in Adult ADHD
Samed Hakon Uzuniar1, Ece Rüjer1, Umut Mert Aksoy2, Barış Elmaslar1, Lutfi Hanaglu1,2, Bahar Güntekin1,3
1Department of Neurosciences, Graduate School of Health Science, Istanbul Medipol University, Istanbul, Turkey, 2Department of Psychiatry, Kanuni Sultan Suleyman Training and Research Hospital, Istanbul, Turkey, 3School of Medicine, Istanbul Medipol University, Istanbul, Turkey, 4Department of Neurology, School of Medicine, Istanbul Medipol University, Istanbul, Turkey, 5REM ER, Clinical Electrophysiology, Neuroimaging and Neuromodulation Lab, Istanbul Medipol University, Istanbul, Turkey, 6Department of Biophysics, School of International Medicine, Istanbul Medipol University, Istanbul, Turkey

Th453 Temporal and Spatial Effects of Movement-induced Analgesia and Its Neural Mechanisms
Xinru Yao1,2, Xuejing Lu1,2, Li Hu1,2
1CAS, Key Laboratory of Mental Health, Institute of Psychology, Beijing, China, 2Department of Psychology, University of Chinese Academy of Sciences, Beijing, China

Th454 Correspondence of Late Positive Potentials as biomarker of compassion: An EEG Hyperscanning study
Jinjia Tong1, Angela Claramidaro2, Christine Freitag2, Chantal Casper3, Pascal Vogels1, Michael Sinacchini1, Laura Astolfi1
1Sapienza University of Rome, Rome, Italy, 2Dept of Education and Human Sciences, University of Modena and Reggio Emilia, Reggio Emilia, Italy, 3Dept. of Child and Adolescent Psychiatry, Psychosomatics and Psychotherapy, Goethe-University, Frankfurt/M, Germany, 4Goethe-University, Frankfurt/M, Germany, 5Clinic of Child and Adolescent Psychiatry and Psychotherapy, Evangelical Hospital Bethel (EvKB), Bielefeld, Germany, 6Department of Computer, Control, and Management Engineering, University of Rome Sapienza, Rome, Italy

Th455 Pre-stimulus EEG microstates correlate with anticipatory alpha rhythms
Sara Spadone1, Pierpaolo Croce2, Filippo Zappasodi1, Paolo Capotosto1
1Dept. of Neuroscience, Imaging and Clinical Sciences, University G. d’Annunzio, Chieti, Italy, 2Department of Neuroscience, Imaging and Clinical Sciences, G. d’Annunzio University Chieti-Pescara, Chieti, CH, 3Department of Neuroscience, Imaging and Clinical Sciences, G. d’Annunzio University Chieti-Pescara, Pescara, CH

Th456 Subcortical dynamics are detectable with high-density EEG source imaging
Martin Seeker1, Lucia Cantonas1, Mauritus Hoevels1, Thibaut Sesia2, Veerle Visser-Vandewalle2, Christoph Michiel3
1University of Geneva, Geneva, Switzerland, 2University of Cologne, Cologne, Germany

Th457 Intrasal oxotocin enhances de-coupling of neural oscillations at rest
Kaat Albers1, Elisa Maes1, Julio Rodriguez Larios1
1University of Leuven, Leuven, Belgium

Th458 How to Collect Genuine TEPs: A Graphical User Interface to Control Data Quality in Real-time
Silvia Casarotto1, Matteo Fecchio1, Sara Parmigiani1, Mario Rosanova1
1University of Milan, Milan, Italy

Th459 Neural signature for non-face real-world visual expertise: a review and meta-analysis
Guangying Ye1, Minghao Dong1, Jia Wu1, Jimin Liang1
1Xi Dian University, Xian, China, 2School of Foreign Languages, Northwestern Polytechnical University, Xian, China

Th460 Abnormalities of resting state cortical EEG rhythms in subjects with neurodegenerative diseases
Claudio Del Percio1, Claudio Babilioli2, Maria Teresa Pascarelli1, Roberta Lisio1, Giuseppe Noce1, Andrea Sorcilli1,2, Raffaele Ferri1, Flavio Mariano Nobili1, Franco Giubilei1, Laura Bonanni1, Peter Fuhra, Gerhard Ransmayr1,2, Lucilla Parnetti1, Michela Pievani1,2, Carlo De Lena1,2, Bahar Güntekin1,3, Gorsey Vener1,2, Fabrizio Stacchi1, Maria Francesca De Pandis1
1Dept. Physiology and Pharmacology, Sapienza University of Rome, Rome, Italy, 2IRCCS San Raffaele Pisana, Rome, Italy, 3IRCCS SDN, Naples, Italy, 4University of Naples Parthenope, Naples, Italy, 5IRCCS Ospedale Pollicino San Martino, Genova, Italy, 6Dept. Neuroscience, Mental Health and Sensory Organs, Sapienza University of Rome, Rome, Italy, 7University G d’Annunzio di Chieti-Pescara, Chieti, Italy, 8Universitàtsstipital Basel, Basel, Switzerland, 9Johannes Kepler University, Linz, Austria, 10University of Perugia, Perugia, Italy, 11IRCCS Istituto Centro San Giovanni di Dio Fatebenefratelli, Brescia, Italy, 12Dept. Neurology and Psychiatry, Sapienza University of Rome, Rome, Italy, 13Istanbul Medipol University, Istanbul, Turkey, 14Dokuz Eylül University Medical School, İzmir, Turkey, 15Hospital San Raffaele of Cassino, Cassino, Italy

Th461 NEUROMODULATION OF CORTICAL EXCITABILITY IN PARKINSON’S DISEASE PATIENTS
Maria Teresa Pascarelli1, Claudio Del Percio1, Roberta Lisio1, Giuseppe Noce1, Susanna Lopez1, Raffaele Ferri1, Andrea Sorcilli1, Francesco Ozari2, Laura Bonanni1, Peter Fuhra, Gerhard Ransmayr1, Michela Pievani1, Fabrizio D’Antonio1, Carlo De Lena1,2, Bahar Güntekin1,3, Gorsey Vener1,2, Fabrizio Stacchi1, Francesco Fama1, Maria Francesca De Pandis1, Claudio Babilioli1
1Sapienza University of Rome, Rome, Italy, 2Oasi Research Institute - IRCCS, Triona, Triona, Italy, 3IRCCS SDN, Naples, Italy, 4University G d’Annunzio di Chieti-Pescara, Chieti, Italy, 5Universitàtsstipital Basel, Basel, Switzerland, 6Johannes Kepler University, Linz, Austria, 7IRCCS Istituto Centro San Giovanni di Dio Fatebenefratelli, Brescia, Italy, 8Dept. Neurology and Psychiatry, Sapienza University of Rome, Rome, Italy, 9Istanbul Medipol University, Istanbul, Turkey, 10Dokuz Eylül University Medical School, İzmir, Turkey, 11Hospital San Raffaele of Cassino, Cassino, Italy

To view full abstract text and ePosters, visit www.aievolution.com/hbm1901
Th462 Effects of HIV on resting-state functional cortical connectivity

Giuseppe Noceti1,2, Claudio Del Percio1, Roberta Lizio2, Maria Teresa Pasconcelli2, Alfredo Pennica3, Andrea Sorrelli1, Francesco Di Campli1, Massimo Galli1, Annalisa Saracino1, Massimo Di Pietra1, Vincenzo Vulpiani1, Pasquale Pagliano3, Giovanni Di Prima1, Andrea Calcagno1, Benedetto Maurizio Celenza1, Stefano Ferracuti2, Paolo Onorati2, Massimo Andreoni3, Claudio Barbini1, 1IRCCS SDN, Naples, Italy, 2Sapienza University of Rome, Rome, Italy, 3University of Milan, Milan, Italy, 4University of Bari “Aldo Moro”, Bari, Italy, 5S. Maria Annafranzen Hospital, Florence, Italy, 6D. Cotugno Hospital, AORN Dei Colli, Naples, Italy, 7University of Torino, Torino, Italy, 8University of Catania, Catania, Italy, 9University of Rome “Tor Vergata”, Rome, Italy

Th463 A Demand-Selection task to study effort-avoidance employing EEG Spectro-Temporal analysis

David Lopez-Garcia1, Alberto Sabrada1, Jose Perlavie1, Maria Ruiz1
1University of Granada, Granada, Spain

Th464 The Reproducibility and Reliability of EEG Microstates

Jiayi Liu1, Jing Xu1, Guangyuan Zou1, Shujin Zou1, Qihong Zou1, Jiahong Gao1,2,5
1Center for MRI Research, Academy for Advanced Interdisciplinary Studies, Peking University, Beijing, China, 2Beijing Key Laboratory of Medical Physics and Engineering, Institution of Heavy Ion Physics, School of Physics, Peking University, Beijing, China, 3Laboratory of Applied Brain and Cognitive Sciences, Shanghai International Studies University, Shanghai, China, 4Department of Biomedical Engineering, College of Medicine, Peking University, Beijing, China, 5McGovern Institute for Brain Research, Peking University, Beijing, China, 6Shenzhen Institute of Neuroscience, Beijing, China

Th465 Assessing Noise and Data Quality in EEG data - Bootstrapped SE as a General and Principled Method

Andrew Stewart1, Steven Luck1
1University of California, Davis, Davis, CA, United States

Th466 Theta and spindle oscillations are associated with social bias reduction during sleep

Tao Xio1, Xiaoping Hu1
1The University of Hong Kong, Hong Kong, China

Th467 A hybrid electrode for evaluating brain activity directly after transcranial electrical stimulation

Syochi Tashiro1, Hartwig Siebner2, Angeliki Charalampaki1, Guilhem Bicalo Satumino3, Axel Thielers4, Leo Tomasevic5
1Danish Research Center for Magnetic Resonance, Copenhagen, Denmark, 2Technical University of Denmark, Kgs. Lyngby, Denmark

Th468 EEG functional connectivity networks during a letter-speech sound binding task in adult dyslexics

Gorka Froga Gonzalez2,3, Dirk Smit4, Melle Van der Molen5,4, Silvia Brem5,4, Cornelis Stam2,4, Edo de Geus5,4, Maurits Van der Molen5,4
1University of Amsterdam, Amsterdam, Netherlands, 2Rudolf Berlin Center, Amsterdam, Netherlands, 3University Hospital of Psychiatry Zurich, University of Zurich, Zurich, Switzerland, 4Department of Biological Psychology, Vrije Universiteit Amsterdam, Amsterdam, Netherlands, 5Leiden Institute for Brain and Cognition, University of Leiden, Leiden, Netherlands, 6WAL Institute, Amsterdam, Netherlands, 7Department of Clinical Neuropsychology and MEG Center, VU University Medical Center, Amsterdam, Netherlands, 8Amsterdam Brain and Cognition, University of Amsterdam, Amsterdam, Netherlands

Th469 Automatic cleaning of movement artifacts in mobile EEG data using Artiﬁct Subspace Reconstruction

Philipp Anders, Helen Müller, Nina Skjæret-Maroni, Beatrix Vereijken, Jochen Baumeister
1Norwegian University of Science and Technology, Trondheim, Norway, 2Paderborn University, Paderborn, Germany

Th470 Narrowband analysis for the mental workload assessment

Nicolino Sciaraffo1, Pietro Aricò1, Gianluca Borghini1,2, Gianluca Di Flumeri3,4, Fabio Babiloni5,2,4
1Dept. of Anatomical, Histological, Forensic & Orthopedic Sciences University of Rome Sapienza, Rome, Italy, 2IRCCS Fondazione Santa Lucia, Neuroelectrical Imaging and BCI Lab, Rome, Italy, 3Dept. of Molecular Medicine, University of Rome, Rome, Italy, 4BrainSigns srl, Rome, Italy, 5Department of Computer Science, Hangzhou Dianzi University, Xixia Higher Education Zone, 13 310018, Hangzhou, China

Th471 EEG Microstates Temporal Dynamics Differentiate Mood and Anxiety Disorders from Healthy Subjects

Obado Al Zoubi1,2, Ahmad Mayel1, Aki Tsuchiyagaito2, Masaya Misaki3, Vadim Zotev1, T1000 Investigators5, Hazem Refai5, Martin Paulus1, Jerzy Bouduk1
1Laureate Institute for Brain Research, Tulsa, OK, United States, 2The University of Oklahoma, Tulsa, OK, United States

Th472 Contingent negative variation as a biomarker of hypoxia effects on visuospatial Attention Networks

Alberto Zani1,3, Massimo Bertoli1,2, Annopaula Senerchia2, Alice Mado Poverbo2
1Institute for the History of Philosophical and Scientific Thought in modern Age of CNR ( (ISPF-CNR), Milan, Italy, 2University of Milano Bicocca, Milan, Italy, 3University of Milano Bicocca, Milano, Italy

Th473 Complex cortical dynamics in arithmetic problem solving

Elizaveta Bezkrova1, Mikhail Zaleshnik1, Alexander Jones2, Brian Butterworth3, Yulia Kovas4, Vyacheslav Karolis5
1Tomsk State University, Tomsk, Russian Federation, 2Middlesex University, London, United Kingdom, 3University College London, London, United Kingdom, 4Goldsmiths, University of London, London, United Kingdom, 5FMRIB, University of Oxford, Oxford, London, United Kingdom

Th474 EEG biomarkers for experienced versus observed/vicarious pain

Alessandra Anzolin1, Jeungchan Lee1, Meryem Yuce1, Roberta Scocco2, Kylie Isenburg1, Ted Kaptchuk1, Vitaly Napadow1
1MGH/HST Martinos Center for Biomedical Imaging, Charlestown, MA, United States, 2Boston University, Boston, MA, United States, 3Program in Placebo Studies & Therapeutic Encounter, Harvard Medical School, Boston, MA, United States

Th475 Source localization of intracranial single pulse electrical stimulation

Ezequiel Mikuljan1, Simone Russo1, Anna Cattani1, Sara Parmigiani1, Matteo Fecchio1, Simone Sarasso1, Pietro Avanzini1, Ivana Sartori1, Annalisa Rubino1, Marcello Massimini1, Lino Nabil1, Andrea Pigorini1
1University of Milan, Milan, Italy, 2Consiglio Nazionale delle Ricerche, Parma, PR, 3Ospedale Ca’ Granda Niguarda, Milan, Italy, 4Claudio Munari1 Epilepsy Surgery Centre, Niguarda Hospital, Milan, Italy, 5Department of Biomedical and Clinical Science ‘L. Sacco’, Milan, Italy, 6University of Genoa, Genoa, Italy, 7Università Statale di Milano, Milano, Italy

Th476 Are time efficient brain networks also energy efficient? A simultaneous EEG - FDG-PET study at rest

Shuki Romkiran1,2,3, Ravichandran Rajkumar1,2,4, Jörg Mauler1, Elena Rota Kops1, Jorge Arrubla1, Lutz Tellmann1, Christoph Lerche1, Karl Josef Langen1,5, Hans Herzog1, 2, N. Jon Shah1,3,4, Irene Neuner1,2,4
1Institute of Neuroscience and Medicine 4 (INM4), Forschungszentrum Juelich, Juelich, Germany, 2Department of Psychiatry, Psychotherapy and Psychosomatics, RWTH Aachen University, Aachen, Germany, 3JARA – BRAIN – Translational Medicine, Aachen, Germany, 4TRIMAGE consortium, Aachen, Germany, 5Department of Nuclear Medicine, RWTH Aachen University, Aachen, Germany, 6Department of Neurology, RWTH Aachen University, Aachen, Germany
**Th477** Altered Cortical and Postural Response to Balance Perturbation in Traumatic Brain Injury
Didier Alexandre¹, Vikram Shenoy¹, Armand Hoxt³, Soha Saleh¹, S. Easter Selvani¹, Guang Yue¹
¹Kessler Foundation, West Orange, New Jersey, United States

**Th478** Dysregulating Electrophysiology and Behavior via an Emotionally Evocative Stop-Signal Task
Killian Kleffner³, Patrick Carolan¹, Mario Liotti²
¹Simon Fraser University, Burnaby, British Columbia, Canada, ²Simon Fraser University, Burnaby, British Columbia, Canada

**Th479** Motor Imagery Classification using Cascade ResNet-LSTM
Yijing Feng¹, Euiyoung Chung², Yael Cycowicz¹, Xiaofu He¹
¹The New York State Psychiatric Institute, New York, NY, United States, ²Department of Statistics, Columbia University, New York, NY, United States

**Th480** Alpha Oscillation in Phantom Limb Pain Patients: A Neuropathic Pain Signature
Eva Lendaro¹, Max Ortiz Catalan¹
¹Chalmers University of Technology, Gothenburg, Sweden

**Th481** An EEG Study of Induced Emotion by Manipulating Feedback During Decision Making Task
Atyngul Kamzanova¹, Ayim Kabdilgabtiova¹, Almira Kustubayeva¹
¹al-Farabi Kazakhstan National University, Center for Cognitive Neuroscience, Almaty, Kazakhstan

**Th482** AUTOMAGIC: Standardized Preprocessing of Big EEG Data
Nicolas Langer¹, Andreas Pedroni¹, Amineza Bahreini¹
¹University of Zurich, Zurich, Switzerland

**Th483** A Framework to Study the Impact of Initial Geometry on Cortical Morphogenesis
Amine Bahl¹, Xiaoyu Wang¹, Mariam Al Harrach¹, Mickael Dinomais¹, François Rousseau², Julien LeFèvre¹
¹Aix Marseille Univ, CNRS, INT, Inst Neurosci Timone, Marseille, Marseille, France, ²IMT Atlantique, LaTIM U1101 INSERM, UBL, Brest, France

**Th484** Fast Macromolecular Proton Fraction (MPF) Maps using a Calibrated Synthetic Fast Reference Image
Sofia Chavez¹, Kim Desmond²
¹Centre for Addictions and Mental Health, CAMH, Toronto, Ontario, Canada, ²Centre for Addictions and Mental Health, CAMH, Toronto, Ontario, Canada

**Th485** Estimating absolute conductivities for head models through bEIT: the issues are not the amplitudes
Daniel Miklody¹, Benjamin Blankertz¹
¹Technische Universität Berlin, Berlin, Germany

**Th486** Event-related analysis based on DMN fluctuations for source localization of interictal discharges
Bruno Campuzó¹, Ana Coim², Marina Alvim¹, Leticia Ribeiro¹, Clarissa Vasuda¹, Fernando Cendes¹
¹University of Campinas, Campinas, São Paulo, Brazil

**Th487** Removing noise from sodium MR Images by means of a Denoising Autoencoder
Simon Koppert¹, Edouard Coussoux², Jörg Schulz², Dorit Merhof³, Kathrin Reetz², Sandro Romanzetti²
¹Institute of Imaging & Computer Vision, RWTH Aachen University, Aachen, Germany, ²Department of Neurology, RWTH Aachen University, Aachen, Germany, ³JARA-BRAIN Institute of Molecular Neuroscience and Neuroimaging Research Center Jülich GmbH, Aachen, Germany

**Th488** Differential cortical activation during covert vs. overt language generation assessed using HD-DOT
Mariel Schroeder¹, Andrew Fishell¹, Arefeh Sherafati¹, Alexia Svoboda¹, Joseph Culver¹, Adam Eggbrecht¹
¹Washington University in St Louis, St Louis, MO, United States

**Th489** Detection of Magnetic Nanoparticle Signals with a Compact OPM towards Next Generation Neuroimaging
Tetsue Kobayashi¹, Takenori Oida¹, Yosuke Ito¹, Kentaro Kato¹
¹Kyoto University, Kyoto, Japan

**Th490** Simultaneous Estimation of T1, T2, T2* and Relative-B1 Using MR Fingerprinting with EPI Readout
Mahdi Khajehi², Thomas Christen³, J. Jean Chen³
¹Medical Biophysics, University of Toronto, Toronto, Ontario, Canada, ²Rotman Research Institute, Baycrest Health Sciences, Toronto, Ontario, Canada, ³Grenoble Institute of Neurosciences, Inserm, Grenoble, France

**Th491** Brain Mechanical Properties and Impaired Balance Reactions in Children with Cerebral Palsy
Grace McLivain¹, Charlotte Chaze¹, Gabrielle Villermaux¹, James Tracy¹, Henry Wright¹, Freeman Miller², Jeremy Crenshaw¹, Curtis Johnson¹
¹University of Delaware, Newark, DE, United States, ²University of Delaware, Newark, DE, United States, ³Department of Orthopedic Surgery, Nemours/A.I. duPont Hospital for Children, Wilmington, DE, United States

**Th492** Relationship between SLF injury and visual pursuit in HI-BI patients with impaired consciousness
HanDo Lee¹, SungHo Jang²
¹College of Medicine, Yeungnam University Hospital, Daegu, Namku, ²College of Medicine, Yeungnam University Hospital, Republic of Korea, Daegu, Namku

**Th493** Sensorimotor and cognitive contributions to the Nine-Hole Peg Test
Laura Bonzano¹, Ludovico Pedulli¹, Giampaolo Brichetto¹, Marco Bove¹
¹University of Genoa, Genoa, Italy, ²Multiple Sclerosis Italian Foundation, Genoa, Italy

**Th494** Investigating Psychosis Spectrum White Matter Glutamate Alterations with GluCEST Imaging
Valerie Synnott¹, Christian Kohler¹, Theodore Satterthwaite¹, Andrew Craw¹, Monica Calkins¹, Mark Elliott¹, Ravi Nango¹, Hari Harinarayana, Ravinder Reddy¹, Raquel Gur¹, Ruben Gur¹, David Raifí¹
¹Neuropsychiatry Section, Department of Psychiatry, University of Pennsylvania, Philadelphia, PA, United States, ²Department of Radiology and Center for Magnetic and Optical Imaging, University of Pennsylvania, Philadelphia, PA, United States

**Th495** Myelin Mapping Using 3D Adiabatic Inversion Recovery Ultrashort Echo Time (3D IR-UTE) Sequences
Jiang Du¹, Hyungsok Jang¹, Eric Chang¹, Jody Corey-Bloom¹, Yajun Ma¹
¹University of California, San Diego, San Diego, CA, United States

**Th496** Lead Suite - A Powerful Imaging Toolbox for Epilepsy Patients with Deep Brain Stimulation
Elisabeth Hartl¹, Jan Hinnerk Mehrkens¹, Kai Bötzel¹, Soheyl Noachtar¹, Christian Vollmar¹
¹LMU Munich, Munich, Germany
**Imaging of CLARITY**

**THURSDAY, JUNE 13**

Odd numbers: 12:45 – 13:45; Even numbers: 13:45 – 14:45; Poster Reception: 16:00 – 17:00

**Th497** Human Microstructural Connectomics – Validation with histology and CLARITY

**Th503** Finite-State Hb Transition Network Provides Access to Disease-Sensitive Dense Feature Spaces

Randall Barbour², San-Lian Barbour², Harry Graber³

SUNY Downstate Medical Center, Brooklyn, NY, United States, ²Photon Migration Technologies, Corp., Brooklyn, NY, United States, ³Photon Migration Technologies Corp., Brooklyn, NY, United States

**Th504** Decoding visual stimulus position from high density diffuse optical tomography neuroimaging data

Kalyan Tripathy¹, Andrew Fishell², Zachary Markov³, Adam Eggebrecht⁴, Bradley Schlagger⁵, Joseph Cullen⁴

¹Washington University in St Louis, St Louis, MO, United States, ²Kennedy Krieger Institute, Baltimore, MD, United States

**Th505** Using fNIRS to study fronto-temporoparietal connectivity in awake infants

Chiara Bulgarelli¹, Carina de Klerk¹, Antonia Hamilton⁵, Victoria Southgate², Anna Bias²

¹Università Federal do ABC, Santo André, São Paulo, ²University of Queensland, Brisbane, Australia, ³Università Federale del ABC, Santo André, Brazil, ⁴Università di Campania, Campinas, Brazil

**Th506** Identifying individuals using fNIRS-based cortical connectomes

Julia Rodrigues¹, Claudia Biazi³, Fernanda Lenit¹, João Sato¹, Rickson Mesquita⁴

¹Universidade Federal do ABC, Santo André, São Paulo, ²University of Queensland, Brisbane, Australia, ³Università Federale del ABC, Santo André, Brazil, ⁴Università di Campania, Campinas, Brazil

**Th507** Fluctuations in cerebral oxygenated hemoglobin and water concentrations are inversely correlated

Vesa Korhonen¹, Viola Borchardt², Heta Helakari³, Niko Huotari³, Janne Kanann, Ville Razzakainen⁴, Jussi Kantola³, Teemu Myllyla⁴, Vesa Kiviniemi⁴

¹Oulu University Hospital, Oulu, Finland, ²University of Oulu, Oulu, Finland, ³Leibniz Institute for Neurobiology, Magdeburg, Germany

**Th508** Prefrontal cortex challenged by multitasking: a functional near-infrared spectroscopy study

Silvia Mammarella¹, Stefania Lancia¹, Denise Blanco¹, Jongkwan Choi², Jiyoung Baek², Marco Ferrari¹, Valentino Quaresima³

¹University of L’Aquila, L’Aquila, Italy, ²OBELAB, Seoul, Korea, Republic of

**Th509** Systemic hemodynamic influences in functional Near-Infrared Spectroscopy – a multimodal study

Li Hocke¹, Kenroy Cayetano¹, Junyong Tong³, Blaise Frederick⁴

¹McLean Hospital, Belmont, MA, United States, ²Harvard University, Boston, MA, United States, ³Purdue University, West Lafayette, MA, United States

**Th510** Using fNIRS as a biomarker for executive function atypicality in Autism Spectrum Disorder

Paola Pinti¹, David Perpetuini², James Crum³, Lily Carnegie-Peake¹, Maud Busemann¹, Davide Paoletti¹, Arcangelo Merla², Albert Postma³, Antonia Hamilton², Ilias Tachtisidis², Paul Burgess²

¹Department of Medical Physics and Biomedical Engineering, University College London, London, United Kingdom, ²Department of Neuroscience, Imaging and Clinical Sciences, University of Chieti-Pescara, Chieti, Italy, ³Centre of Cognitive Neuroscience, University College London, London, United Kingdom, ⁴Experimental Psychology, Utrecht University, Utrecht, Netherlands

**Th511** Neural correlates of lying and lie detection in a two-person game measured with fNIRS

Paola Pinti¹, Andrea Devoto¹, Isabel Greenhalgh², Ilias Tachtisidis², Paul Burgess², Antonia Hamilton²

¹Department of Medical Physics and Biomedical Engineering, University College London, London, United Kingdom, ²Centre of Cognitive Neuroscience, University College London, London, United Kingdom

**Th499** Segmentation of cerebral cortical microvasculature using an enhanced multi-scale Frangi approach

Michael Bernier¹, Nick Evans², Dae Hee³, Joerg Pfannmoller², Avery Berman¹, Lawrence Wald³, Jonathan Polimeni¹

¹Department of Radiology, A.A. Martinos Center for Biomedical Imaging, MGH and Harvard Medical School, Charlestown, Boston, MA, United States, ²Picower Institute for Learning and Memory, Massachusetts Institute of Technology, Cambridge, MA, United States

**Th500** The spatiotemporal hemodynamic changes from neonates to elderslies investigated by fNIRS

Mohammed Rupawala¹, Peter Tino², Samuel Lucas³, Hamid Dehghani², Damian Cruse⁴

¹Centre for Doctoral Training in Physical Sciences for Health, University of Birmingham, Birmingham, United Kingdom, ²School of Basic Medical Sciences, Purdue University, West Lafayette, IN, United States, ³School of Sport, Exercise and Rehabilitation Sciences, University of Chieti-Pescara, Chieti, Italy, ⁴Department of Mechanical Engineering, Purdue University, West Lafayette, IN, United States

**Th501** Detecting motor imagery using frequency domain functional NIRS

Mohammed Rupawala¹, Peter Tino², Samuel Lucas³, Hamid Dehghani², Damian Cruse⁴

¹Centre for Doctoral Training in Physical Sciences for Health, University of Birmingham, Birmingham, United Kingdom, ²School of Basic Medical Sciences, Purdue University, West Lafayette, IN, United States, ³School of Sport, Exercise and Rehabilitation Sciences, University of Chieti-Pescara, Chieti, Italy, ⁴Department of Mechanical Engineering, Purdue University, West Lafayette, IN, United States

**Th502** Characterizing Physiological Components of Nirs-Infrared Spectroscopy Signal under Hypercapnia

Ho-Ching Yang², Hao Tien³, Ho-ching Yang¹, Takeshi Arimitsu¹, Takao Takahashi¹, Haijing Niu¹, Yasuyo Minagawa¹, Yingwei Li², Junyong Tong³

¹Keio University School of Medicine, Tokyo, Japan, ²Beijing Normal University, Beijing, China, ³Beijing University, Tokyo, Japan

**Th503** Finite-State Hb Transition Network Provides Access to Disease-Sensitive Dense Feature Spaces

Randall Barbour², San-Lian Barbour², Harry Graber³

SUNY Downstate Medical Center, Brooklyn, NY, United States, ²Photon Migration Technologies, Corp., Brooklyn, NY, United States, ³Photon Migration Technologies Corp., Brooklyn, NY, United States
Th512 Interpersonal brain synchronization with instructor compensates for student’s sleep deprivation
Pan Yafeng1, Guyon Camillle2, Borragan Guillermo2, Hu Yi1, Philippe Peigneux2
1East China Normal University, Shanghai, China, 2Université Libre de Bruxelles (ULB), Bruxelles, Belgium

Th513 Neural Mechanism for Mother-Child Relationship
Hui Zhao1, Huixin Xie1
1Beijing Normal University, Beijing, China

Th514 Neck Proprioceptive Inputs Integration For Spatial Orientation
Marco Bove1, Ludovico Pedullà1,2, Simone Cutini1, Giampaolo Brichetto1, Laura Bonzano1
1University of Genoa, Genoa, Italy, 2Multiple Sclerosis Italian Foundation, Genoa, Italy, 3University of Padova, Padova, Italy

Th515 Motion artifacts removal method for fNIRS data to examine brain activity during dart throwing
Saori Yoshida1, Satoru Hiwa1, Masaki Takeda2, Tomoyuki Hiyonasu1
1Department of Biomedical Sciences and informatics, Doshisha University, Kyoto, Japan, 2Faculty of Health and Sports Science, Doshisha University, Kyoto, Japan

Th516 Neural dynamics of attentional cueing revealed by fast optical imaging
Gioia Parisi1, Chiara Mazz1, Elisabetta Colombati1, Brian Metzger1, Antonio Chiarelli1, Silvia Savozzi1, Carlo Marzi
1University of Verona, Verona, Italy, 2Baylor College of Medicine, Houston, TX, United States, 3University G. d’Annunzio di Chieti-Pescara, Chieti, Italy

Th517 FNIRS brain-to-brain synchrony during social cooperation in children with Autism
Vanessa Reinfeld1,2, Jano Kruppa1,2, Julia Prinz1, Ellen Weis1,2, Christian GerloPf1,2, Wolfgang Schärke1, Beate Herpertz-Dahlmann1, Kerstin Konrad1,2, Martin Schulte-Rüther1,2
1University Hospital RWTH Aachen, Aachen, Germany, 2RWTH Aachen & Research Centre Juelich, Germany

Th518 Advancing optical methods to reconstruct the first images of infant functional activation in Africa
Liam Collins-Jones1,2, Robert Cooper1, Anna Blasi1, Sarah Lloyd-Fox2, Laura Kischkel1, Sam McCann1, Luke Mason1, Sophie Moore1, Tomoki Arichi5, Jem Hebden1, Clare Elwell4, The BRIGHT Team3, 1University College London, London, United Kingdom, 2Centre for Brain and Cognitive Development, Birkbeck College, London, United Kingdom, 3Medical Research Council Unit, Keneba, Gambia, 4University College London, London, United Kingdom, 5The Rosie Hospital, Cambridge, United Kingdom

Th519 FNIRS Responses in Professional Violinists While Playing Duets
Joanna Balardin1, Rogério Furuchor1, Guilherme Augusto Morais1, Thennile Braun Janzen1, Daniela Sammiller1, João Sato1, Patricia Vanzella1, 1Hospital Albert Einstein, São Paulo, Brazil, 2Universidade Federal do ABC, São Bernardo do Campo, Brazil, 3NIRe Medizintechnik GmbH, Berlin, Germany, 4Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, 5Universidade Federal do ABC, São Paulo, Brazil

Th520 Neural correlates of cognitive-motor dual tasks
Ludovico Pedullà1, Laura Bonzano1, Ambra Bisio1, Mirko Job1, Giampaolo Brichetto1, Marco Bove1
1University of Genoa, Genoa, Italy, 2Multiple Sclerosis Italian Foundation, Genoa, Italy

Th521 Habituation and Novelty Detection fNIRS brain responses from 5 to 12 months of age: The Gambia, UK
Anna Blasi1, Sarah Lloyd-Fox2, Sam McCann1, Maria Rozhko1, Laura Kischkel1, Luke Mason1, Topun Austin1, Sophie Moore1, Clare Elwell1, The BRIGHT Team1, 1University College London, London, United Kingdom, 2Centre for Brain and Cognitive Development, Birkbeck College, London, United Kingdom, 3Medical Research Council Unit, Keneba, Gambia, 4University College London, London, United Kingdom, 5The Rosie Hospital, Cambridge, United Kingdom

Th522 Functional Connectivity-Based Parcellation of Prefrontal Cortex: A high-resolution fNIRS Study
Jaehyun Lim1, JongKwan Choi2, Jae-Myoung Kim1, Mooka Lee2, Do-Joon Yi1, Soyang Eom2,1 1Optical Brain Electronics Laboratory, Seoul, Korea, Republic of, 2OBELAB, Seoul, Korea, Republic of, 3KAIST, Daejeon, Korea, Republic of, 4Epilepsy Research Institute, Yonsei University, Seoul, Korea, Republic of, 5Yonsei University College of Medicine, Seoul, Korea, Republic of

Th523 Monitoring Brain Activity during Rhythmic Music Therapy: an fNIRS Investigation
Sabrina Brigadoi1, Federico Curzel1, Simone Cutini1
1University of Padova, Padova, Italy

Th524 Assessment of Cognitive Reserve using Near Infrared Spectroscopy
Andrei Medvedev
1Georgetown University Medical Center, Washington, DC, United States

Th525 Photogrammetry for Localizing 3D Position of Multi-channel NIRS Optodes using multiple snapshots
Changmin Lee1, JongKwan Choi1, Hangjun Jo1, Hyeon-Min Bae2 1OBELAB, Seoul, Korea, Republic of, 2KAIST, Daejeon, Korea, Republic of

Th526 The role of timing in the consolidation of human’s first memories
Silvia Benavides-Varela1, Roma Siugzdaite2, Jacques Mehler3
1University of Padova, Padova, Italy, 2University of Cambridge, Cambridge, United Kingdom, 3SISSA, Trieste, Italy

Th527 Prefrontal Functional Connectivity during Cognitive Tasks in Depression: An fNIRS Study
Suh-Yeon Dong1, JongKwan Choi2, Jae-Myoung Kim1, Mooka Lee2, Do-Joon Yi1, Soyang Eom2
1OBELAB, Seoul, Korea, Republic of, 2KAIST, Daejeon, Korea, Republic of

Non-BOLD fMRI

Th528 Resting-state diffusion fMRI in the rat brain at ultra-high field
Ileana Jelescu1, Olivier Reynaud2 1Ecole Polytechnique Federale de Lausanne, Lausanne, Switzerland, 2Fondation Campus Biotech, Geneva, Switzerland

Th529 Optimization of Canonical Hemodynamic Response Function in Perfusion fMRI
Qingfei Luo1, Wen-Ming Luh1, Jerzy Bodurka1,2,3
1Laureate Institute for Brain Research, Tulsa, OK, United States, 2Cornell MRI Facility, Cornell University, Ithaca, NY, United States, 3Stephenson School of Biomedical Engineering, University of Oklahoma, Norman, OK, United States

Th530 Investigating an optimal duration of acquisition in resting-state ASL
Corentin Vallée1, Pierre Maure1, Isabelle Corouge1, Christian Barillot1, 1Optical Brain Electronics Laboratory, Seoul, Korea, Republic of, 2KAIST, Daejeon, Korea, Republic of, 3OBELAB, Seoul, Korea, Republic of

Non-BOLD fMRI
Th531 Changes in Cerebral Stiffness Relative to ToF Measured Arterial Dilation During Visual Activation
Reihanee Forouhandehpour1, Michaela Bernier2, Guillaume Gilbert1, Russell Butler1, Kevin Whittingstall1, Elijah Van Houten1
1Department of Nuclear Medicine and Radiobiology, University of Sherbrooke, Sherbrooke, QC, Canada, 2Martinos Center - MGH - Harvard Medical School, Charlestown, MA, United States, 3MR Clinical Science, Philips Healthcare Canada, Markham, Ontario, Canada, 4Department of Mechanical Engineering, University of Sherbrooke, Sherbrooke, QC, Canada

Th532 Organization of semantic verbal fluency brain network assessed by dual-echo arterial spin labeling
Andrea Monteiro Paschoal1, Pedro Henrique da Silva1, Carlo Rondinoni1, Isabella Arigo1, Fernando Paiva1, Renata Leon1
1InBrain Lab - University of Sao Paulo, Ribeirao Preto, Brazil, 2Universidade de Sao Paulo, Ribeirao Preto, Brazil, 3CIERMag - University of Sao Paulo, Sao Carlos, Brazil, 4University of Sao Paulo, Ribeirao Preto, Brazil

Th533 Changes in Brain Structure and Function in Cluster Headache and Predictors for Treatment Response
Sonia Meding1, Owen O’daly1, Elena Makovac1, Norazah Bakar1, Sarah Miller2, Tara Renton3, Steven Williams4, Manjit Matharu5, Matthew Howard1
1Kings College London, London, United Kingdom, 2KCL, London, United Kingdom, 3UCL, London, United Kingdom, 4Department of Neuroimaging, King’s College London, London, 5UCL Queen Square Institute of Neurology, London, United Kingdom

Th534 Multi-parametric quantitative fMRI imaging in humans during fixation and visual stimulation
Katarzyna Kurczy1, Samira Epp1, Stella Koutsouli1, Stephan Kaczmarz1, Christine Preibisch1, Valentin Reid1
1Neuroradiology, Technische Universität München, Munich, Germany, 2Technische Universität München, Munich, Germany

Th535 Comparing VASO and BOLD responses elicited by different hand movement rates at 7T
Icaro Oliveira1,2, Serge O. Dumoulin2,3, Wietse van der Zwaag4, Jeroen Siero1,2,3
1SpinOza Centre for Neuroimaging, Amsterdam, Netherlands, 2Experimental and Applied Psychology, VU University, Amsterdam, Netherlands, 3Experimental Psychology, Heimholtz Institute, Utrecht University, Utrecht, Netherlands, 4SpinOza Center, Amsterdam, Netherlands, 5Radiology, University Medical Centre Utrecht, Utrecht, Netherlands

Th536 Peripheral inflammatory markers predict exercise-induced hippocampal blood flow changes
Jessica Steventon1, Claire Kelly1, Catherine Foster1, Hannah Chandler1, Michael Germuska1, Richard Wise1, Kevin Murphy1
1Cardiff University, Cardiff, United Kingdom, 2Cardiff Metropolitan University, Cardiff, Cardiff

Th537 Laminar Signal Change of BOLD and VASO in Human Visual Cortex at 7T
Athena Akbari1, Saskia Bollmann1, Markus Barth1
1The University of Queensland, Brisbane, Queensland, Australia

Optical coherence tomography (OCT)

Th538 Surface and thickness of cerebellar cortex with polarization sensitive optical coherence tomography
Viviana Sillas1, Morgan Fogarty1, Douglas Greve1, Bruce Fischl2,3, Hui Wong1
1Athinoula A. Martinos Center for Biomedical Imaging, Massachusetts General Hospital, Boston, MA, United States, 2MIT Computer Science and AI Lab, Cambridge, MA, United States

PET

Th539 DRD2 genotype-based variants modulates D2 receptor distribution in ventral striatum
Miroel Valti1, Sang Soo Cho1, Mario Masellis1, Robert Chen1, Pablo Rusjan1, Jinhee Kim1, Yoko Koshimori1, Alexander Miaoescu1, Antonio Strafella2, 3CAMH, Toronto, CA, United States, 4CAMH, Toronto, Ontario, Canada, 5LC Campbell Cognitive Neurology Research Unit, Sunnybrook Research Institute, Toronto, Ontario, Canada, 6Division of Brain, Imaging and Behaviour – Systems Neuroscience, Krembil Research Institute, UHN, Toronto, Ontario, Canada, 7University of Toronto, Toronto, Canada

Th540 Optimization of partial volume correction parameters using surface based analyses in FDG-PET
Victor Montal1, Jordi Pegueroles1,3, Eduard Vilaplana2,3, Rafael Blesa1,3, Alberto Lleó1,3, Juan Fortea1,2,3
1Memory Unit, Department of Neurology, Hospital de la Santa Creu i Sant Pau, Barcelona, Spain, 2Centro de Investigación Biomédica en Red De Enfermedades Neurodegenerativas CIBERNED, Spain, 3Barcelona Down Medical Center. Fundación Catalana de Síndrome de Down, Barcelona, Spain

Th541 High-temporal resolution resting-state metabolic connectivity using simultaneous BOLD-fMRI/ FDG-PET
Sharma Jamsadar1, Shenpeng Li1, Phillip Ward1, Francesco Sforazzini1, Zhaolin Chen1, Gary Egan4
1Monash University, Melbourne, Vic, 2Monash Biomedical Imaging, Clayton, Vic, 3Monash University, Melbourne, Australia, 4Monash University, Melbourne, Victoria

Th542 EEG spectral contribution to glucose PET in healthy subjects and severely brain-injured patients
Jitka Annen1, Federico Raimondo1, Gianluca F rasso1, Helena Cassol1, Monan Carriere1, Rojankant Panda1, Aureo Thibaut1, Camille Chatelle1, Steven Laureys1
1ULiege, Liège, Belgium, 2Features-Analitics, Nivelles, Belgium

Th543 PCA to accurately create a 18F-Flutemetamol PET template for spatial normalization
Jordi Pegueroles1, Victor Montal1, Eduard Vilaplana1, Ignasi Carrió1, Valle Camacho1, Rafael Blesa1, Alberto Lleó1, Juan Fortea1,3
1Memory Unit, Hospital de Sant Pau- IIB Sant Pau, Barcelona, Spain, 2Department of Nuclear Medicine, Hospital Sant Creu i Sant Pau, Barcelona, Spain

Th544 Neuroinflammatory changes of the maternal immune activation animal model of schizophrenia
Luís Romero1, Marta Casquero-Vega2,3, Lucía Vicario1, Jordi Llop1, Karina MacDowell2,4, Juan Carlos Leza2,5,6, Manuel Desco2,5,6, Maria Luisa Soto-Montenegro2,5
1Instituto de Investigación Sanitaria Gregorio Marañón, Madrid, Spain, 2CIBER de Salud Mental (CIBERSAM), Madrid, Spain, 3Departamento de Biogenero e Ingeniería Aeroespacial, Universidad Carlos III de Madrid, Madrid, Spain, 4CIC biomaGUNE, San Sebastián, Spain, 5Department of Pharmacology, Faculty of Medicine, Complutense University, Madrid, Spain, 6Instituto de Investigación Sanitaria Hospital 12 de Octubre (I+12) & Instituto Universitario de Investigación en Neuroquímica (IUN), Madrid, Spain, 7Department of Pharmacology, Faculty of Medicine, Complutense University. CIBERSAM, Madrid, Spain, 8Fundación del Centro Nacional de Investigaciones Cardiovasculares Carlos III, Madrid, Spain

Th545 Quantifying Skull Binding in Tau PET Studies using a Subject-Level CT-based Skull Mask
Shaney Flores1, Brian Gordon1, Yi Su1, Jon Christensen1, Aylin Dincer1, Adedamola Adedokun1, Russ Hornbeck1, John Morris1, Tammie Benzinger1
1Washington University School of Medicine, St. Louis, MO, United States, 2Banner Alzheimer’s Institute, Phoenix, AZ, United States
Th546 Head to head comparison of [18F] florbetaben and [18F] flutemetamol for amyloid imaging in Alzheimer
Yeong Sim Choe1,2, Soo Hyun Cho1,2, Hee Jin Kim1,2, Hyemin Jang1,2, Jun Pyo Kim1,2, Duk L. Na3,4,5, Seongbeom Park1,2, Sang Won Seo1,2,6
1Department of Health Sciences and Technology, SAIHST, Sungkyunkwan University, Seoul, Korea, Republic of, 2Departments of Neurology, Samsung Medical Center, Seoul, Korea, Republic of, 3Neuroscience Center, Samsung Medical Center, Seoul, Korea, Republic of, 4Stem Cell & Regenerative Medicine Institute, Samsung Medical Center, Seoul, Korea, Republic of, 5Neuroscience Center, Samsung Medical Center, Seoul, Korea, Republic of, 6Department of Clinical Research Design & Evaluation, SAIHST, Sungkyunkwan University, Seoul, Korea, Republic of

Th547 Hypometabolism and Metabolic Connectivity in Internet Gaming Disorder and Alcohol Use Disorder
Hee Jung Kim, Yoon Kyeong Kim, Ji Yoon Lee, A Ruem Choi, Dai Jin Kim, Jung-Seok Choi
1Seoul National University, Seoul, Korea, Republic of, 2Department of Nuclear Medicine, Seoul National University Boramae medical center, Seoul, Korea, Republic of, 3Department of Psychiatry, SMG-SNU Boramae Medical Center, Seoul, Korea, Republic of, 4Department of Psychiatry, Seoul St. Mary’s Hospital, The Catholic University of Korea College of Medicine, Seoul, Korea, Republic of

Th548 Metabolic and structural changes of chronic subjective tinnitus in patients with MCI
Hee Jung Kim, Da Young Lee, Sang Yeon Lee, Young Ho Kim, Seong A Shiri, Sang Joong Kim, Jae Sung Lee, Jun Young Lee, Yu Kyeong Kim
1Department of Nuclear Medicine, Seoul National University Boramae medical center, Seoul, Korea, Republic of, 2Seoul National University, College of Medicine, Seoul, Korea, Republic of, 3Department of Otorhinolaryngology, Seoul National University Hospital, Seoul, Korea, Republic of, 4Department of Otorhinolaryngology, Seoul National University Boramae medical center, Seoul, Korea, Republic of, 5Department of Physiology, College of Medicine, Seoul National University, Seoul, Korea, Republic of, 6Department of Nuclear Medicine, Seoul National University, Seoul, Korea, Republic of, 7Department of Psychiatry and Behavioral Science, Seoul National University Boramae medical center, Seoul, Korea, Republic of

Polarized light imaging (PLI)

Th549 Diattenuation Imaging of Brain Tissue Explored by Finite-Difference Time-Domain Simulations
Miriam Mende1, Markus Aker1, Katrin Amunts1, Hans De Raedt2, Kristel Michielsen1
1Forschungszentrum Jülich GmbH, Jülich, Germany, 2Department of Psychiatry, Yokohama City University School of Medicine, Yokohama, Japan

MODELING AND ANALYSIS METHODS

Exploratory Modeling and Artifact Removal

Th550 A method for decomposing multimodal neuroimaging data into trajectories of ageing
Zebanu Arya1, Verena Heise2, Clare Mackay2, Mark Jenkinson3
1FMRIB, Wellcome Centre for Integrative Neuroimaging, University of Oxford, Oxford, United Kingdom, 2Department of Population Health, University of Oxford, Oxford, United Kingdom, 3Department of Psychiatry, University of Oxford, Oxford, United Kingdom

Th551 Denoising Ultra-High Field Multi-dimensional MRI with Local Complex PCA
Pierre-Louis Baron, Anneke Alkemade1, Wietse van der Zwaag3, Matthieu Coant4, Martijn Mulder5, Birte Forsmann2
1Universiteit van Amsterdam, Amsterdam, Netherlands, 2University of Amsterdam, Amsterdam, Netherlands, 3Amsterdam University Medical Center, Amsterdam, Netherlands, 4Integrative Model-Based Neurosciences Research Unit, University of Amsterdam, Amsterdam, Netherlands

Th552 A robust convolutional neural network model for reducing motion artifacts in resting-state fMRI data
Zhengshi Yang1, Xiaowei Zhuang1, Karthik Sreenivasan1, Virendra Mishra1, Dietmar Cordes1,2
1Cleveland Clinic Lou Ruvo Center for Brain Health, Las Vegas, NV, United States, 2University of Colorado, Boulder, CO, United States

Th553 EEG artifact correction for real-time approaches and hypothesis testing
Amanda Medeiros de Freitas1,2, Goetan Sanchez1, Francoise Lecagniard1, Emmanuel Maby1, Alcimar Barbosa Soares2, Jerome Mattout1
1Lyron Neuroscience Research Center, Lyon, France, 2Federal University of Uberlândia, Uberlândia, Brazil

Th554 FMRI Dynamic Phantom for Improved Detection of Resting-State Brain Networks
Rajat Kumar1, Liang Tan2, Alan Kriegstein2, Atsushi Takahashi3, Lawrence Wald4, Jonathan Polimeni5, Helmut Streit6, Lilianne Mujica-Parodi7
1Stony Brook University, Stony Brook, NY, United States, 2ALA Scientific Instruments, Farmingdale, NY, United States, 3Massachusetts Institute of Technology, Cambridge, MA, United States, 4Department of Radiology, A.A. Martinos Center for Biomedical Imaging, MGH and Harvard Medical School, Boston, MA, United States, 5A. A. Martinos Center for Biomedical Imaging, Harvard Medical School, Massachusetts General Hospital, Charlestown, Boston, MA, United States

Th555 A Local Model of Retinotopically Organized Regions for Partial Reconstruction
Duyan Ta, Yalin Wang2, Zheng-Lin Lu2
1Arizona State University, Gilbert, AZ, United States, 2Arizona State University, Tempe, AZ, United States, 3The Ohio State University, Columbus, OH, United States

Image Registration and Computational Anatomy

Th556 Extracting feature from structural brain image using convolutional auto-encoder
Hiroyuki Yamaguchi1,2, Yuki Hashimoto1, Manabu Honda1, Yuichi Yamashita1
1Department of Functional Brain Research, National Center of Neurology and Psychiatry, Tokyo, Japan, 2Graduate School of Interdisciplinary Information Studies, The University of Tokyo, Tokyo, Japan

Th557 Computationally efficient depth-mapping scheme for improved midbrain
David Hess1, Paulina Truong1, Jung Hwan Kim1, Ricky Savjani2
1Baylor College of Medicine, Houston, TX, United States, 2University of Chicago (NorthShore), Chicago, IL, United States

Th558 Aligning Images of Large Human Brain Sections on a Cellular Level using Bisection Cells
Marcel Huebsegov1, Sarah Haas1, Sebastian Bliudat1, Katrin Amunts2, Timo Dickscheid3
1Institute of Neuroscience and Medicine, INM-1, Research Centre Jülich, Jülich, Germany, 2Cécile & Oskar Vogt Institute for Brain Research, Medical Faculty, University Hospital Düsseldorf, Düsseldorf, Germany
**Th562** A generalizable method for multilayer flat-map projection of hippocampal subfields

Nikos Pravoukos1, Dino Ivanov1, Benedikt Poser1, Frans Verhey1, Heidi Jacobs1,2

1Faculty of Psychology and Neuroscience, Maastricht University, Maastricht, Netherlands, 2Department of Radiology, Harvard Medical School, Boston, MA, United States

**Th563** Evaluation of Brain Normalization Methods in Glioma Patients

Henry Chen1, Vinoddh Kumar1, Jason Johnson1, Kyle Noll1, Sujit Prabhu1, Donald Schomer1, Ho-Ling Liu1

1The University of Texas MD Anderson Cancer Center, Houston, TX, United States

**Th564** Ultra-high Field MRI Registration Using Mutual Information of Images in Scale Space

Yi Chen1, Ennrah Duzel1

1Otto-von-Guericke University, Institute of Cognitive Neurology and Dementia Research, Magdeburg, Germany

**Th565** Hierarchical modeling of Alzheimer’s disease progression from a large longitudinal MRI data set

Alexandre Böde1, Benoît Martin1, Maxime Louis1, Olivier Colliot1, Stanley Dunneman1

1ARAMIS Lab, ICM, INSERM U1127, CNRS UMR 7225, Sorbonne University, Inria, Paris, France, Paris, France

**Th566** Correction of B0 distortion in high-resolution ex vivo brains with reversed polarity acquisitions

Robert Frost1, Divya Varadarajan1, Jesper Andersson2, Emma Boyd1, Lee Tirrell1, Bram Diamond1, Leah Morgan1, Allison Stevens1, Jonathan Polimeni1, Bruce Fischl2,3, Andre van der Kouwe1

1A. A. Martinos Center for Biomedical Imaging, Harvard Medical School, Massachusetts General Hospital, Boston, MA, United States, 2University of Oxford, Oxford, UK, 3Department of Imaging, Massachusetts General Hospital, Boston, MA, United States, 4University of California, Los Angeles, California, United States

**Th567** A novel, geometry-based method for the analysis of hippocampal thickness

Kersten Diers1, Tobias Bauer1, Theodor Rübel1,2, Martin Reuter1,5

1German Center for Neurodegenerative Diseases (DZNE), Bonn, Germany, 2Department of Epileptology, University of Bonn Medical Center, Bonn, Germany, 3Epilepsy Center Frankfurt Rhein-Main, Department of Neurology, Goethe University Frankfurt, Frankfurt am Main, Germany, 4Center for Personalized Translational Epilepsy Research (CePTER), Goethe University Frankfurt, Frankfurt am Main, Germany, 5Martinos Center for Biomedical Imaging, Radiology, MGH / Harvard Medical School, Boston, MA, United States

**Th568** U-Net Model for Brain Extraction: Training in Humans and Transferring to Non-human Primates

Nanditha Rajaram1, Xindi Wang2, Joe Wook Choi1, Anchaliaya Khorchmaros1, Lei Ai1, Alisa Omelchenko1, R. Cameron Craddock1, Michael milham3, Ting Xu1

1Child Mind Institute, New York, NY, United States, 2Montréal Neurological Institute (MNI), Quebec, Canada, 3Lundos Biopharma, VA, United States, 4University of Texas at Austin, Austin, TX, United States

**Th569** A method to describe folding patterns across species

Katja Heuer1,2, Roberto Toro3

1Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, 2Institut Pasteur, Paris, France, 3Center for Research and Interdisciplinarity (CRI), Université Paris Descartes, Paris, France

**Motion Correction and Preprocessing**

**Th570** Distortion correction for retinotopic mapping at ultra-high magnetic fields

David Linhardt1, Allon Hummer1, Michael Wotz1, Christian Windischberger1

1Medical University of Vienna, Vienna, Austria

**Th571** Global Signal Regression Enhances Association between Resting-State fMRI and Behavior

Jingwei Li1, Ru Kong1, Raphaeli Liegeois2, Csaba Orbani1, Nanbo Sun1, Avram Holmes2, Mert Sabuncu1, Tom Grér1, B. T. Thomas Yee2,3

1ECE, CIRC, SINAPSE & MNP, National University of Singapore, Singapore, Singapore, 2Ecole Polytechnique Fédérale de Lausanne, Lausanne, Switzerland, 3Yale University, New Haven, CT, United States, 4Cornell University, Ithaca, NY, United States, 5Center for Genomic Medicine, Massachusetts General Hospital, Boston, MA, United States, 6Martinos Center for Biomedical Imaging, Massachusetts General Hospital, Charlestown, MA, United States, 7Centre for Cognitive Neuroscience, Duke-NUS Medical School, Singapore, Singapore, 8NUS Graduate School for Integrative Sciences and Engineering, National University of Singapore, Singapore, Singapore

**Th572** Model based fMRI denoising

Luigi Gresele1, Klaus Scheffler1, Bernhard Schölkopf1, Gabriele Lohmann1

1Max-Planck Institute for Intelligent Systems, Max-Planck Institute for Biological Cybernetics, Tübingen, Germany, 2Max-Planck Institute for Biological Cybernetics, University of Tübingen, Tübingen, Germany, 3Max-Planck Institute for Intelligent Systems, Tübingen, Germany, 4Max-Planck Institute for Biological Cybernetics, Tübingen, Germany

**Th573** Quality Control Metrics for Assessing the Quality of fMRI Data in Functional Connectivity Studies

Michalis Kassinos1, Georgios Missis1

1McGill University, Montreal, QC, Canada, 2McGill University, Montreal, Quebec, Canada

**Th574** The Impact of Spatial Normalization strategies on resting state fMRI

Zhao Qing1, Xin Zhang1, meiping ye1, Sichu Wu1, Xin Wang1, Zuzana Nedelska2, Jakub Hort2, Bing Zhang1

1Affiliated Drum Tower Hospital of Nanjing Medical School, Nanjing, China, 2International Clinical Research Center, St. Anne’s University Hospital Brno, Brno, Czech Republic

**Th575** High Frequency Contamination of Motion Estimates in Single-band fMRI

Caterina Grotton1, Rebecca Coalslon1, Ally Dworestsky1, Babatunde Adeyemo2, Deanna Barouch1, Daniel Tran1, Oscar Miranda-Dominguez1, Damien Fair3, Nico Dosenbach1, Abraham Snyder2, Joel Perlmuter1, Steven Petersen1, Meghan Campbell1

1Northwestern University, Evanston, IL, United States, 2Washington University in St. Louis, St. Louis, MO, United States, 3University of Iowa, Iowa City, IA, United States, 4Oregon Health and Science University, Portland, OR, United States
Th576 Evaluation of motion scrubbing in task-based fMRI using open data
Michael Jones1, Zhenchen Zhu2, Jonathan Peelle1
1Washington University in Saint Louis, Saint Louis, MO, United States

Th577 The Developmental Cognition and Neuroimaging (DCAN) Lab’s Functional MRI Preprocessing Pipelines
Darrick Sturgeon1, Anders Perrone1, Emma Schifsky1, Eric Earl1, Jonathan Uriarte-Lopez2, Oscar Miranda-Dominguez2, Anajani Ragothaman1, Eric Fecko1, Donald Hagler2, Richard Watts4, Damien Fair1
1Oregon Health and Science University, Portland, OR, United States, 2Oregon Health & Science University, Portland, OR, United States, 3University of California San Diego, San Diego, CA, United States, 4Yale University, New Haven, CT, United States

Th578 Comparison of FSL FIX vs. CompCor for reduction of task-related noise
Marie-Eve Hoeppli1, Martin Garenfeld2, Christian Mortensen2, Hadas Nahman-Averbuch1, Christopher King1, Robert Coghfill1
1Cincinnati Children’s Hospital Medical Center, Cincinnati, OH, United States, 2Aalborg University, Aalborg, Denmark

Th579 Effects of motion and motion correction on the structure of brain functional connectivity
Giulia Forcellini1,2, Carlo Nicolini1, Ludovico Minati1,2, Angelo Bifone1,4
1Center for Neuroscience and Cognitive Systems, Istituto Italiano di Tecnologia, Rovereto (TN), Italy, 2Center for Mind/Brain Sciences, University of Trento, Rovereto (TN), Italy, 3Institute of Innovative Research, Tokyo Institute of Technology, Yokohama, Japan, 4Department of Molecular Biotechnology and Health Sciences, University of Torino, Torino, Italy

Th580 A comparison of fMRIPrep and HCP Pipeline preprocessing of an fMRI dataset in the surface and volume
Josef Etzel1, Mitch Jeffers1, Todd Braver1
1Washington University in St Louis, Saint Louis, MO, United States

Th581 Importance of non-linearities in confounds for UK Biobank brain imaging data
Fidel Alfaro Almagro1, Thomas Nichols2, Stephen Smith3
1FMRIB, Wellcome Centre for Integrative Neuroimaging, University of Oxford, Oxford, United Kingdom, 2Big Data Institute, Oxford, United Kingdom

Th582 To scrub or not to scrub: motion features during fMRI scanning strongly vary across subjects
Thomas Bolton1, Daniela Zoller1, Dimitri Van De Ville2
1École Polytechnique Fédérale de Lausanne, Genève, Switzerland, 2École Polytechnique Fédérale de Lausanne (EPFL) and University of Geneva, Geneva, Switzerland, 3École Polytechnique Fédérale de Lausanne, Lausanne, Switzerland

Th583 Differentiating neural and non-neural components in fMRI using cross-cortical depth delay patterns
Jingyuan Chen1, Anna Blazejewski1, Nina Fultz2, Bruce Rosen2, Laura Lewis3, Jonathan Polimeni1
1A. A. Martinos Center for Biomedical Imaging, Harvard Medical School, Massachusetts General Hospital, Charlestown, Boston, MA, United States, 2A. A. Martinos Center for Biomedical Imaging, Massachusetts General Hospital, Charlestown, Boston, MA, United States, 3Department of Radiology, A. A. Martinos Center for Biomedical Imaging, MGH and Harvard Medical School, Charlestown, Boston, MA, United States, 4Boston University, Boston, MA, United States

Th584* Real-time fMRI Motion Tracking: should I stop and restart the scan?
Nathalia Esper1, Maicon Much1, Dario Azevedo1, Augusto Buchweitz1, Michael Milham2, Alexandre Franco3
1PUCRS, Porto Alegre, Rio Grande do Sul, 2Child Mind Institute, New York, NY, United States

Th585 Qualitative assessment for clinical resting state fMRI: Voxel-wise biopsy of functional Connectivity
Salvatore Torrisi1, Ryan Robison1, Stephen Foldes1, P. David Adelson1, Angus Wilfong2, Vrina Boerwinkle3
1Barrow Neurological Institute at Phoenix Children’s Hospital, Phoenix, AZ, United States

Th586 Wasserstein Generative Adversarial Network (WGAN) for Realistic Motion Correction in 3D MPRAge Image
Zhenyang Fang1, Dong Nie2, Qian Zhang1, Zhenghan Fang1, Weili Lin1, Xiaopeng Zong1, Dinggang Shen3
1University of North Carolina at Chapel Hill, Chapel Hill, NC, United States

Th587* Spatial normalization in fMRIPrep
Oscar Esteban1, Rastko Cicic2, Christopher Markiewicz1, Russell Poldrack1, Krzysztof Gorgolewski4
1Stanford University, Stanford, CA, United States, 2University of Pennsylvania, Philadelphia, PA, United States

Other Methods
Th588 Is Visual Image Classification Possible with Brain Signal?-MEG Study
Yangwoo Kim1, Sehyeon Jang1, Soo Cho1, SungChan Jun1
1Gwangju Institute of Science and Technology, Gwangju, Gwangju

Th589 On the use of the Scaled False discovery rate in connectomic studies
Djelia-Eddine Meskalldji1,2, Stephan Morgenthaler1
1Swiss Federal Institute of Technology, Lausanne, Switzerland, 2University of Geneva, Geneva, Switzerland

Th590 Clustering insula structural alteration using density-based approach: a DBSCAN application to brain
Jordi Manuelli1, Enrico Palumbo2, Giuseppe Rizzo2, Andrea Nani3, Tommaso Costa4, Sergio Duca4, Franco Cauda5
1University of Turin, Turin, Italy, 2Istituto Superiore Mario Boella, Turin, Italy, 3Department of Psychology - University of Turin, Turin, Italy, 4Koelliker Hospital, Turin, Italy, 5University of Turin, Department of Psychology, Turin, Italy

Th591 Scanner Invariant Representations
Daniel Moyer1, Greg ver Steeg2, Chantal Tax3, Paul Thompson4
1University of Southern California, Los Angeles, CA, United States, 2Information Sciences Institute, Los Angeles, CA, United States, 3CUBRIC, Cardiff University, Cardiff, United Kingdom, 4Keele School of Medicine of the University of Southern California, Marina del Rey, CA, United States

Th592 A statistical mechanics approach to modelling neurotransmitter-mediated cortical interactions
Caroline Lea-Carnall1, Nelson Trujillo-Barreto1
1University of Manchester, Manchester, United Kingdom

Th593 Naturalistic viewing paradigm using eye-tracking based 360° movie clip
Sungman Jo1, Sangsoo Jin1, Hyun-Chul Kim1, Jong-Hwan Lee2
1Korea University, Seoul, Korea, Republic of
Th594 Comparison of MR-less FBB PET Quantification Methods
Seongbeom Park1,2, Soo Hyun Choi2, Sang Won Seo2,3,4, Ucheul Yoon5
1Neuroscience Center, Samsung Medical Center, Seoul, Korea, Republic of, 2Department of Neurology, Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, Korea, Republic of, 3Department of Health Sciences and Technology, SAIHST, Sungkyunkwan University, Seoul, Korea, Republic of, 4Department of Clinical Research Design & Evaluation, SAIHST, Sungkyunkwan University, Seoul, Korea, Republic of, 5Department of Biomedical Engineering, Daegu Catholic University, Gyeongsan-si, Korea, Republic of

Th595 Non-invasive biomarkers via network integration for early prediction of Alzheimer's disease
Poule-J Tousaint1, Alan Evans2
1Montreal Neurological Institute and Hospital, McGill University, Montreal, Quebec, Canada, 2Montreal Neurological Institute, McGill University, Montreal, Quebec, Canada

Univariate Modeling

Th596 Multiple testing correction over contrasts in brain imaging
Bianco Visineski Alberton1, Humberto Gamba1, Anderson Winkler1
1Federal University of Technology – Paraná, Curitiba, Brazil, 2National Institutes of Health, Bethesda, MD, United States

Th597 Non-Parametric Combination (NPC) for treatment of missing data
Felipe Ferreira1, Andre Zugman1, Ary Gadelha1, Stephen Smith1, Tom Nichols4, Anderson Winkler1
1UNIFESP, São Paulo, São Paulo, 2Universidade Federal de São Paulo, São Paulo, São Paulo, 3FMRIB, Wellcome Centre for Integrative Neuroimaging, University of Oxford, Oxford, United Kingdom, 4Big Data Institute, University of Oxford, 5National Institutes of Health, Bethesda, MD, United States

Th598* Cluster Failure or Power Failure? Evaluating Sensitivity in Cluster-Level Inference
Stephanie Noble1, Dustin Scheinost1, Todd Constable1
1Yale University, New Haven, CT, United States

Th599 Modelling Lesion Mask: Comparison of Classical, Bias-Adjusted and Bayesian Regression Methods
Petra Kindalova1, Ioannis Kosmidis1, Thomas Nichols5
1Department of Statistics, University of Oxford, Oxford, United Kingdom, 2Department of Statistics, University Of Warwick, Coventry, United Kingdom, 3Oxford Big Data Institute, Nuffield Department of Population Health, University of Oxford, 4University of Pennsylvania, Philadelphia, PA, United States, 5National Institutes of Health, Bethesda, MD, United States

Th600 To Smooth or not to smooth – Threshold-free cluster enhancement revisited
Christian Gaser1, Robert Dahnke1
1Jena University Hospital, Jena, Germany

Th601 BLM: Parallelized Computing for Big Linear Models
Thomas Maulin-Sagay1, Thomas Nichols1
1University of Oxford, Oxford, Oxfordshire, 2Nuffield Department of Population Health, University of Oxford, Oxford, United Kingdom

Brain Machine Interface

Th602 Looking for neurophysiological correlates of brain-computer interface learning
Marie-Constance Corsi1, Maria Chavez1, Denis Schwartz1, Nathalie George2, Laurent Hugueville3, Ari Khan4, Sophie Dupont5, Danielle Bassett6, Fabrizio De Vico Fallani7

Th603 Decoding of unilateral finger-movement patterns from high-density scalp EEG: a data-driven approach
Seitaro Iwama1, Shohei Tsuchimoto1, Masaaki Hayashi1, Junichi Ushiba1
1Department of Biosciences and Informatics, Faculty of Science and Technology, Keio University, Kanagawa, Japan, 2Graduate School of Science and Technology, Keio University, Kanagawa, Japan, 3Keio Research Institute for Pure and Applied Sciences (KiPAS), Keio University, Kanagawa, Japan

Th604 Brain-communication: Decoding speech imagery from MEG signals
Linlin Zhu1, Ke Ni2, Zhen Zhang2, Jia-Hong Gao3
1McGovern Institute for Brain Research, Peking University, Beijing, China, 2Beijing Information Science and Technology University, Beijing, China

Th605 Incremental SVM training improves real-time neurofeedback brain state classification
EpiFarino Bagarinao1, Akihiro Yoshida1, Kazunori Terabe1, Shohei Kato1, Toshiharu Nakai2
1Nagoya University, Nagoya, Japan, 2NCGG, Ohbu, Japan, 3Nagoya Institute of Technology, Nagoya, Japan

Th606 Differential brain activities for various grasping movements measured by human electroencephalogram
Naoya Miwa1, Sotaro Shimada2
1Meiji University, Kawasaki, Japan, 2Meiji University, Kawasaki, Kanagawa

Th607 Dynamic functional beta-band connectivity during BCI learning supports sustained attention
Jennifer Stiso1, Marie-Constance Corsi1, Jean Vertel1, Javier Garcia2, Fabrizio De Vico Fallani3
1Inria-ICM, Paris, France, 2Center for Bioelectric Interfaces, NRU Higher School of Economics, Moscow, Russian Federation, 3Center for Bioelectric Interfaces, NRU Higher School of Economics, Moscow, Russian Federation

Th608 Decoding movement direction from ECoG for the instructed-delay center-out task performed with a pen
Ksenia Volkova1, Alexei Ossadtchi2, Alexander Belyaev1, Mikhail Lebedev1
1Center for Bioelectric Interfaces, NRU Higher School of Economics, Moscow, Russian Federation, 2Center for Bioelectric Interfaces, NRU Higher School of Economics, Moscow, Russian Federation

Th609 The effect of session-specific region definition in multi-session fMRI neurofeedback
Anita Tursic1,2, Santiago Muñoz Moldes1, Michael Lührs1,2, Judith Eck1, Amaia Benitez1, Rainer Goebel1,2,4
1Mastricht University, Maastricht, Netherlands, 2Brain Innovation BV, Maastricht, Netherlands, 3Université Libre de Bruxelles, Brussels, Belgium, 4Netherlands Institute for Neuroscience, Amsterdam, Netherlands
Th610 Multi-frequency visual stimuli to predict steady-state visual evoked potential (SSVEP) response
Joo-Hee Kwon1, Toe-Young Um2, Do-Won Kim2
1Chonnam National University, Gwangju, Korea, Republic of, 2Chonnam National University, Yeosu, Korea, Republic of

Th611 The Mirror Neuron System in aging: compensation by reorganization of the ventral premotor cortex
Sonia Di Tella1, Voleria Basili1, Mania Cabina1, Federica Rossetto1, Chiara Pagliari1, Raffaello Nemni2, Francesco Baglio1
1IRCCS Fondazione Don Carlo Gnocchi, Milan, Italy, 2Department of Pathophysiology and Transplantation, Università degli Studi di Milano, Milan, Italy

Th612 Somatotopic organization of the subcortical structures involved in action execution and observation
Antonina Errante1, Marzio Gerbella1, Leonardo Fogassi1
1University of Parma, Parma, Italy

Th613 Modulation of motor resonance by the reward value associated with observed actions
Andrea Cretu1, Nicole Wenderoth1
1ETH Zurich, Neural Control of Movement Laboratory, Zürich, Switzerland

Th614 Mirror Neuron activations in encoding of psychic pain in Borderline Personality Disorder
Karim Labek1, Julia Eberhardt1, Julia Bosch2, Lisa Dommes2, Anna Buchheim1, Roberta Viviani2, Zrinka Sosic-Vasic2
1Institute of Psychology, University of Innsbruck, Innsbruck, Austria, 2Department of Psychiatry and Psychotherapy III, University of Ulm, Ulm, Germany

Th615 Mirror Neurons affect Autonomic Nervous System regulations: A physiological and fMRI investigation
Antonello Pellicano1, Gianluca Mingoia2, Harshal Patel1, Giovanni Bucchi1, Ferdinand Binkofski2
1Clinical Cognitive Sciences, RWTH Aachen University, Aachen, Germany, 2Interdisciplinary Center for Clinical Research (IZKF), RWTH Aachen University, Aachen, Germany

Th616 Similarity and synchronization of BOLD signal in an instructive origami learning setting
Kathrin Kostorz1,2, Virginia Planagay3,2, Stefan Gläsner1
1LMU Munich, Munich, Germany, 2German Center for Vertigo and Balance Disorders, Munich, Germany, 3Graduate School for Systemic Neurosciences, Munich, Germany

Th617 A common synergy-based code for execution, imagery and observation of hand movements
Andrea Leo1, Giacomo Handjaras1, Paolo Popale1, Luca Cecchetti1, Matteo Bianchi1, Antonio Bicchi1, Pietro Pietrini1, Emiliano Ricciardi1
1IMT School for Advanced Studies Lucca, Lucca, Italy, 2Research Center “E. Piaggio”, University of Pisa, Pisa, Italy, 3Department of Advanced Robotics, Istituto Italiano di Tecnologia, Genova, Italy

Th618 The Role of SII in Action Observation
Maria Del Vecchietti1, Faustina Caruana2, Veronica Pelliccia1, Ivana Sartori1, Giorgio Lo Russo1, Giacomo Rizzolatti1, Pietro Avanzini1
1Università degli Studi di Modena e Reggio Emilia - Consiglio Nazionale delle Ricerche, Parma, PR, 2Consiglio Nazionale delle Ricerche, Parma, PR, 3Ospedale Ca’ Granda Niguarda, Milano, Italy

Th619 The brain as a mirror for understanding actions
Christine Tipper1, Kendra Underhill1
1University of British Columbia, Vancouver, British Columbia, Canada

Th620 Different proactive brain processing explains the gender-difference in speed-accuracy trade-off
Valentina Bianco1, Marika Berchich2, Federico Quinzii1, Rinaldo Perrin1, Donatella Spinelli2, Francesco Di Russo2
1Fondazione Santa Lucia IRCCS, Rome, Italy, 2Università Foro Italico, Rome, Italy, 3Fondazione Santa Lucia IRCCS, Roma, Italy, 4Università Nicolo Casulo, Roma, Italy

Th621 Multimodal analysis of the macaque monkey frontal lobe
Lucija Jankovic-Rapan1, Karl Zilles1, Nicola Palamero-Gallagher1
1Institute of Neuroscience and Medicine INM-1, Research Centre Jülich, Jülich, Germany

Th622 Modulating the Neural Networks underlying Motor Sequence Learning using Prefrontal Repetitive TMS
Mareike Gann1,2, Marco Davare1,2, Brad King1, Nina Dolfen1,2, Donte Martin1,2, Stephan Swinnen1,2, Edwin Robertson3, Genevieve Albowy1,2
1Department of Movement Sciences, Motor Control and Neural Plasticity Research Group, KU Leuven, Leuven, Belgium, 2Leuven Brain Institute, KU Leuven, Leuven, Belgium, 3Institute of Neuroscience and Psychology, University of Glasgow, Glasgow, United Kingdom

Th623 Motor fatigability is associated with connectivity changes between premotor areas and M1
Marc Bächinger1, Rea Lehner1, Stefan Frässle2, Samira Hanemann1, Joshua Baistars1, Nicole Wenderoth1
1ETH Zürich, Neural Control of Movement Laboratory, Zürich, Switzerland, 2Translational Neuromodelling Unit, Zurich, Switzerland, 3ETH Zürich, Switzerland, 4Department of Psychology, Royal Holloway University of London, Egham, United Kingdom, 5ETH Zürich, Neural Control of Movement Laboratory, Zürich, Switzerland

Th624 Motor skill learning and intermanual transfer: behavioral and neuroimaging correlates
Elisabeth Direen1, Alexis Bourgeois1, Andreas Kleinschmidt1, Mitsouka Van Assche1, Emmanuel Carrera1
1University Hospitals of Geneva, Geneva, Switzerland, 2University of Geneva, Geneva, Switzerland

Th625 Community structure of anatomical and functional muscle networks
Tjeerd Boonstra1, Jennifer Kerkman2, Leonardo Gollo3, Andreas Daffertshofer4, Michael Breakspear5
1University of Technology Sydney, Sydney, Australia, 2University of Sydney, Sydney, Australia, 3Department of Anatomy and Cell Biology, University of Melbourne, Melbourne, Australia, 4Neuroscience Institute, University of Melbourne, Melbourne, Australia, 5Aalto University, Espoo, Finland

Th626 Phase Coupling of Bilateral Motor Areas Decreases From Bipedal to Single Leg Stance
Tim Lehmann1, Daniel Büchel1, John Cockcroft2, Quinette Louw3, Jochen Boumeister4
1Exercise Science & Neuroscience Unit, Department Exercise & Health, Paderborn University, Paderborn, Germany, 2Neuromechanics Unit, Stellenbosch University, Cape Town, South Africa, 3Division of Physiotherapy, Stellenbosch University, Cape Town, South Africa

Th627 Structural and Functional Differences in Precentral Gyrus between Badminton Player and Novice
Akikata Muta1, chihiro hosoda2
1Tokyo Medical and Dental Univ., Tokyo, Japan, 2University of Tokyo, Tokyo
Motor Planning and Execution

Th628 Bilateral motor network activation during unilateral handgrip contractions is intensity dependent
Justin Andrushko1, Layla Gould1, Doug Renshaw1, Chelsea Ekstrand2, Ron Borowsky3, Jon Farthing3
1University of Saskatchewan, College of Kinesiology, Saskatoon, Saskatchewan, Canada, 2University of Saskatchewan, College of Arts and Science, Department of Psychology, Saskatoon, Saskatchewan, Canada

Th629 Modality-invariant Representation of Spatial Targets Within V1 during Action Planning
Luca Turella1, Giulia Maffaiti1, Simona Monaco1, Jody Culham2, Luigi Cattaneo2
1Center for Mind/Brain Sciences (CIMeC) - University of Trento, Rovereto, Italy, 2Department of Psychology, University of Western Ontario, London, Ontario, Canada

Th630 Primary motor cortex deactivation as a new mechanism in conversion paralysis
Eva Matt1, Ahmad Amini1, Tuna Aslan1, Robert Schmidthammer2, Roland Beisteiner2
1Medical University of Vienna, Department of Neurology, Vienna, Austria, 2Ludwig Boltzmann Institute for Experimental and Clinical Traumatology, Vienna, Austria

Th631 Neural Representations of Action: Comparing Meta-Analyses of Imagery, Observation, and Execution
Robert Hardwick1, Svenja Caspers2, Simon Eickhoff3, Stephan Swinnen1
1KU Leuven, Leuven, Belgium, 2Research Centre Juelch, Juelich, Germany, 3Forschungszentrum Jülich, Jülich, Germany

Th632 A BIDS pipeline to compute the spatial correlation between ECoG and fMRI activity
Byron Sicotte1, Dora Hermes1, Natalia Petridou1, Nick Ramsey1
1University Medical Center Utrecht, Utrecht, Netherlands, 2Mayo Clinic, Rochester, MN, United States

Th633 The brain in willed action: a meta-analytical review of imaging studies on intentionality and agency
Silvia Seghezzi1, Zirone Eleonora2, Eraldo Polesuli1, Laura Zapparoli2
1University of Milano-Bicocca, Milan, Italy, 2IRCCS Istituto Ortopedico Galeazzi, Milan, Italy

Th634 Involvement of the Dorsal Premotor Cortex in Goal-directed Motor Behavior
Yoshikazu Nakayama1, Sho Sugawara1, Masaki Fukunaga2, Yuki Hamano3, Norihiro Sadato1
1Tokyo Metropolitan Institute of Medical Science, Tokyo, Japan, 2National Institute for Physiological Sciences, Okazaki, Japan, 3SOKENDAI (The Graduate University for Advanced Studies), Hayama, Japan

Th635 Posterior parietal cortex directly modulates corticofugal output: an intraoperative study
Davide Grampaiccolo1, Vincenzo Triomontano1, Pietro Meneghelli1, Francesca Sala2, Luigi Cattaneo2
1Section of Neurosurgery, Dept of Neuroscience, Biomedicine and Movement, University of Verona, Verona, Italy, 2Section of Neurophysiology, Dept of Neuroscience, Biomedicine and Movement, University of Verona, Verona, Italy

Th636 VTA-M1 pathway contributes to human motivated motor outputs
Sho Sugawara1, Yoshisuka Nakayama1, Masaki Fukunaga2, Tetsuya Yamamoto1, Norihiro Sadato2, Yukio Nishimura2
1Tokyo Metropolitan Institute of Medical Science, Tokyo, Japan, 2National Institute for Physiological Sciences, Okazaki, Japan, 3SOKENDAI (The Graduate University for Advanced Studies), Hayama, Japan

Th637 Multimodal investigation of motor inhibition in professional Drummers
Lara Schlaffke1, Sarah Friedrich1, Martin Tengenhoff1, Onur Gunterkun1, Erhan Genc2, Sebastian Ockenberg
1BG UK Bergmannsheil GmbH, Bochum, Germany, 2Ruhr-University Bochum, Bochum, Germany

Th638 Using subjective expectations to model the neural underpinnings of proactive inhibition
Pascale Par1, Stefan Da Plessis2, Hanna van den Munkhof1, Thomas Gladwin3, Matthijs Vink2
1University Medical Center Utrecht, Utrecht University, Utrecht, Netherlands, 2Department of Psychiatry, Stellenbosch University, Stellenbosch, South Africa, 3Max Planck Institute for Metabolism Research, Cologne, Germany

Th639 Movement Preparation Modulates Activity Patterns in Auditory Cortex During Command-Driven Actions
Daniel Gale1, Claire Honda1, Ingrid Johnsruede2, Randall Flanagan1, Jason Gallivan1
1Queen’s University, Kingston, Ontario, Canada, 2Western University, London, Ontario, Canada

Th640 Exploration of cortical hemodynamic signals related to golf-putting performance: An fNIRS study
Hiroki Sato1, Kodai Takanod1
1Shibaura University, Chofu, Tokyo, Japan

Th641 Looking at the agent: Neural signatures of self-generated and external-generated errors
Alba Gomez-Andres1,2, David Cucurella1,2, Toni Cunillera1,2, Antoni Rodriguez-Fornells1,2
1University of Barcelona, Barcelona, Spain, 2Cognition and Brain Plasticity Group [Belvitge Biomedical Research Institute, IDIBELL], Barcelona, Spain

Th642 Action kinematics as an organising principle in the cortical control of human hand movement
James Kolasinski1, Diana Dim1, David Mehler1, Slawomir Kusmin1, Holly Rossiter1
1Cardiff University, Cardiff, United Kingdom

Th643 Hemispheric preferences for the control of slow and fast finger tapping rates
Christian Alexander Kell1, Anja Pflug2, Florian Gomp3, Muthuraman Muthuraman3, Sergiu Groppo3
1Goethe University, Frankfurt, Germany, 2Department of Neurology, Goethe University Frankfurt, Germany, 3Department of Motor Learning, Austrian University of Applied Sciences, Mainz, Germany

Th644 RSA reveals planning of single and sequential finger movements in cortical motor areas
Giacomo Arian1, Jörn Diedrichsen1
1Western University, London, Ontario, Canada

Th645 Two Corticocerebellar Systems in Primary Motor Cortex Identified Using 7T Resting State fMRI
Thomas Zeffiro1, Salvatore Torrisi2, Erin O’Connor1, Assia Jaiard2, Christian Grillon1, monique Ernst2
1University of Maryland, Baltimore, MD, United States, 2NIH/NIMH, Bethesda, MD, United States, 3CHU Grenoble Alpes, Grenoble, France

Th646 Distinct neural correlates of a reward-based motor skill learning in early and advanced stages
Emily Yunha Shin1, Yera Choi1, Hyeonjeong Lee1, Sungshin Kim1
1Sungkyunkwan University, Suwon, Korea, Republic of

Th647 Building a cognitive map of a reward-based motor skill learning
Yera Choi1, Emily Yunha Shin1, Hyeonjeong Lee1, Sungshin Kim1
1Sungkyunkwan University, Suwon, Korea, Republic of
Th648 Neural mechanisms for adaptive change of behaviors while car-driving
Ryu Ohashi1, Kenji Ogawa2, Hiroshi Imamizu2
1The University of Tokyo, Tokyo, Japan, 2ATR, Kyoto, Japan, 3Hokkaido University, Hokkaido, Japan

Th649 Attentional balancing of visual vs proprioceptive information during manual actions
Jakub Limanowski1, Karl Friston2
1University College London, London, United Kingdom, 2University College London, London, United Kingdom

Th650 Effects of aging on the sensorimotor network during unimanual motor learning – an fMRI/EEG study
Sabrina Chettouf1,2,3, Jan Paul Triebkorn2, Michael Schimek1,4, Joelle Zimmerman5, Andreas Daffertshofer6, Petra Ritter1,3,4
1Charité, Berlin, Germany, 2VU University - Human Movement Sciences, Amsterdam, Netherlands, 3Bernstein Center for Computational Neuroscience, Berlin, Germany, 4Berlin Institute of Health (BIH), Berlin, Germany, 5Rotman Research Institute, Toronto, Ontario, Canada

Th651 Age-related changes of the visuomotor network in the human brain
Jan Schreiber1, Svenja Cospers1,2
1Institute of Neuroscience and Medicine (INM-1), Research Center Juelich, Juelich, Germany, 2Institute of Anatomy I, Medical Faculty, Heinrich Heine University Duesseldorf, Duesseldorf, Germany, 3JARA-BRAIN, Juelich-Aachen Research Alliance, Juelich, Germany

Th652 Statistical analysis of an fMRI reach-to-grasp task including behavioral covariates using LISA
Francesco Molinari1, Marc Himmelebach1, Klaus Scheffler1, Gabriele Lohmann1,4
1Graduate Training Centre of Neuroscience, University of Tuebingen, Tuebingen, Germany, 2Center of Neurology, University of Tuebingen, Tuebingen, Germany, 3University Hospital, Tuebingen, Germany, 4Max Planck Institute for Biological Cybernetics, Magnetic Resonance Center, Tuebingen, Germany

Th653 Spatial and temporal demands modulate functional lateralization during bimanual visuomotor control
Christina Nissel1, Florian Gompf1, Anja Pflug2, Mareike Flögel1, Kajal Diljit Singh1, Christian Alexander Kell1
1Department of Neurology, Goethe University Frankfurt, Germany, 2Frankfurt am Main, Hessen

Th654 The (motor) rhythm of visual perception
Alice Tassinari1, Pauline Hilt1, Luciano Fadiga1, Alessandro D’Ausilio2
1Istituto Italiano di Tecnologia, CNR-IT, Ferrara, Italy, 2Universität di Ferrara, Dipartimento di Scienze Biomediche e Chirurgiche Specialistiche, Ferrara, Italy

Th655 Robotic-driven proprioceptive recalibration affects sensorimotor aspects of empathy for pain
Guiliano Pampaloni1,2, Julio Dueras Solgado1, Philipp Stampfli1, Erich Seifritz1, Roger Gasser1, Silvio Ionta2
1Sensory-Motor Lab (SeMoLa), Department of Ophthalmology, University of Lausanne, Lausanne, Switzerland, 2Rehabilitation Engineering Laboratory (RELaB), Department of Health Sciences and Technology, ETH, Zurich, Switzerland, 3Department of Psychiatry, Psychotherapy and Psychosomatics, University Hospital for Psychiatry, Zurich, Switzerland

Th656 Motor cortical inhibition during concurrent action execution and observation
Elisa Dolfini1, Pasquale Cardellinchio1, Pauline Hilt1, Alessandro D’Ausilio2
1Istituto Italiano di Tecnologia, Ferrara, Italy

Th657 Sensorimotor information and negative BOLD in the deprived visual cortex of congenitally blind
Or Yizhar1, Amir Amedi2
1The Hebrew University of Jerusalem, Jerusalem, Israel, 2Sorbonne Université’s UPMC Univ Paris 06, Paris, France

NEUROANATOMY

Th658 Phase-coupled modules in human stereo-tactical EEG recordings
Nitin Williams1, Sheng Wang1, Gabriele Arnufo2, Lino Nobili3,4, Satu Palva5, Matias Palva1
1University of Helsinki, Helsinki, Finland, 2University of Genoa, Genoa, Italy, 3Niguarda Hospital, Milan, Italy, 4University of Glasgow, Glasgow, United Kingdom

Th659 Integrating dMRI Structural Connectivity with Functional data from Direct Electrical Stimulation
Maciej Jedynek1,2, Lena Trebal2, Jean-Didier Lemerechaill2,3, Nico Laube1, Pierre Demar2, Viateur Tuysenge1,2, François Tadel1,2, Blandine Chanteuol-Foret1,2, Carole Saubat1,2, Gina Reyes Mejia1,2, Cyril Poupot1,2, Jean-François Mangin1,2, Olivier David1, F-Tract Consortium1,2
1Inserm, U1216, Grenoble, France, 2Univ Grenoble Alpes, Grenoble Institut des Neurosciences, GIN, Grenoble, France, 3Sorbonne Universités, UPMC Univ Paris 06 UMR S 1127, Inserm U 1127, CNRS UMR 7225, ICM, ENS, Paris, France, 4CATI Multicenter Neuroimaging Platform, Paris, France, 5Neurospin, I2BM, CEA, Paris-Saclay University, Gif-sur-Yvette, France

Th660 Local-to-distant development of cerebrocerebellar sensorimotor network in human brain
Eichi Naito1, Kaoru Amemiya1, Tomoyo Morita1, Daiсужue Sato1,4, Midori Ban1, Koji Shimada1,6, Yuko Okamoto1,4, Hirota Koshako1,2, Hidehiko Okazawa4,5, Minoru Asada1,2
1CiNet, NICT, Osaka, Japan, 2Graduate School of Engineering, Osaka University, Osaka, Japan, 3Research Center for Child Mental Development, Kanazawa University, Kanazawa, Japan, 4Research Center for Child Mental Development, University of Fukui, Fukui, Japan, 5Graduate School of Engineering Science, Osaka University, Osaka, Japan, 6Biomedical Imaging Research Center, University of Fukui, Fukui, Japan, 7Department of Neuropsychiatry, Faculty of Medical Sciences, University of Fukui, Fukui, Japan

Th661 A 3D Reconstruction of the Cerebellum for Dejerines’ Atlas
Adnen Constantini1, Florent Krust1, Odile Plaisant2, Bernard Maxham2,3, Alexis Guédon1,2
1URDIA EA 4465, ANCRE, Paris Descartes University, Paris, France, 2Trans-European Anatomical Pedagogic Research Group (TEPARG), Europe, 3Cardiff School of Biosciences, Cardiff University, Cardiff, Wales, United Kingdom

Th662 Correspondence between structure and function in human brain using MRI data of 15,000+ individuals
Na Lu1,2, Jing Su1,2,3,4, Jessica Turner5, Zening Fu1,2,5,6,7, Anees Abrol1,7, Eswar Damaraju1,7, Eiichi Naito1, Kaoru Amemiya1, Tomoyo Morita1, Daiсужue Sato1,4, Midori Ban1, Koji Shimada1,6, Yuko Okamoto1,4, Hirota Koshako1,2, Hidehiko Okazawa4,5, Minoru Asada1,2
1University of Chinese Academy of Sciences, Beijing, China, 2Brainnetome Center, Institute of Automation, Chinese Academy of Sciences, Beijing, China, 3The Mind Research Network, Albuquerque, NM, United States, 4CAS Center for Excellence in Brain Science and Intelligence Technology, Institute of Automation, Chinese Academy of Sciences, Beijing, China, 5Department of Psychology, Neuroscience Institute, Georgia State University, Atlanta, GA, United States, 6Department of Psychiatry, Yale University, School of Medicine, New Haven, CT, United States, 7Department of Electrical and Computer Engineering, the University of New Mexico, Albuquerque, NM, United States
Th663  Connectional topographies of human and macaque inferior parietal lobe
Suhas Vijayakumar1, Guilherme Blazquez Freches1, Jerome Sallet1, Miriam Klein-Flugge1, Daria Jensen1, W. Pieter Medendorp2, Rogier Mars3
1Donders Institute for Brain, Cognition and Behaviour, Radboud University Nijmegen, Nijmegen, Netherlands, 2University of Oxford, Oxford, United Kingdom

Th664  Medial temporal lobe connectivity extends to the amygdala and to an allostatic-interoceptive system
Adriana Ruiz-Rizzo1, Florian Beissner1, Kathrin Finke1, Hermann Muller1, Claus Zimmer1, Lorenzo Pasquin1, Christian Sarg2
1Ludwig-Maximilians-Universität München, Munich, Germany, 2Hannover Medical School, Hannover, Germany, 1Universitätsklinikum Jena, Jena, Germany, 2Technical University of Munich, Munich, Germany, 1UCSF, San Francisco, CA, United States

Th665  Myelin gradients and associations to functional connectivity in insular and cingulate cortices
Jessica Royer1, Casey Paquola1, Sara Larivièrè1, Reinder Vos De Weel1, Shahin Tavakol1, Alexander Lowe1, Boris Bernardt1
1Montreal Neurological Institute, McGill University, Montréal, Québec, Canada, 2Montreal Neurological Institute, Montreal, Quebec, Canada, 1Montreal Neurological Institute, McGill university, Montréal, QC, Canada

Th666  Sex differences in long-term temporal dependence of resting state fMRI time series
Elvisha Dhamal1, Keith Jamison1, Amy Kuceyeski1
1Well Cornell Medicine, New York, NY, United States

Th667  The architecture of functional lateralisation and its relationship to callosal connectivity
Vyacheslav Karolis, Mauricio Corbetta, Michel Thiebaut de Schotten
1ICM - Institut du Cerveau et de la Moelle épineire, Hôpital de la Salpêtrière, Sorbonne Universités, Paris, France, 2University of Padua, Padua, Italy, 3ECBLAB, Paris, France

Th668  Replication of the Human Allostatic-Interoceptive System Using 7 Tesla Resting State fMRI
Jiahe Zhang1, Tara Srinagaraj2, Marta Bianciardi1, Lisa Barrett1
1Northeastern University, Boston, MA, United States, 2Northeastern University, Boston, MA, United States, 3Department of Radiology, A.A. Martins Center for Biomedical Imaging, MGH and Harvard Medical School, Boston, MA, United States

Th669  Subcortical anatomy of the default mode network: a functional and structural connectivity study
Pedro Nascimento Alves, Chris Foulon1,2, Vyacheslav Karolis1,2, Donaldo Redor1,2,3, Daniel Marguiles2, Emmanuelle Voille1,2, Michel Thiebaut de Schotten2,3
1Brain Connectivity and Behaviour Group, Sorbonne Universités, Paris, France, 2Frontlab, Institut du Cerveau et de la Moelle épineire (ICM), UPMC UMR S1127, Inserm U 1127, CNRS, Paris, France, 3Inserm, Paris, France, 4Department of Neuroscience, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, 5University College London, London, United Kingdom, 6Birkbeck, University of London, London, United Kingdom

Th670  Structural and Functional Information Processing Speed Brain Networks: From Connections to Cognition
Pedro da Silva1, Renata Leon2
1University of São Paulo, Ribeirão Preto, Brazil, 2University of Sao Paulo, Ribeirao Preto, Brazil

Cortical Anatomy and Brain Mapping

Th671  CHENONCEAU: towards a novel mesoscopic (100/200μm) post-mortem human brain MRI atlas at 11.7T
Justine Beaupiaux1, Alexandros Popov1, Raissa Yegba Hot1, Fabrice Poupart1, Jean-Francois Mangin2, Christophe Destrieux3, Cyril Poupon4
1CEA/DRF/Neurospin/UNIRS, Gif-sur-Yvette, France, 2CEA/DRF/Neurospin/UNATI, Gif-sur-Yvette, France, 3INSERM UMR 1253 iBrain, Université de Tours, Tours, France

Th672  Deep-embedding: multi-feature structural affinity and the constraining influence on function
Casey Paquola1, Jakob Seidlitz2, Richard Bethlehem2, Reinder Vos De Weel3, Boris Bernardt4
1Montreal Neurological Institute, Montreal, Quebec, Canada, 2National Institutes of Health, Bethesda, MD, United States, 3University of Cambridge, Cambridge, United Kingdom, 4McGill University, Montreal, Quebec, Canada, 5Montreal Neurological Institute, McGill University, Montreal, QC, Canada

Th673  Quantitative MRI maps of human neocortex explored using cell-specific gene expression analysis
Luke Edwards1, Peter McColgan2, Saskia Helbling1, Fred Dick3, Nikolaus Weiskopf4
1Department of Neuropsychopharmacology, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, 2University College London, London, United Kingdom, 3Birkbeck, University of London, London, United Kingdom

Th674  On the asymmetry of human brain folding
Lucas da Costa Campos1,2, Jens Elgeti2, Svenja Caspers1,2,3
1Institute of Neuroscience and Medicine (INM-1), Research Centre Jülich, Jülich, Germany, 2Institute for Anatomy I, Medical Faculty, Heinrich Heine University Düsseldorf, Düsseldorf, Germany, 3JARA-BRAIN, Jülich-Aachen Research Alliance, Jülich, Germany

Th675  What Drives the Sex Difference in Human Cortex Size? A Normative Age Modeling Approach
Joost Janssen1,2, Javier Perez Sanztonja1,2,3, Kenia Martinez Rodriguez2,2,3, Clara Alloza2,3, Anouck Schippers1, Lucia de Hoyos Gonzalez1, Covadonga Diaz-Caneja1,2,3, Elizabeth Buimer1, Neeltje van Haren1,4, Hilleke Husthoff Puf1, Wiepke Cahn1, Celso Arango2,3, Rene Kahn2, Hugo Schnack5
1Dept. of Child and Adolescent Psychiatry, IJSSM, Hospital General Universitario Gregorio Marañón, Madrid, Spain, 2Ciber del Area de Salud Mental (CIBERSAM), Madrid, Spain, 3School of Medicine, Universidad Complutense, Madrid, Spain, 4Department of Psychiatry, Brain Center Rudolf Magnus, University Medical Center Utrecht, Utrecht, Netherlands, 5Department of Child and Adolescent Psychiatry/Psychology, Erasmus Medical Centre, Sophia Children’s Hospital, Rotterdam, Netherlands

Th676  Mapping the Macaque Connectome using High-resolution Multi-modal Imaging in 30 Animals (MacCP 30)
Takuya Hayashi1, Joonas Autio2, Takayuki Ose3, Masahiro Ohno1, Kantaro Nishigori1, Masataka Yamaguchi1, Akhiro Kawasaki1, Chihyo Takeda1, Chihiro Yokoyama1, Timothy Coalson1, Chad Donahue1, Stephen Smith2, David Van Essen2, Matt Glasser3
1RIKEN Center for Biosystems Dynamics Research, Kobe, Japan, 2Department of Neuroscience, Washington University Medical School, St Louis, MO, United States, 3FMRIB, Wellcome Centre for Integrative Neuroimaging, University of Oxford, Oxford, United Kingdom

Th677  Long-Axis Structural Connectivity Transitions in the Human Subiculum
Reinder Vos De Weel1,2,3, Jeremy Lowe1, Shahin Tavakol1, Jessica Royer1, Casey Paquola1, Seok-Jun Hong3, Andrea Bernasconi1, Neda Bernasconi1, Boris Bernardt4
1Montreal Neurological Institute, McGill University, Montreal, Quebec, Canada, 2Department of Medical Imaging, Jining Hospital, Medical School of Nanjing University, Nanjing, China, 3Child Mind Institute, New York, NY, United States
Th678 Pils-de-passage within the STS: morphological characterization and underlying connectivity
Clementine Bodin1, Alexandre Prout1, Marion LeMao1, Jean Régis2, Pascal Belin1, Olivier Coulon1
1Institut de Neurosciences de la Timone, Marseille, France, 2Institut de Neurosciences des systèmes, Marseille, France

Th679 Cortical thickness and neurophysiological outcomes in HIV infected & uninfected children at 5 years
Abdulmumin Ibrahim1, Emmanuel Nwosu1, Frances Robertson1, Francesca Little1, Mark Cotton2, Barbara Laughton2, André van der Kouwe3, Ernesto Meintjes4, Martha Holmes5
1University of Cape Town, Cape Town, Western Cape, South Africa, 2Stellenbosch University, Cape Town, Western Cape, South Africa, 3Department of Radiology, Massachusetts General Hospital, Boston, MA, United States

Th680 Increased Local Gray Matter in the Maternal Brain at 4-6 Weeks after Childbirth
Eileen Luders1, Florian Kurth1, Malin Gignéni2, Jonas Engmann1, Inger Sundström Poromaa2, Christian Gaser3
1University of Auckland, Auckland, New Zealand, 2Uppsala University, Uppsala, Sweden, 3Jena University Hospital, Jena, Germany

Th681 Probing hippocampus' functional properties with activation databases
Sarah Gosen1, Anna Piochtil, Ana Luisa Pinho2, Bertrand Thirion2, Simon Eickhoff2
Forschungszentrum Jülich, Jülich, Germany, 1Parietal Team, INRIA, GIF-sur-Yvette, France

Th682 Location and height of the central sulcus pli de passage fronto-parietal moyen in a large cohort
Renate Schweizer1, Anna Muelen, Jens Frahm1
1Max Planck Institute for Biophysical Chemistry, Goettingen, Germany, 2Leibniz-ScienceCampus, Goettingen, Germany

Th683 Effects of Body Mass Index on Brain Cortex and Neurocognition in Youth
Jennifer Laurent1, Richard Watts2, Shana Adise1, Bader Chaarani1, Nicholas Allgaier1, Alexandre Potter1, Hugh Garavan1, Scott Mackey1
1University of Vermont, Burlington, VT, United States, 2Yale University, New Haven, CT, United States

Th684 Cortical morphological abnormalities in schizophrenia and bipolar disorder
Merce Madre1,2, Erick Canales-Rodríguez1,3, Paola Fuentes-Claramonte1, Silvia Alonso-Lana1, Amalia Guerrero1, Noemi Maro1, Jesus Gomar1, JM Goikolea1, Eduard Vieta1, Salvador Sardos2, Peter McKenney1, Raymond Salvador1, Edith Pomarol-Clotet1
1FIDMAG Germanes Hospitalarias Research Foundation, Barcelona, Spain, 2Benito Menni CASM, Sant Boi de Llobregat, Barcelona, Spain, 3Department of Radiology, Centre Hospitalier Universitaire Vaudois (CHUV), Lausanne, Switzerland, 4Lütin-Zucker Alzheimer’s Research Center, New York, NY, United States, 5Bipolar Disorders Unit, Hospital Clinic, University of Barcelona, IDIBAPS, Barcelona, Spain

Th685 Genetic basis of macroscale functional and structural cortical organization
Sofie Valk1, Reinder Vos de Waele1, Felix Hoffstaedter1, Boris Bernhardt1, Daniel Margulies1, Peter Kochunov1, B. T. Thomas Yeo6, Simon B. Eickhoff2
1ZF Jülich, Jülich, Germany, 2McGill University, Montreal, Quebec, Canada, 3MNI, Montreal, Quebec, Canada, 4Institut du Cerveau et delà Moelle Épinière, Pairs, France, 5University of Maryland, Baltimore, MD, United States, 6Department of Electrical and Computer Engineering, ASTAR-NUS Clinical Imaging Research Centre, Singapore, Singapore, 7Institute of Clinical Neuroscience and Medical Psychology, Medical Faculty, University Dusseldorf, Dusseldorf, Germany

Th686 Multivariate Concavity Amplitude Index (MCAI) for characterizing Heschl’s gyrus shape
Josue Luiz Dalboni da Rocha1, Jan Bennet1, Peter Schneider1, Narly Golestan1
1University of Geneva, Geneva, Switzerland, 2University Hospital Heidelberg, Heidelberg, Germany

Th687 Childhood Music Training Induces Change in Cortical Thickness of Right Auditory Association Areas
Assal Habibi1, Hanna Damasio1
1University of Southern California, Los Angeles, CA, United States

Th688 Cognitive and clinical predictors of prefrontal cortical thickness change in recent-onset psychosis
Giulia Tranchi1, Theophilus Akudjedu2, Shane Mchenry1,2, Cathy Scallon1, Joanne Kenney1, John Mccarthy1, Heike Anderson-Schmidt1, Dara Cannon1, Brian Hallahan1, Colm Macdonald3
1Centre for Neuroimaging & Cognitive Genomics (NICOG), Clinical Neuroimaging Laboratory, National University of Ireland Galway, H91TK33 Galway, Ireland, 2St Michaels Hospital, University of Toronto, Ontario, Canada, 3Trinity College Institute of Neuroscience and School of Psychology, Trinity College Dublin, Dublin, Ireland, Ireland

Th689 Surface tools: creating equivolumetric mesh surfaces
Konrad Wagstyl1, Casey Paquita1, Richard Bethlem1, Alan Evans2, Alexander Huth3
1University of Cambridge, Cambridge, United Kingdom, 2McGill University, Montreal, Quebec, 3Montreal Neurological Institute, McGill University, Montreal, Quebec, Canada, 4The University of Texas at Austin, Austin, TX, United States

Th690 Genetic variation on IGFBP7 is associated with brain development in preterm infants
Daniel Cramp1, Harriet Cullen1, Madeleine Barnett2, Dafnis Batalle1, Jonathan O’Muircheartaigh1, Christaan de Leeuw1, A David Edwards1
1Centre for the Developing Brain, Kings College, London, United Kingdom, 2Complex Trait Genetics Lab, Centre for Neurogenomics and Cognitive Research, Vrije Universiteit, Amsterdam, Netherlands

Th691 The Neural Control of Human Vocalization: A Meta-Analytic Modeling of Functional Brain Imaging Data
Zoe Wessendorf1, Amy Ramage1, Charles Larsson1, Donald Robins1
1University of New Hampshire, Durham, NH, United States, 2Northwestern University, Chicago, IL, United States

Th692 Telomere length change over nine months relates to multimodal measures of brain structure
Lara Puhmann1, Sofie Valk1, Veronika Engert1, Boris Bernhardt1, Elisa Epe1, Pascal Vrticka1, Tania Singer1
1Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, 2FZ Jülich, Jülich, Germany, 3MNI, Montreal, Quebec, Canada, 4Department of Psychiatry, University of California, San Francisco, CA, United States

Th693 Human visual cortex is organized along two genetically opposed hierarchical gradients
Jesse Gomez1, Zonglei Zhen1, Kevin Weiner1
1University of California Berkeley, Berkeley, CA, United States, 2Beijing Normal University, Beijing, China, 3University of California Berkeley, Berkeley, CA, United States

Th694 The role of prefrontal cortical morphology in the development of reasoning ability
Willa Voorhees1, Jacob Miller1, Jewelia Yao1, Ishaana Raghuram1, Silvia Burge1, Kevin Weiner1
1University of California, Berkeley, Berkeley, CA, United States

Th695 Topological Organization of Large-Scale Cortical Networks in Impaired and Nonimpaired Fighters
Virendra Mishra1, Karthik Sreenivasan1, Xiaowei Zhuang1, Zhengshi Yang1, Sarah Banks2, Dietmar Cordes1, Charles Berrnick1
1Cleveland Clinic Lou Ruvo Center for Brain Health, Las Vegas, NV, United States, 2University of California, San Diego, La Jolla, CA, United States
**Th696** Evaluation of Functional Connectivity Using Retrograde Tracers in the Macaque Monkey

David Van Essen1, Takuya Hayashi1, Joonas Autio2, Masahiro Ohno2, Takayuki Ueki3, Kantaro Nishigori4, Timothy Coakson4, Yuike Hou5, Stephen Smith4, Zhiming Shen6, Kenneth Knoblauch7, Henry Kennedy8, Matt Glasser1

1Washington University, St Louis, MO, United States, 2RIKEN Center for Biosystems Dynamics Research, Kobe, Japan, 3Université de Lyon, Université Lyon 1, INSERM U2008, Stem Cell and Brain Research Institute, Lyon, France, 4FMRIB, Wellcome Centre for Integrative Neuroimaging, University of Oxford, Oxford, United Kingdom, 5Shanghai Institutes for Biological Sciences, Shanghai, China, 6Institute of Neuroscience, Shanghai Institutes for Biological Sciences, Chinese Academy of Sciences, Shanghai, China

**Th697** Optimizing the T1/T2 ratio for analysis within and between subjects

Kjetil Jørgensen2, Stener Nerland3, Torgeir Moberget3, Torbjørn Elvsåshagen3, Erik Jonsson4, Ole Andreassen2,3, Ingrid Agartz1,2

1Department of Psychiatric Research, Diakonhjemmet Hospital, Oslo, Norway, 2NORMENT, K.G. Jebsen Centre for Psychosis Research, University of Oslo, Oslo, Norway, 3NORMENT, K.G. Jebsen Centre for Psychosis Research, Oslo University Hospital, Oslo, Norway, 4Department of Clinical Neuroscience, Karolinska Institutet, Stockholm, Sweden

**Th698** Mapping Retrograde Tracer Data onto a Macaque Cortical Atlas

Yuike Hou1, Loic Magrou1, Kenneth Knoblauch1, Zhiming Shen6, Henry Kennedy8, Timothy Coakson4, Erin Reid3, Matt Glasser1, David Van Essen7

1Université de Lyon, Université Lyon 1, INSERM U2008, Stem Cell and Brain Research Institute, Lyon, France, 2Institute of Neuroscience, Shanghai Institutes for Biological Sciences, Chinese Academy of Sciences, Shanghai, China, 3Department of Neuroscience, Washington University Medical School, St Louis, MO, United States

**Th699** Automated Sulcal Line Extraction based on Laplacian Skeletonization

Alberto Fernández-Pena3, Daniel Martín de Blas3, Javier Perez Santonja2, Luis Marcos-Vidal8, Isabel Martínez-Tejado4,5, Magdalena Martínez-García1, Laura Carretero-Gómez3, María Paternina4, Joost Janssen2, Francisco Navas-Sánchez1, Susanna Carmona6,7, Manel Desco8,9, Yasser Alemán-Gómez8,9,10

1Instituto de Investigación Sanitaria Gregorio Marañón, Madrid, Spain, 2Dept. of Child and Adolescent Psychiatry, IISGM, Hospital General Universitario Gregorio Marañón, Madrid, Spain, 3Departamento de Bioingeniería e Ingeniería Aeroespacial, Universidad Carlos III de Madrid, Leganés, Spain, 4Department of Neurosurgery, Rigshospitalet, Copenhagen, Denmark, 5Department of Health Technology, Technical University of Denmark, Kgs. Lyngby, Denmark, 6Centro de Investigación Biomédica en Red de Salud Mental (CIBERSAM), Madrid, Spain, 7Faculty of Health Sciences, Universitat Oberta de Catalunya, Barcelona, Spain, 8Fundación Centro Nacional de Investigaciones Cardiovasculares Carlos III, Madrid, Spain, 9Department of Psychiatry, Centre Hospitalier Universitaire Vaudois, Prilly, Switzerland, 10Department of Radiology, Centre Hospitalier Universitaire Vaudois (CHUV) and University of Lausanne (UNIL), Lausanne, Switzerland, 11Medical Image Analysis Laboratory (MIAL), Centre d’Imagerie BioMédicale (CIBM), Lausanne, Switzerland

**Th700** Single Nucleus RNA-Seq of the Human Dorsolateral Prefrontal Cortex and Subgenual Anterior Cingulate

Billy Kim1, Kory Johnson1, Carolina Caban-Rivera2, Ningping Feng1, Qiong Xu1, Ajeet Mandal1, Nirmala Alemán-Gómez8,9,10

1Parietal, INRIA, Université Paris-Saclay, Paris, France, 2Psychiatry Neuroimaging Laboratory, BWH, HMS, Boston, MA, United States

**Th702** A new sulcal landmark in human prefrontal cortex

Jacob Miller1, Willa Voorhies1, Mark D’Esposito1, Kevin Weiner1

1University of California, Berkeley, Berkeley, CA, United States

**Th703** Cortical Morphometric Similarity Networks for Exploring Early Brain Development

Dingna Duai1,2, Shunren Xia1, Zhengwang Wu1, Li Wang1, Weili Lin1, Dinggang Shen1, Gong Li2

1Key Laboratory of Biomedical Engineering of Ministry of Education, Zhejiang University, Hangzhou, China, 2Department of Radiology and BRIC, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States

**Th704** MultiMap: Multilingual visual naming test for the mapping of eloquent areas during awake surgeries

Sandra Gisbert-Muñoz1,2, Ileana Quiñones1, Meritxell Garcia2,3, Lucia Amoroso1, Iñigo Pomposa1,4, Santiago Gil-Robles1,2,5, Manuel Carreiras2,3,5

1Basque Center on Cognition, Brain and Language (BCBL), San Sebastian, Spain, 2University of the Basque Country, UPV/EHU, Bilbao, Spain, 3BioCruces Research Institute, Bilbao, Spain, 4Department of Neurosurgery, Hospital Quirón, Madrid, Spain, 5IKERBASQUE. Basque Foundation for Science, Bilbao, Spain

**Th705** Heritability of brain structures follows synapatic hierarchy

Uku Vanik1, Casey Paquola1, Ying-Qiu Zheng1, Boris Bernhardt2, Bratislav Mišić3, Alain Daghero2

1Montreal Neurological Institute, Montreal, Quebec, Canada, 2Montreal Neurological Institute, Montreal, Quebec, Canada

**Th706** Spatial Organization of Functional Connectivity Between IPS and FEF in Humans and Macaques

Jonathan Orloff1, Hoi-Chung Leung2

1Stony Brook University, Stony Brook, NY, United States
Th710 Longitudinal analysis of intracortical microstructure profiles during adolescent development

CASEY PAQUOLI1, RICHARD BETHLEHEM2, JAKOB SEIDLITZ3, KONRAD WAGSTFY4, RAFAEL ROMERO-GARCIA5, PETRA VERTES6, KIRSTIE WHITAKER1, DANIEL MARQUILLES1, BORIS BARNERHT1, EDWARD BULLMORE7

1Montreal Neurological Institute, Montreal, Quebec, 2University of Cambridge, Cambridge, United Kingdom, 3NH/University of Cambridge, Kensington, MD, United States, 4The Alan Turing Institute, London, United Kingdom, 5Institut du Cerveau et del Moelle Épinière, Pairs, France, 6Montreal Neurological Institute, McGill university, Montreal, QC, 7Cambridge University, Cambridge, United Kingdom

Th711 Odd numbers: 12:45 – 13:45; Even numbers: 13:45 – 14:45; Poster Reception: 16:00 – 17:00

Th716 Prediction of Motor Function Development in Infants Using the Thickness of the Primary Motor Cortex

KOJI YAMASHITA1, ZHENGWANG WU2, TIANYOU LUO1, PENG-THIAN YAP1, LI WANG1, GANG LI1, TENGFEI LI1, KRISTINE BALUYOT1, BRITTANY HOWELL1, MARTIN SYNER1, ESA YACOUB2, GENG CHERI1, TAYLOR PATTS1, JOHN GILMORE1, JOSEPH PIVEN1, KEITH SMITH1, KAMIL UGURBI1, HEATHER HAZZETT1, HONGTU ZHU1, JED ELISON1, DINGGANG SHEN1, WELIN LIN1

1UNC at Chapel Hill, Chapel Hill, NC, United States, 2University of Minnesota, Minneapolis, MN, United States

Th712 Reduced cortical thickness in Heschl’s gyrus as an in vivo marker for primary auditory cortex

SIMEONE ZOELNER1, JAN BENNER1, Bettina ZEIDL1, ANNEMARIE SEITHE-PREISLER1, MARKUS CHRISTNER1, Angelika Seitz2, Rainer Goebel3, Armin Heinicke4, Martina Wengenroth5, Maria Blatow1, Peter Schneider1

1University Hospital Heidelberg, Heidelberg, Germany, 2University of Graz, Graz, Austria, 3University of Vienna, Vienna, Austria, 4Maastricht University, Maastricht, Netherlands, 5University of Maastricht, Maastricht, Netherlands, 6University Medical Center Schleswig-Holstein, Luebeck, Germany, 7University Hospital Zurich, Zurich, Germany

Th713 Morphological and laminar characterization of the human hippocampus based on 3D BigBrain data

JORDAN DEKRAKER1,9, KAYO FERKO1,9, JONATHAN LAU2,9, STAN KOHLER4,9, ALI KHAN4,9

1Robarts Research Institute, University of Western Ontario, London, Ontario, Canada, 2Brain and Mind Institute, University of Western Ontario, London, Ontario, Canada, 3Division of Neurosurgery, Department of Clinical Neurological Sciences, London Health Sciences Centre, University Hospital, University of Western Ontario, London, Ontario, Canada, 4Department of Psychology, University of Western Ontario, London, Ontario, Canada, 5Department of Medical Biophysics, University of Western Ontario, London, Ontario, Canada

Th717 Quantification of developmental trajectory in the fetal brain: a sulcus-wise approach

HYUK JIN YUN1, CYNTHIA LAURENTY1, P. ELLEN GRANT7, KIHO IM2

1Boston Children’s Hospital, Boston, MA, United States, 2Boston Children’s Hospital, Harvard Medical School, Boston, MA, United States

Th714 Longitudinal myelination profiles in infant and toddler brains

DAISUKE TSUZUKI1,2,3, GENTARO TAGO2,5, HAMA WATANABE5, FUMITAKA HOMOE4,5

1Department of Language Sciences, Tokyo Metropolitan University, Hachioji, Tokyo, Japan, 2Graduate School of Education, The University of Tokyo, Bunkyo-ku, Tokyo, Japan, 3Applied Cognitive Neuroscience Laboratory, Chuo University, Bunkyo-ku, Tokyo, Japan, 4Research Center for Language, Brain and Genetics, Tokyo Metropolitan University, Hachioji, Tokyo, Japan

Th718 Neurodevelopmental changes in qMRI measures in hippocampal and cortical regions

JAIANE ARNEZ-TELLEIG1, AVIV MEZER2, PEDRO M. PAZ-ALONSO2

1BCBL - Basque Center on Cognition Brain and Language, Donostia - San Sebastian, Spain, 2The Hebrew University of Jerusalem, Jerusalem, Israel

Th719 Differences in brain developmental trajectories relate to use of emotion regulation strategies

LIA FERSCHMANN1, NANDITA VIJAYAKUMAR1, HKON GRYDELAND1, KRUNT OVERTBY1, KATHRYN MILLS1, ANDERS FJELL2, KRISTINE WALHOV1, JENNIFER PFEIFER1, CHRISTIAN TAMMES1

1University of Oslo, Oslo, Norway, 2University of Oregon, Eugene, OR, United States

Th715 The Fractal Dimension of the Brain during Childhood, Adolescence and Adulthood

CHIARA MARZI1, MATTEO LENGE1, MARCO MASCAILDI1,4, STEFANO DICTI1

1Dept. of Electrical, Electronic and Information Engineering “Guglielmo Marconi”, Univ. of Bologna, Bologna, Italy, 2Neurology Unit, “A. Meyer” Children’s Hospital, Florence, Italy, 3Neuroimaging Unit, “A. Meyer” Children’s Hospital, Florence, Italy, 4“Maria Sera” Department of Experimental and Clinical Biomedical Sciences, University of Florence, Florence, Italy

Th721 Cortical Thickness Maturational Trajectories Revisited

BENJAMIN REID1, MADHURA BAXI1, SUHEYLA CETIN KARAYUMAK1, YOGESH RATH1,2, MAREK KUBICKI2,5,6

1Psychiatry Neuroimaging Laboratory, Brigham and Women’s Hospital, Harvard Medical School, Boston, MA, United States, 2Boston Children’s Hospital, Harvarad Medical School, Boston, MA, United States, 3Department of Radiology, Brigham and Women’s Hospital, Harvard Medical School, Boston, MA, United States, 4Department of Psychiatry, Massachusetts General Hospital, Harvard Medical School, Boston, MA, United States

Th722 Anatomical Imbalance Mapping (AIM) Reveals Developmental Tightening of Structural Covariance Norms

AJAY NADIG1, JAKOB SEIDLITZ1, CASSIDY McDERMOTT1, LIV CLASEN1, JONATHAN BLUMENTHAL1, FRANCOIS LATONDE1, RUBEN GUR1, RAQUEL GUR1, EDWARD BULLMORE1, THEODORE SATTERTHWAITE1, ARMIN RAZNAN1

1National Institute of Mental Health, Bethesda, MD, United States, 2Cambridge University, Cambridge, United Kingdom, 3University of Pennsylvania, Philadelphia, PA, United States
**NEUROANATOMY**

**Subcortical Structures**

**Th723** Spatiotemporal Patterns of Hemispheric Asymmetries of Cortical Properties in Early Brain Development  
Jing Xi1, Zhengwang Wu1, Fan Wang2, Li Wang2, Caiming Zhang1, Kristine Baluyot2, Brittany Howell3, Martin Styner1, Essa Yacoub1, Geng Chen1, Taylor Potts2, John Gilmore4, Joseph Piven4, J. Keith Smith2, Kamil Ugurbil5, Heather Hazlett1, Jed Elison12, Hongtu Zhu1, Wei Li1, Dinggang Shen58, Gang Li1, for UNC/UMN Baby Connectome Project Consortium

1Department of Computer Science and Technology, Shandong University, Jinan, China, 2Department of Radiology and BIRC, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States, 3Institute of Child Development, University of Minnesota, Minneapolis, MN, United States, 4Department of Psychiatry, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States, 5Center for Magnetic Resonance Research, University of Minnesota, Minneapolis, MN, United States, 6Carolina Institute for Developmental Disabilities, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States, 7Department of Pediatrics, University of Minnesota, Minneapolis, MN, United States, 8The University of Texas M.D. Anderson Cancer Center, Houston, TX, United States, 9Department of Brain and Cognitive Engineering, Korea University, Seoul, Korea, Republic of

**Th724** Resting Oscillatory Activity and Connectivity of the Human Ventral Temporal Area  
Vladimir Litvak1, Douglas Steele1, Manjit Matharu1, Ludvic Zrinzo1

1UCL Queen Square Institute of Neurology, London, United Kingdom, 2University of Dundee, Dundee, United Kingdom

**Th725** Mapping the human subcortical auditory system with histology, post mortem MRI and in vivo MRI  
Kevin Sitek1, Omer Foruk Gulban2, Evan Calabrese3, G. Allan Johnson4, Satrajit Ghosh1, Federico De Martino5

1MIT, Cambridge, MA, United States, 2Maastricht University, Maastricht, Limburg, 3Duke University, Durham, NC, United States, 4MIT/HMS, Cambridge, MA, United States, 5Maastricht University, Maastricht, Netherlands

**Th726** Smaller basal nuclei volumes at 1st month postnatal life in HIV-exposed uninfected children  
Abdulmumin Ibrahim1, Fleur Warton1, Samantha Fry2, Mark Cotton2, Sandra Jacobson3,1, Joseph Jacobson1, Christopher Molteno1, Francesca Little1, Andre van der Kouwe4, Barbara Laughton1, Ernesto Meinrads1, Vladimir Litvak1

1University of Cape Town, Cape Town, Western Cape, South Africa, 2Stellenbosch University, Cape Town, Western Cape, South Africa, 3Wayne State University, Detroit, MI, United States, 4Department of Radiology, Massachusetts General Hospital, Boston, MA, United States

**Th727** Perineuronal nets as an immunohistochemical tool to identify auditory brainstem nuclei in humans  
Mandy Sonntag1, Markus Morawski1, Wolfgang Grodd1

1University Medicine Goettingen, Goettingen, Germany, 2Asklepios Kliniken Schildautal Seesen, Germany, 3German Primate Center, Goettingen, Germany

**Th728** Human brain - superior colliculus depth dependent functional connectivity  
Amin Dadashi1, Marc Himmelbach1

1University of Tuebingen, Tuebingen, Germany

**Th729** The Thalamus and the Limbic System: Tracing the Structural Connectivity  
Wolfgang Grodd1, Vinod Kumar1, Klaus Scheffler2

1Max Planck Institute for Biological Cybernetics, Tuebingen, Germany, 2Max-Planck Institute for Biological Cybernetics, University of Tuebingen, Tuebingen, Germany

**Th730** Resting-state functional connectivity of the human superior colliculus  
Amin Dadashi1, Marc Himmelbach1

1University of Tuebingen, Tuebingen, Germany

**Th731** In-vivo functional and structural MRI of the sensory thalamic VPL nucleus  
Rosa Sanchez Panchuelo1, Moeen Ali2, Kingkam Aphiwatthanasumet1, Richard Bowtell1, Penny Gowland1

1University of Nottingham, Nottingham, United Kingdom, 2University Hospital Southampton NHS Foundation Trust, Southampton, United Kingdom

**Th732** Intrinsic functional connectivity of the superior colliculus and changes in Blindsight  
Matteo Diano1, Alessia Celeghin2, Lorena Georgy3, Beatrice de Gelder4, Alain Pito5, Marco Taniello5

1Department of Psychology, University of Turin, Turin, Italy, 2Department of Psychology, University of Turin, University of Turin, Italy, 3McGill University Montreal Neurological Institute, Montreal, QC, Canada, 4Maastricht University, Maastricht, Netherlands, 5McGill University, Montreal, Quebec, Canada

**Th733** Multi-Scale Functional Granularity in the Thalamus and Basal Ganglia  
Vinod Kumar1, Christian Beckmann2, Erik van Oort3, Klaus Scheffler4, Wolfgang Grodd5

1Max Planck Institute for Biological Cybernetics, Tuebingen, Germany, 2Donders Institute for Brain, Cognition and Behaviour, Nijmegen, Netherlands, 3Max-Planck Institute for Biological Cybernetics, University of Tuebingen, Tuebingen, Germany

**Th734** Testing relationships between fitness, anterior hippocampal volume and memory in young adolescents  
Thomas Wassenaar1, Piergiorgio Salvan1, Nick Beale2, Catherine Wheatley3, Claire Sexton4, Mark Jenkins1, Helen Dawes2, Heidi Johansen-Berg1

1Wellcome Centre for Integrative Neuroimaging, University of Oxford, Oxford, United Kingdom, 2Centre for Movement, Occupational and Rehabilitation Sciences (MOReS), Oxford Brookes University, Oxford, United Kingdom, 3University of California San Francisco, San Francisco, CA, United States

**Th735** Thalamic contributions to visually-guided actions: a behavioral and fMRI study in stroke patients  
Carsten Schmidt-Samoa1, Kristina Miloserdov4, Peter Dechent1, Shirin Mahdavi1, Kathleen Williams5, Manfred Holzgraefer1, Jan Liman1, Igor Kagan1, Mathias Bahr1, Melanie Wilke2,3

1University Medicine Goettingen, Goettingen, Germany, 2Asklepios Kliniken Schildautal Seesen, Germany, 3German Primate Center, Goettingen, Germany

**Th736** Precision Mapping of the Human Subcortex Reveals Integrative and Network-Specific Functional Zones  
Scott MAREK1, Deanna Greene2, Caterina Gratton3, Joshua Siegel4, Evan Gordon4, Timothy Laumann4, Nico Dosenbach5

1Washington University School of Medicine, St. Louis, MO, United States, 2Mallinckrodt Institute of Radiology, Washington University School of Medicine, St. Louis, MO, United States, 3Northwestern University, Evanston, IL, United States, 4Washington University School of Medicine, Saint Louis, MO, United States, 5VA VISN17 Center of Excellence, Waco, TX, United States, 6Washington University School of Medicine, St. Louis, MO, United States

**Th737** Preferential Stimulus-Specific Responses Within the Hippocampus  
Jennifer Robinson1, Sarah Etherton1, Julio Yanes1, Ryan Bird2, Xinyu Zhao1, Gopikrishna Deshpande1

1Auburn University, Auburn, AL, United States
Th738 Locus coeruleus integrity at ultra-high field 7T associated with increased heart rate variability
Claire O’Callaghan1, Catarina Ruiz2, Frank Hezenmans3, Rong Ye4, Simon Jones5, Kamen Tsvetanov6, Nicola Toschi7, Trevor Robbins8, James Rowe9, Luca Passamonti10
1University of Cambridge, Cambridge, Cambridgeshire, 2Wolfson Brain Imaging Centre, Cambridge, United Kingdom, 3University of Cambridge, Cambridge, United Kingdom, 4Institute of Cambridge, CAMBRIDGE, United Kingdom, 5Department of Psychology, University of Cambridge, Cambridge, United Kingdom, 6Martins Center for Biobehavioral Imaging (MGI) and Harvard Medical School, Boston, MA, United States, 7Department of Clinical Neurosciences, University of Cambridge, Cambridge, United Kingdom

Th739 Connectivity-based cross-species comparison of the mediadorsal thalamus
Kaixin Li1, Longzhong Fan2, Long Cao3, Tianzijiang4, Bo You5
1Harbin University of Science and Technology, Harbin, China, 2Institute of Automation Chinese Academy of Sciences, Beijing, China, 3National Laboratory of Pattern Recognition, Institute of Automation, Automation, Beijing, China, 4School of Life Science and Technology, University of Electronic Science and Technology of China, Chengdu, China

Th740 Multimodal characterisation of the locus coeruleus in Parkinson’s disease at ultra high-field 7T MRI
Claire O’Callaghan1, Catarina Ruiz2, Rong Ye3, Simon Jones4, Kamen Tsvetanov5, Frank Hezenmans6, Christopher Rodgers7, Guy Williams8, Trevor Robbins9, James Rowe10
1University of Cambridge, Cambridge, Cambridgeshire, 2Wolfson Brain Imaging Centre, Cambridge, United Kingdom, 3Cambridge Centre for Frontotemporal Dementia and Related Disorders, Cambridge, United Kingdom, 4University of Cambridge, Cambridge, United Kingdom, 5Department of Psychology, University of Cambridge, Cambridge, United Kingdom, 6Department of Clinical Neurosciences, University of Cambridge, Cambridge, Other, 7Department of Clinical Neurosciences, University of Cambridge, Cambridge, United Kingdom

Th741 A claustrum atlas of the healthy brain
Hannah Weiss1, Regine Goh2, Anil Mahavadi3, Aline Borghesi4, Kerry Steed5, S. Band6, Pierre Bessonet7
1Feinberg School of Medicine, Northwestern University, Chicago, United States, 2Feinberg School of Medicine, Northwestern University, Chicago, IL, United States, 3University of Miami Miller School of Medicine, Miami, FL, United States, 4Department of Neurosurgical Surgery, Tehran University of Medical Sciences, Tehran, Iran, 5Islamic Republic of, 6Vanderbilt University, Nashville, TN, United States, 7Department of Neurological Surgery, Feinberg School of Medicine, Northwestern University, Chicago, IL, United States

Th742 A comparison of automated segmentation and manual tracing for quantifying amygdala volumes
Quan Zhou1, Xinian Zuo2
1Institute of Psychology, Chinese Academy of Sciences, Beijing, China

Th743 LSD increases social adaptation to opinions similar to one’s own
Katrin Preller1, Leonhard Schilbach2, Patricia Duerler3, Thomas Pokorny4, Katrin Amunts5
1Institute of Neuroscience and Medicine INM-1, Research Centre Jülich, Jülich, Germany, 2Department of Psychiatry, Psychotherapy and Psychosomatics, RWTH Aachen University, Aachen, Germany, 3JARA-BRAIN, Jülich-Aachen Research Alliance, Jülich, Germany, 4C.A.O. Vogt Institute of Brain Research, Düsseldorf University, Düsseldorf, Germany

Th745 Perirhinal Cortex as revealed by the multimodal receptor analysis
Oiga Kedo1, Karl Zilles2,3, Nicola Palomero-Gallagher4,5, Katrin Amunts6
1Institute of Neuroscience and Medicine INM-1, Research Centre Jülich, Jülich, Germany, 2Department of Psychiatry, Psychotherapy and Psychosomatics, RWTH Aachen University, Aachen, Germany, 3JARA-BRAIN, Jülich-Aachen Research Alliance, Jülich, Germany, 4C.A.O. Vogt Institute of Brain Research, Düsseldorf University, Düsseldorf, Germany

Th746 Ultra-high resolution 3D neurotransmitter receptor atlas of the human brain
Thomas Funck1, Nicola Palomero-Gallagher2,3, Mona Omidyeganeh4, Claude Lepage5, PJ Toussaint6, Najmeh Khalili-Mahani7, Alexander Thiele8, Karl Zilles9, Alan Evans10
1Montreal Neurological Institute, McGill University, Montreal, QC, Canada, 2Lady Davis Institute, Jewish General Hospital, McGill University, Montreal, QC, Canada, 3Institute of Neuroscience and Medicine INM-1, Research Centre Jülich, Jülich, Germany, 4Department of Psychiatry, Psychotherapy and Psychosomatics, Medical Faculty, RWTH Aachen University, Aachen, Germany

White Matter Anatomy, Fiber Pathways and Connectivity

Th747 Microstructural properties of optic tract and optic radiation after retinal ganglion cell damage
Hiromasa Takemura1,2, Shumpei Ogawa2,4, Aviv Mezer5, Hiroshi Horiguchi2, Atsushi Miyazaki6, Kenji Matsumoto2, Keiga Shikishima2, Tadasu Nakano2, Yoichiro Masuda2
1Center for Information and Neural Networks (CiNet), NICT, Saito, Japan, 2Graduate School of Frontier Biosciences, Osaka University, Saito, Japan, 3Department of Ophthalmology, The Jikei University of Medicine, Tokyo, Japan, 4Department of Ophthalmology, Atsugi City Hospital, Atsugi, Japan, 5The Edmond and Lily Safra Center for Brain Science, The Hebrew University of Jerusalem, Jerusalem, Israel, 6Brain Science Institute, Tamagawa University, Machida, Japan

Th748 Using Vascular Territories to Predict Disconnection Profiles in Post-Stroke Aphasia
Natalie Busby1, Ajay Holot2, Ying Zhao2, Geoff Parker3, Matthew Lamon Ralph4
1University of Manchester, Manchester, United Kingdom, 2Department of Psychology, University of Cambridge, Cambridge, United Kingdom, 3Department of Psychology, University of Cambridge, Cambridge, United Kingdom, 4Quantitative Biomedical Imaging Laboratory, University of Manchester, Manchester, United Kingdom

Th749 A novel 11.7T ultra-high field diffusion MRI structural connectivity atlas of the Japanese quail
Hiromasa Takemura1,2, Markus Axer3, Nicola Palomero-Gallagher3,4,5, David Grässel3, Matthew Dräger2
1Center for Information and Neural Networks (CiNet), NICT, Suita-shi, Osaka, Japan, 2Graduate School of Frontier Biosciences, Osaka University, Suita, Japan, 3Institute of Neuroscience and Medicine INM-1, Research Centre Jülich, Jülich, Germany, 4Department of Psychiatry, Psychotherapy and Psychosomatics, Medical Faculty, RWTH Aachen University, Aachen, Germany, 5JARA-BRAIN, Jülich-Aachen Research Alliance, Jülich, Germany, 6Department of Pathology, Wake Forest University School of Medicine, Winston-Salem, NC, United States, 7Department of Psychiatry, Psychotherapy and Psychosomatics, Medical Faculty, RWTH Aachen University, Aachen, Germany

Th750 Ultra high-resolution mapping of occipital white matter tracts disentangles current controversies
Hiromasa Takemura1,2, Markus Axer1, Nicola Palomero-Gallagher1,2,5, David Graessler2, Matthew Jorgensen3, Roger Woods4, Karl Zilles2,4
1Center for Information and Neural Networks (CiNet), NICT, Saito-shi, Osaka, Japan, 2Graduate School of Frontier Biosciences, Osaka University, Saito-shi, Osaka, Japan, 3Institute of Neuroscience and Medicine INM-1, Research Centre Jülich, Jülich, Germany, 4Department of Psychiatry, Psychotherapy and Psychosomatics, Medical Faculty, RWTH Aachen University, Aachen, Germany, 5JARA - Translational Brain Medicine, Aachen, Germany, 6Department of Pathology, Wake Forest University School of Medicine, Winston-Salem, NC, United States, 7University of California, Los Angeles, Los Angeles, CA, United States
Th751 Connectivity gradients and connectomic projections onto white matter in diffusion weighted imaging
Guilherme Blazquez Freches1,2, Koen Hoon1,2, Rogier Mars2,3, Christian Beckmann1,2,4
1Department of Cognitive Neuroscience, Radboud University Medical Center, Nijmegen, Netherlands, 2Radboud University, Nijmegen, Netherlands, 3Centre for Functional MRI of the Brain (FMRIB), University of Oxford, Oxford, United Kingdom, 4Centre for Integrative Neuroimaging, University of Oxford, Oxford, United Kingdom

Th752 Segmentation of White Matter Bundles as Anatomically-Informed Multiple Linear Assignment Problems
Giulia Bert2,1, Paolo Avesani1,3, Franco Pestilli1, Daniel Bullock1, Bradley Carson1, Emanuele Olivetti1, Bruna Kessler Foundation, Trento, Italy, 1University of Trento, Trento, Italy, 2Indiana University, Bloomington, IN, United States

Th753 Effects of tractography filtering on the topology and interpretability of connectomes
Matteia Frigo1, Samuel Deslauriers-Gauthier1, Drew Parker1, Abdul Aziz Ould Ismail1, Junghoon John Kim1, Ragini Verma2, Racidh Deriche1, 1Inria Sophia-Antipolis Mediterranee, Universite Cote d’Azur, Nice, France, 2Penn Applied Connectomics and Imaging Group, Department of Radiology, University of Pennsylvania, Philadelphia, PA, United States, 3Department of Molecular, Cellular, and Biomedical Sciences, CUNY School of Medicine, The City College, NY, United States

Th754 Connectivity gradients and connectomic projections onto white matter in diffusion weighted imaging
Guilherme Blazquez Freches1,2, Koen Hoon1,2, Rogier Mars2,3, Christian Beckmann1,2,4
1Department of Cognitive Neuroscience, Radboud University Medical Center, Nijmegen, Netherlands, 2Radboud University, Nijmegen, Netherlands, 3Centre for Functional MRI of the Brain (FMRIB), University of Oxford, Oxford, United Kingdom, 4Centre for Integrative Neuroimaging, University of Oxford, Oxford, United Kingdom

Th755 A novel constraint for anatomical tractography in the brainstem
Claude Bagatto1,2, Lucas da Costa Campos1,2,3, Jan Schreiber1, Richard Muscat1, Svenja Cospers1,4,5
1Faculty of Medicine and Surgery, University of Malta, Msida, Malta, 2Institute of Neuroscience and Medicine (INM-5), Research Centre Juelich, Juelich, Germany, 3Institute of Complex Systems (ICS-2), Research Centre Juelich, Juelich, Germany, 4Institute for Anatomy I, Medical Faculty, Heinrich-Heine-University Dusseldorf, Dusseldorf, Germany, 5JARA-BRAIN, Juelich-Aachen Research Alliance, Juelich, Germany

Th756 Characterizing white matter tract organization in complex malformations of cortical development
Filippo Arrigoni1, Joseph Yang2,1, Denis Peruzzo1, Simone Mandelstam2,4,5, Gabriele Amorosino1, Daniela Redaelli1, Romano Raimondi2, Renato Borgatti1, Marc Seif1,4
1E.Medea Research Institute, Bosisio Parini, Italy, 2Murdoch Children’s Research Institute, Parkville, Australia, 3Royal Children’s Hospital, Parkville, Australia, 4The University of Melbourne, Parkville, Australia, 5The Florey Institute of Neuroscience and Mental Health, Parkville, Australia

Th757 Tractography in the presence of White Matter Hyperintensities in UK Biobank
Hanna Nowicka1, Matteo Bastiani1, Mark Jenkinson1
1University of Oxford, Oxford, United Kingdom, 2University of Nottingham, Nottingham, United Kingdom

Th758 Structural Connectivity Changes in Post-stroke Patients after Rehabilitation
Pradeepa Ruwan Wanni Arachchige1, Atsushi Senoo1,2,3
1Department of Radiological Sciences, Faculty of Health Sciences, Tokyo Metropolitan University, Tokyo, Japan

Th759 Probabilistic tractography identifies an amygdalofugal tract similar to that found in tracer studies
Davide Folloni1, Jerome Sallet1, Alexandre Kharapchiev1,2, Nicola Sibson2, Lennart Verhagen1, Rogier Mars1,2
1Wellcome Integrative Neuroimaging (WIN), Department of Experimental Psychology, University of Oxford, Oxford, United Kingdom, 2Institute for Radiation Oncology, Department of Oncology, University of Oxford, Oxford, United Kingdom, 3Wellcome Integrative Neuroimaging (WIN), FMRIB, University of Oxford, Oxford, United Kingdom, 4Donders Institute for Brain, Cognition and Behaviour, Radboud University Nijmegen, Nijmegen, Netherlands

Th760 Thalamo-cortical connectivity in epilepsy pediatric patients with unilateral thalamic lesions
Ana Rita Oliveira1, Patricia Figuerido1, Alberto Leop1, Rita Nunes1
1ISR-Lisboa/LARsS and Dept. Bioengineering, Instituto Superior Technico - Universidade de Lisboa, Lisbon, Portugal, 2Department of Neurophysiology, Centro Hospitalar Psiquiatrico de Lisboa, Lisbon, Portugal

Th761 Relationships between MRI-derived indices of myelin and math performance in children
Ronan Denyer1, Katherine White1, Sarah Morris1, Rachel Weber1, Lara Boyd2
1University of British Columbia, Vancouver, BC, Canada

Th762 Neurophylogenetics: Evolutionary Changes to White Matter Organization in the Primate Lineage
Katherine Bryant1, Longchuan Li3,4,5, Saad Jabbi1, Christian Beckmann1,2,4
1Wellcome Centre for Integrative Neuroimaging, Dept Experimental Psychology, University of Oxford, Oxford, United Kingdom, 2Donders Institute for Brain, Cognition, & Behaviour, Nijmegen, Netherlands, 3Marcus Autism Center, Children’s Healthcare of Atlanta, Emory University, Atlanta, GA, United States, 4University of Oxford, Oxford, United Kingdom

Th763 Cross-species surface registration identifies different types of cortical reorganization
Nicole Eichert1, Emma Robinson2, Katherine Bryant1, Saad Jabbi1, Mark Jenkinson1, Longchuan Li3,4,5, Kristine Krug1, Kate Watkins1,2, Rogier Mars1,2
1University of Oxford, Oxford, United Kingdom, 2King’s College London, University of London, London, United Kingdom, 3Donders Institute for Brain, Cognition, & Behaviour, Nijmegen, Netherlands, 4Marcus Autism Center, Children’s Healthcare of Atlanta, Emory University, Atlanta, GA, United States

Th764 Comparative Anatomy of the Temporal Lobe Fasciculi in Humans, Great Apes and Macaques
Lea Roumazie1,2, Katherina Bryant1, Nicole Eichert1, Davide Folloni1, Suhas Vijayakumar2, Colin Revely3, Lennart Verhagen1, Saad Jabbi1, Sean Foxley1, Karla Miller2, Jerome Sallet1, Rogier Mars1,2,3,4
1Wellcome Centre for Integrative Neuroimaging, Dept Experimental Psychology, University of Oxford, Oxford, United Kingdom, 2Donders Institute for Brain, Cognition, & Behaviour, Nijmegen, Netherlands, 3Wellcome Centre for Integrative Neuroimaging, FMRIB, University of Oxford, Oxford, United Kingdom, 4Dpt of Radiology, University of Chicago, Chicago, IL, United States

Th765 Quality Assessment in Population Imaging: The Maastricht Study
Joost de Jong1,2,3, Jacobus Jansen1,2, Laura Verhaagen1,2,3, Miranda Schram1,2,4,5, Walter Backes1,4,5
1Department of Radiology and Nuclear Medicine, Maastricht University Medical Center, Maastricht, Netherlands, 2School for Mental Health and Neuroscience (MH-eNS), Maastricht University Medical Center, Maastricht, Netherlands, 3Department of Internal Medicine, Maastricht University Medical Center, Maastricht, Netherlands, 4School for Cardiovascular Disease (CARIM), Maastricht, Netherlands, 5Heart and Vascular Centre, Maastricht University Medical Center, Maastricht, Netherlands

Th766 Laplacian Eigenmaps reveal two distinct modes of connectivity in the human temporal cortex
Guilherme Blazquez Freches1,2, Katherine Bryant1, Koen Hoon1,2, Christian Beckmann1,2, Rogier Mars1,2
1Department of Cognitive Neuroscience, Radboud University Medical Center, Nijmegen, Netherlands, 2Donders Institute for Brain, Cognition and Behaviour, Radboud University, Nijmegen, Netherlands, 3Centre for Functional MRI of the Brain (FMRIB), University of Oxford, Oxford, United Kingdom, 4Wellcome Centre for Integrative Neuroimaging, University of Oxford, Oxford, United Kingdom
THURSDAY, JUNE 13

Odd numbers: 12:45 – 13:45; Even numbers: 13:45 – 14:45; Poster Reception: 16:00 – 17:00

Th767 Some analysis strategies for non-human MRI
Lennart Verhagen1, Guilherme Blazquez Freches2, Nicole Eichert1, Davide Folloni1, Martin Guthrie2, Saad Jbabdi3, Colin Reveley1, Lea Roumazelleis4, Jerome Sallet1, Lev Tankeljevitch1, Suhai Vijayakumar1, Rogier Mors1
1University of Oxford, Oxford, United Kingdom, 2Radboud University Nijmegen, Nijmegen, Netherlands, 3Wellcome Centre for Integrative Neuroimaging, FMRIIB, University of Oxford, Oxford, United Kingdom, 4Wellcome Centre for Integrative Neuroimaging, Dept Experimental Psychology, University of Oxford, OXFORD, United Kingdom, 5Donders Institute for Brain, Cognition and Behaviour, Radboud University Nijmegen, Nijmegen, Netherlands

Th768 Automated Tractography of Four White Matter Fascicles in Support of Brain Tumor Surgery
Stephan Meesters1,2, Geert-Jan Rutten1, Luc Floraar1
1Eindhoven University of Technology, Eindhoven, Netherlands, 2Elisabeth-TweeSteden Hospital, Tilburg, Netherlands

Th769 Bundle Analytics: a computational and statistical analysis framework for tractometric studies
Bromsh Chandio1, Jaroslav Harezlik2, Eletherios Garyfallidis1
1Indiana University Bloomington, Bloomington, IN, United States, 2Department of Epidemiology and Biostatistics, Indiana University, Bloomington, IN, United States

Th770 The relationship between physical activity, fitness, white matter and response inhibition in youth
Ilona Ruotsalainen1, Tetiana Gorbach2,3, Joanna Hiltunen4, Ville Renvall6, Heidi Syväoja1, Tuija Tammelin1, Juha Korvainen5, Tiina Parvinen1
1Department of Psychology, Centre for Interdisciplinary Brain Research, University of Jyväskylä, Jyväskylä, Finland, 2Umed School of Business, Economics and Statistics, Umed University, Umed, Sweden, 3Department of Mathematics and Statistics, University of Jyväskylä, Jyväskylä, Finland, 4Department of Clinical Neurophysiology, Hospital District of Helsinki and Uusimaa, Helsinki, Finland, 5Department of Neuroscience and Biomedical Engineering, Aalto University, Espoo, Finland, 6AMICI, Centre, Aalto Neuroimaging, School of Science, Aalto University, Espoo, Finland, 7LUKE Research Centre for Physical Activity and Health, Jyväskylä, Finland

Th771 Fixed density thresholding in structural brain networks: a requirement for clinical studies?
Bruno de Brito Robalo1, Naomi Vlieges1, Alexander Leemans2, Geert-Jan Biessels1, Yoel Reijmer1
1Department of Neurology, Brain Center Rudolph Magnus, University Medical Center Utrecht, University, Utrecht, Netherlands, 2PROVIDI Lab, Image Sciences Institute, University Medical Center Utrecht, University of Utrecht, Utrecht, Netherlands

Th772 Intrahemispheric cortical connectivity patterns defined by PCA of advance diffusion tractography
Lia Tozzo1, Ahmad Beyll1, Francisco De Santiago Requejo1, Stephanie Farke1, Caterina Tonon1,2, Claudia Testa1, Flavio Dell’Acqua2,3, Marco Catani1,2
1NatBrainLab, Department of Forensic and Neurodevelopmental Science, IoPPN, King’s College London, London, United Kingdom, 2Department of Biomedical and NeuroMotor Sciences, University of Bologna, Bologna, Italy, 3NatBrainLab, Centre for Neuroimaging Sciences, IoPPN, King’s College London, London, United Kingdom, 4IRCCS Istituto delle Scienze Neurologiche di Bologna, Diagnostica Funzionale Neuroradiologica, Bologna, Italy, 5Department of Physics and Astronomy, University of Bologna, Bologna, Italy

Th773 The Corticospinal Tract in the Human Medulla Oblongata: a High-Resolution Microscopic Analysis
Maria Morozova1,2,3,4, Henriette Rusch1, Carsten Jöger1, Alfred Anwander1, Siaowsoon Mohammadi2, Markus Morawski1, Stefan Geyer1
1Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, 2Paul Fleisch Institute of Brain Research, University of Leipzig, Leipzig, Germany, 3Department of Systems Neurosciences, University Medical Center Hamburg-Eppendorf, Hamburg, Germany

Th774 Rich club-based subnetworks in 16p11.2 deletion syndrome reveal differential structural alterations
Ai Wern Chung1, Banu Ahtam1, P. Ellen Grant1, Kiho Im1
1Division of Newborn Medicine, Boston Children’s Hospital, Harvard Medical School, Boston, MA, United States

Th775 Development of Structure-Function Network Coupling in Youth
Graham Baun1, Rostko Ciric2, Ziau Xu1,2, David Roalf3, Richard Betzel1, Cedric Huchuan Xie4, Tyler Moore5, Koshia Ruparel6, Russell Shinichiro7, Armin Raznahan8, Ruben Gur9, Raquel Gur1, Danielle Bassett1, Theodore Satterthwaite1
1University of Pennsylvania, Philadelphia, PA, United States, 2University of Pennsylvania, Philadelphia, PA, United States, 3Indiana University, Bloomington, IN, United States, 4NIMH, Bethesda, MD, United States

Th776 Subcomponents of the Human SLF/AF and their Connectivity Profiles
Luqi Cheng1, Lingzhong Fan2,3, Gangwon Jeong6, Jang-Hoo Cho6, Tianti Jiang2,3,4
1University of Electronic Science and Technology of China, Chengdu, China, 2Institute of Automation, Chinese Academy of Sciences, Beijing, China, 3National Laboratory of Pattern Recognition, Institute of Automation, Chinese Academy of Sciences, Beijing, China, 4University of Chinese Academy of Sciences, Beijing, China, 5AICT, Seoul National University, Seoul, Korea, Republic of, 6Neuroscience Research Institute, Suwon University, Gyeonggi, Korea, Republic of

Th777 Tractography delineation of the vertical occipital fasciculus using quantitative T1 mapping
Roey Schurr1, Aviv Mezer1
1The Hebrew University of Jerusalem, Jerusalem, Israel

Th778 The Virtual Dissection of Intralobar Fibres of the Occipital Lobe Through a 19th century Perspective
Moea Buqan1, Claude Bajada1, Christian Zommit1, Richard Muscat1
1University of Malta, Msida, Malta

Th779 WM abnormalities and their relationship with cognitive impairment in SZ, BD, and MDD
Shinichi Yamada1,2, Shun Takahashi1, Yuji Ishida1, Yuki Ohoshii1, Tomikumi Tsuji1, Kazuhiro Shinosaki2,3, Kosaki Terada1, Satoshi Uki1
1Department of Neuropsychiatry, Wakayama Medical University, Wakayama, Japan, 2Department of Psychiatry, Asakayama General Hospital, Sakai, Japan, 3Wakayama-Minami Radiation Clinic, Wakayama, Japan

Th780 Brain network disruption and cognitive decline: specific role for critical white matter connections?
Naomi Vlieges1, Bruno de Brito Robalo1, Geert-Jan Biessels1, Yoel Reijmer1
1University Medical Center Utrecht, Utrecht, Netherlands

Th781 White Matter Tracts Adjacent to the Cingulate Sulcus Visual Area (CSV) Assessed with Diffusion MRI
Maiko Usaki1,2, Hiromasa Takemura13,4, Michele Furlani1, Andrew Smith1
1Nanyang Technological University, Singapore, Singapore, 2OIC Research Organization, Ritsumeikan University, Osaka, Japan, 3Japan Society for the Promotion of Sciences, Tokyo, Japan, 4NICT, Suita-shi, Osaka, Japan, 5Graduate School of Frontier Biosciences, Osaka University, Suita, Japan, 6Scuola Internazionale Superiore di Studi Avanzati (SISSA), Trieste, Italy, 7Department of Psychology, Royal Holloway, University of London, Egham, United Kingdom

Th782 Subdividing the superior longitudinal fasciculus to its subcomponents using quantitative T1 mapping
Roey Schurr1,2, Ady Zeilmen3, Aviv Mezer1
1The Hebrew University of Jerusalem, Jerusalem, Israel
Th783 Comparison of structural and functional network-level brain connectivity in the healthy adult
Benedetta Tasselli1, Lino Nobili3, Annalisa Rubino2, Mario Fato1, Matias Palva5, Gabriele Arnulfo1
1University of Genoa, Genoa, Italy, 2Claudio Munari Epilepsy Surgery Centre, Niguarda Hospital, Milan, Italy, 3University of Glasgow, Glasgow, United Kingdom

Th784 Early Music Training Enhances Structural Connectivity of the Right Dorsal Auditory-Motor Pathway
Lucio Vaquer1, Paul-Noël Rousseau1, Diana Vazion1, Denise Klein1, Virginia Penuhne1
1Concordia University, Montreal, Quebec, Canada, 2McGill University, Montreal, Quebec, Canada

Th785 Half of the streamlines built in a whole human brain tractogram is anatomically uninterpretable
Laurent Petit1, François Rheaull1, Maxime Descoteaux1, Nathalie Touzour-Mazoey1
1GIN, IMN, UMR 5293, CNRS - CEA - Univ. Bordeaux, Bordeaux, France, 2SCIL, Université de Sherbrooke, Sherbrooke, Quebec, Canada

Th786 Distinct Rich-Club Organization of Structural Anatomical Backbone in Early Stage Parkinson’s Diseases
Virendra Mishra1, Kirthik Sreenivasa1, Xiaowei Zhuang1, Zhengshi Yang1, Dietmar Cordes1, Zoltan Mar1, David Eidelberg2, Ryan Walsh2
1Cleveland Clinic Lou Ruvo Center for Brain Health, Las Vegas, NV, 2Feinstein Institute for Medical Research, Northwell Research, Manhasset, NY, United States, 3Muhammad Ali Parkinson Center at Barrow Neurological Institute, Phoenix, AZ, United States

Th787 Structural Connectivity Changes in Cognitive Impaired and Nonimpaired Active Professional Fighters
Virendra Mishra1, Kirthik Sreenivasa1, Xiaowei Zhuang1, Zhengshi Yang1, Sarah Banks5, Dietmar Cordes1, Charles Bernick1
1Cleveland Clinic Lou Ruvo Center for Brain Health, Las Vegas, NV, United States, 2University of California, San Diego, La Jolla, CA, United States

Th788 Disrupted structural organization in Parkinson’s Diseases Patients With and Without Memory Impairment
Virendra Mishra1, Kirthik Sreenivasa1, Ece Bayram1, Sarah Banks5, Jason Longhurst2, Zhengshi Yang1, Xiaowei Zhuang1, Dietmar Cordes1, Aaron Ritter1, Jessica Caldwell1, Brent Bluett3
1Cleveland Clinic Lou Ruvo Center for Brain Health, Las Vegas, NV, United States, 2University of California, San Diego, La Jolla, CA, United States, 3Stanford University, Stanford, CA, United States

Th789 Does the SFOF exist in human brain? A study using fiber dissection, DSI tractography and VLSM
Xiaoliang Liu1, Masashi Kinoshita, Harumichi Shinohara, Mitsutoshi Nakada1
1Department of Neurosurgery, Kanazawa University, Kanazawa, Japan, 2Department of Functional Anatomy, Kanazawa University, Kanazawa, Japan

Th790 Modular brains: cross-species connectome analysis sheds new light on human brain evolution
Dirk-Jan Ardesch1, Lianne Scholtens1, Longchuan Lu1, Todd Preuss1, James Rilling2, Martijn van den Heuve3
1Vrije Universiteit Amsterdam, Amsterdan, Netherlands, 2Marcus Autism Center, Children’s Healthcare of Atlanta, Emory University, Atlanta, GA, United States, 3Yerkes National Primate Research Center, Emory University, Atlanta, GA, United States

Th791 Comparing lesion induced topographic simulated connectivity change maps for groups and individuals
Emil Nijhuis1, Christoph Stippich1, Matthias Weigel1, Bram Stieltjes1
1University Hospital Basel, Basel, Switzerland, 2University Hospital Zurich, Zurich, Switzerland

Th792 Robust Segmentation of Corpus Callosum in Multi-Scanner Pediatric T1-w MRI Using Transfer Learning
Gianmarco La Barbera1, Isabelle Bloch1, Gonzalo Barraza2, Catherine Adamsbaum2, Pietro Cor1
1LTCI, Telecom ParisTech, Paris, France, 2Hôpital Bicêtre (Hôpitaux Universitaires Paris-Sud), Paris, France

Th793 Reduced Commissural Fiber Tract Integrity in Mindfulness-Based Stress Reduction Experts
Jui-Wen Chang1, Yao-Chia Shih1,2, Chang-Le Chen1, Yung-Chin Hsu1,2, Tsung-Kuen Wen1, Shih-Chin Fang1,3, Wen-Yih Isaac Tseng1,2
1Institute of Medical Device and Imaging, National Taiwan University College of Medicine, Taipei, Taiwan, 2Institute of Medical Device and Imaging, National Taiwan University College of Medicine, Taipei, Taiwan, 3Institute of Biomedical Engineering, National Taiwan University, Taipei, Taiwan, 4AcroViz Technology Inc., Taipei, Taiwan, 5Department of Buddhist Studies, Dharma Drum Institute of Liberal Arts, New Taipei, Taiwan, 6Department of Neurology, Cardinal Tien Hospital Yonghe Branch, New Taipei, Taiwan, 7Molecular Imaging Center, National Taiwan University, Taipei, Taiwan

Th794 Subtracts of the arcuate fasciculus mediate conceptually driven generation and repetition of speech
Nikki Janssen1, Ardi Roelofs2, Roy Kessels3, Rogier Mars2, Christian Beckmann1
1Donders Institute for Brain, Cognition and Behaviour, Radboud University, Nijmegen, Netherlands, 2University of Oxford, Oxford, United Kingdom, 3Donders Institute, Nijmegen, Netherlands

Th795 The medial occipital longitudinal tract (MOLT): A novel pathway for visual spatial learning
Ahmad Beyhl1, Flavio Dell’Acqua1, Dominic Frythe1, Marco Catani2
1NatBrainLab, Department of Forensic and Neurodevelopmental Science, IoPPN, King’s College London, London, United Kingdom, 2NatBrainLab, Centre for Neuroimaging Sciences, IoPPN, King’s College London, London, United Kingdom, 3Department of Old Age Psychiatry, IoPPN, King’s College London, London, United Kingdom

Th796 Estimating the fraction of unmyelinated axons by combining the g-ratio model, MRI, and histology
Sebastian Papazoglou1, Mark Dos1, Siaawosh Mohammad1
1Department of Systems Neurosciences, University Medical Center Hamburg-Eppendorf, Hamburg, Germany, 2Department of Biomedical Engineering, Vanderbilt University, Nashville, TN, United States

Th797 Global and local disruptions of structural network topology in chronic stroke patients
Eckhardt Schlemm1, Bastian Cheng1, Robert Schultz1, Marlene Bönstrup1, Christian Gerloff1, Gott Thoma1
1University Medical Center Hamburg-Eppendorf, Hamburg, Germany

Th798 Deterministic and probabilistic tractography of the arcuate and superior longitudinal fasciculi
Elise Barbeau1, Maxime Descoteaux1, Michael Petrides2
1Montreal Neurological Institute, McGill University, Montreal, QC, Canada, 2Univérité de Sherbrooke, Sherbrooke, Quebec, Canada, 3McGill University, Montreal, QC, Canada

Th799 Sexual dimorphism without group differences in ASD and typically developing subjects
Giammarco La Barbera1, Isabelle Bloch1, Gonzalo Barraza2, Catherine Adamsbaum2, Pietro Cor1
1LTCI, Telecom ParisTech, Paris, France, 2Hôpital Bicêtre (Hôpitaux Universitaires Paris-Sud), Paris, France

Th800 Ageing and NODDI-weighted structural brain networks in UK Biobank
Colin Buchanan1, Stuart Ritchie2, David Liewald1, Elliot Tucker-Drob3, Ian Deary1, Mark Bastin1, Simon Cox1
1Centre for Computational Epidemiology and Cognitive Ageing, University of Edinburgh, Edinburgh, United Kingdom, 2King’s College London, London, United Kingdom, 3University of Texas, Austin, TX, United States
Th801 Longitudinal and vertical fibre systems in the human temporal lobe revealed by tractography
Hana Abouzahra1, Ahmad Beyh1, Flavio Dell’Acqua1, Marco Catani1,2
1NatBrainLab, Department of Forensic and Neurodevelopmental Science, IoPPN, London, United Kingdom, 2NatBrainLab, Centre for Neuroimaging Sciences, IoPPN, London, United Kingdom

Th802 Structural and functional brain rewiring in children born without corpus callosum: myth or reality?
Vanessa Sifredi1, Silvia Obertino2, Maria Giulia Preti1, Amanda Wood1, Richard Leventer1, Vicki Anderson1, Alessandra McLlroy3, Megan Spencer-Smith3, Dimitri Van De Ville3
1University of Geneva, Geneva, Switzerland, 2Ecole Polytechnique Federale de Lausanne, Lausanne, Switzerland, 3EPFL / University of Geneva, Geneva, Switzerland, 4Aston University, Birmingham, United Kingdom, 5Royal Children’s Hospital, Melbourne, Australia, 6Royal Children’s Hospital, Melbourne, Australia, 7Murdock Children’s Research Institute, Geneva, Switzerland, 8Monash University, Melbourne, Australia, 9Ecole Polytechnique Federale de Lausanne, Lausanne, Switzerland

Th803 Tract-based Hypervoxels
Pedro Angel Luque Laguna1, Laura Goldstein2, Steven Williams3, Marco Catani1, Flavio Dell’Acqua1,2
1NatBrainLab, Department of Forensic and Neurodevelopmental Science, IoPPN, London, United Kingdom, 2Department of Psychology, King’s College London, London, United Kingdom, 3Department of Neuroimaging, King’s College London, London, Please select an option below

Th804 Using Simulation to Estimate Damage to White Matter Tracts with High Reliability
Anouk Smits1, Martine van Zandvoort2, Laura Heezen3, Nick Ramsey4, Edward de Haan1, Mathijs Raemaekers2
1University of Amsterdam, Amsterdam, Netherlands, 2University Medical Center Utrecht, Utrecht, Netherlands, 3Utrecht University, Utrecht, Netherlands

Th805 Convergence and variability of tractography-derived structural connectomes in the HCP dataset
Jonathan Hadida1, Piergiorgio Salvani1
1University of Oxford, Oxford, United Kingdom

Th806 Prediction of Own Body Perception in Gender-Dysphoria (Transgender)
Teena Moody1, Nico Reggente2, Amirohossein Manzouri1, Jamie Feusner3, Ivanka Savic4
1UCLA, Los Angeles, CA, United States, 2UCLA, Tiny Blue Dot Foundation, Los Angeles, CA, United States, 3Department of Psychology, Stockholm University, Stockholm, Sweden, 4Karolinska Institute, Stockholm, Sweden

Th807 Belief updating about the self and others in a social context
Nora Czekalow1, Soren Kracht, Frieder Paulus1, Laura Muller-Pinzler1
1University of Lubeck, Luebeck, Germany

Th808 The effect of perspectives and delayed visual feedback on full body illusion
Itsku Ohtsuka1, Sotaro Shimojo2
1Meiji University, Kawasaki, Kanagawa, 2University of California, Berkeley, CA, USA

Th809 An fMRI investigation of the multifaceted sense of self and its link with psychosis-relevant traits
Simone Di Pino1, Mauro Gianni Perrucci2, Sjoerd Eibisch3
1G. d’Annunzio University of Chieti-Pescara, Chieti, Italy, 2Department of Neuroscience, Imaging and Clinical Sciences, G. d’Annunzio University Chieti-Pescara, Chieti, CH, 3G. d’Annunzio University, Chieti, CH

Th810 Cross sex hormones reverse cerebral signatures of gender dysphoria to the baseline of cis-controls
Lisa Kilpatrick1, Mats Holmberg2, Amirohossein Manzouri1, Ivanka Savic3
1UCLA, Los Angeles, CA, United States, 2Karolinska Institute, Stockholm, Sweden, 3Karolinkska Institute, Stockholm, Sweden

Th811 Neural signs of personal identity and friendship in the lifetime
Francisco Muñoz1,2, Miguel Rubianes1, Pilar Casado1, Laura Jimenez-Ortega2, Sabela Fondevilla2,3, David Hernandez-Gutierrez1, Jose Sanchez1, Jose Garde2, Manuel Martin-Loeches1,2
1Center for Human Evolution and Behavior - UCM - ISCIII, Madrid, Spain, 2Psychobiology & Methods for the Behavioral Sciences Department, Complutense University of Madrid, Madrid, Spain

Th812 Functional Connectivity to Self-Related Social Feedback Relates to Internalizing Symptoms in Youth
Stefanie Sequeira1, Rosalind Butterfield1, Cecile Ladouceur1, Erika Forbes1, Jennifer Silk1
1University of Pittsburgh, Pittsburgh, PA, United States

Th813 fMRI shows different processing of self-body image in transgender vs. cisgender individuals
Adnan Mojidi1,2, Sarah Burke1,2, Amirohossein Manzouri1, Teena Moody1, Jamie Feusner3, Ivanka Savic3,1
1UCLA, Los Angeles, CA, United States, 2Leiden University, Leiden, Netherlands, 3Karolinska Institute, Stockholm, Sweden

Th814 Self-reference effect in memory: the role of encoding and retrieval stages
Maria Nowicka1, Michał Wojcik1, Michał Bola1, Anna Nowicka1
1Nencki Institute of Experimental Biology, Warsaw, Poland, 2Department of Experimental Psychology, University of Oxford, Oxford, United Kingdom, 3Laboratory of Brain Imaging, Neurobiology Center, Nencki Institute of Experimental Biology, Warsaw, Poland

Th815 Modulating Effects of Body Dissatisfaction and Person Perspective in Social Comparison
Xinyu Wang1, Yong Liu2, Xiao Gao2
1Southwest University, Chongqing, China, 2Southwest University, Chongqing

Th816 Self-Referential Neural Processing is Associated with Social Anxiety Symptoms in Adolescent Girls
Rosalind Butterfield1, Stefanie Sequeira1, Cecile Ladouceur1, Jennifer Silk1
1University of Pittsburgh, Pittsburgh, PA, United States

Th817 Memory control induced neural pattern changes in the representation of positive and negative self
Yina Ma1
1State Key Laboratory of Cognitive Neuroscience and Learning, Beijing Normal University, Beijing, China

Th818 Revealing the neural trace of shame and guilt: a functional voxel-based meta-analysis
Eduardo Pappapietro1, Luca Pipietti1, Raffaele Ida Rumiroti1, Remo Job1, Alessandro Grecucci1,2, Department of Psychology and Cognitive Sciences, University of Trento, Rovereto (TN), Italy, 1Neuroscience Area, SISSA, Trieste, Italy

Th819 Loneliness and social distance shape the neural representation of social targets
Andrea Courtney1, Jamil Zuk1, Meghan Meyer1
1Stanford University, Stanford, CA, United States, 2Dartmouth College, Hanover, NH, United States

Th820 Oxytocin Amplifies the Influence of Good Intentions on Moral Judgments
Junfeng Zhang1, Chengyan Zhou1, Rongjun Yu1
1Center for Human Evolution and Behavior - UCM - ISCIII, Madrid, Spain, 2Psychobiology & Methods for the Behavioral Sciences Department, Complutense University of Madrid, Madrid, Spain, 3National University of Singapore, Singapore, Singapore
Th821 Effects of local placebo analgesia on somatosensory responses during first-hand and empathy for pain
Helena Hartmann1, Markus Rütgen1, Ronald Sladky2, Claus Lamm1
1SCAN-Unit, Department of Basic Psychological Research and Research Methods, University of Vienna, Vienna, Austria

Th822 Dynamics of occipitotemporal responses to face onset and change: an iEEG study in humans
Mariana Babo-Rebelo1, Aina Puca2, Vera Dinkelecker3, Nathalie George1
1Institut du Cerveau et de la Moelle Epinière, ICM, Inserm U1027, CNRS UMR7225, Sorbonne Université, Paris, France, 2Psychological & Brain Sciences, Indiana University, Bloomington, IN, United States, 3Rothschild Foundation, Paris, France

Th823 Differential patterns of neural activity to various types of third party encounters - an fMRI study
Lukasz Okruszek1, Jaroslav Biedrzycki2, Justyna Gula3
1Institute of Psychology, Polish Academy of Sciences, Warsaw, Poland, 2Faculty of Psychology, University of Warsaw, Warsaw, Poland, 3Faculty of Physics, University of Warsaw, Warsaw, Poland

Th824 Functional connectivity patterns of trait empathy are associated with individual characteristics
Marie-Pier B. Tremblay1, Isabelle Deschamps2, Béatrice Tousignant3, Philip Jackson4
1Université Laval, Québec, Canada, 2CERVO Brain Research Centre, Québec, Canada, 3Hôpital de l’Enfant-Jésus, Québec, Canada

Th825 The role of egocentric and allocentric perspectives in neural correlates of vicarious embarrassment
Annalina Mayer1, Sören Krach2, Laura Müller-Pinzler1, Frieder Paulus1
1University of Lübeck, Lübeck, Germany

Th826 Neural and behavioral signature of human social hierarchy
Ana Saitovitch1, Hervé Lemaître2, Elza Rechtman2, Alice Vinçon-Leite2, Raphael Colman2, David Grévent1, Violette Dangouloff-Ros2, Francis Brunelle2, Nathalie Boddart3, Monica Zilbovicus1
1Inserm U1000, Institut Imagine, Paris, France

Th827 Effects of local placebo analgesia on picture-based pain empathy
Helena Hartmann1, Markus Rütgen1, Ronald Sladky2, Claus Lamm1
1SCAN-Unit, Department of Basic Psychological Research and Research Methods, University of Vienna, Vienna, Austria

Th828* 10,000 social brains: Charting sexual dimorphism in the UK Biobank
Hannah Kiesow1, Robin Dunbar2, Joseph Kable3, Kai Vogele4, Leonard Schilbach5, Thomas Wiecki6
1Department of Psychiatry, Psychotherapy, and Psychosomatics, RWTH Aachen, Aachen, Germany, 2Department of Experimental Psychology, University of Oxford, Oxford, United Kingdom, 3Department of Psychology, University of Pennsylvania, Philadelphia, PA, United States, 4Department of Psychiatry, University Hospital Cologne, Cologne, 5Max-Planck-Institute for Neurological Research, Cologne, 6Quantopian Inc., Boston, MA, United States

Th829 Increasing the difference in decision making for oneself and for others by stimulating the rTPJ
Yining Zhang1, Xiaolin Mao1
1Department of Psychology, Renmin University of China, Beijing, China

Th830 Experience to take another’s perspective enhance the right parieto-frontal activation
Naoki Miura1, Motoaki Sugiuira1, Takayuki Nawaza1, Yuki Yamamoto2, Yukako Sasaki1, Yumi Hamamoto1, Shohei Yamazaki1, Kenan Hirano1, Makoto Takahashi1, Ryuta Kawashima1
1Tohoku Institute of Technology, Sendai, Japan, 2Tohoku University, Sendai, Japan, 3Tokyo Institute of Technology, Tokyo, Japan

Th831 How Ethnicity and Team-Membership Affect Face Processing: A Cultural Neuroscience Perspective
Zhimin Yan1, Stephanie Schmidt2, Sebastian Sauer3, Peter Kirsch1, Daniela Mier1
1Central Institute of Mental Health, Mannheim, Germany, 2University of Konstanz, Konstanz, Germany, 3SRH Hochschule Heidelberg, Heidelberg, Germany

Th832 Pain-specific and domain-general mechanisms of placebo effects on pain empathy
Markus Rütgen1, Eva-Maria Seidel1, Igor Rieckensky1, Allan Hummer2, Christian Windischberger3, Giorgia Silani1, Predrag Petrovic2, Claus Lamm1
1University of Vienna, Vienna, Austria, 2Medical University of Vienna, Vienna, Austria, 3Karolinska Institutet, Stockholm, Sweden

Th833 Individual Differences in Empathy Reflected in Brain’s Intrinsic and Functional Network Dynamics
Teodora Stoica1, Lindsay Knight1, Karisa Hunt2, Brendan Depue2
1University of Louisville, Louisville, KY, United States, 2Psychological and Brain Sciences, Louisville, KY, United States

Th834 Magnetoencephalography reveals distinct neural processes of same-race and other-race pain expression
Shihui Han1, Yuqing Zhou1
1Peking University, Beijing, China, 2Peking University, Beijing, China

Th835 Social evidence accumulation in medial frontal cortex
Marius Braunsdorf1, Nils Koning1, Suhas Vidyakumar2, Ivan Toni3, Rogier Mars4,5
1Donders Institute for Brain Cognition and Behaviour, Nijmegen, The Netherlands, 2Wellcome Centre for Integrative Neuroimaging, Oxford, United Kingdom, 3Donders Institute for Brain, Cognition and Behaviour, Radboud University Nijmegen, Nijmegen, Gelderland, 4Donders Institute for Brain, Cognition and Behaviour, Nijmegen, Gelderland, 5University of Oxford, Oxford, United Kingdom

Th836 The role of the endogenous opioid system in emotion identification
Yili Zhao1, Markus Rütgen1, Claus Lamm1
1University of Vienna, Vienna, Austria

Th837 The Power of Smiling: The Adult Brain Networks Underlying Learned Infant Temperament
Eloise Stark1, Joana Cabral1,2, Madelon Riem1,2,3, Marinus Van IJzendoorn1,2, Alan Stein1, Morten Kringlebach1
1Department of Psychiatry, University of Oxford, Oxford, United Kingdom, 2Center for Music in the Brain, Aarhus University, Aarhus, Denmark, 3Life and Health Sciences Research Institute (ICVS), University of Minho, Braga, Portugal, 4Department of Medical and Clinical Psychology, Tilburg University, Tilburg, Netherlands, 5Centre for Child and Family Studies, Leiden University, Leiden, Netherlands, 6Leiden Institute for Brain and Cognition, Leiden University, Leiden, Netherlands

Th838 Similarities and differences in the neural processing of emotions from real and virtual faces
Jan Katsry4, Aline de Borst2, Beatrice de Gelder2
1Department of Computer Science, Aalto University, Espoo, Finland, 2Department of Cognitive Neuroscience, Faculty of Psychology and Neuroscience, Maastricht University, Maastricht, Netherlands, 3Department of Computer Science, University College London, London, United Kingdom

Th839 Changes in functional network organization of the brain during the observation of social touch
Hamy Lee Masson1, Ineke Pillet2, Hans Op de Beeck3
1Brain and Cognition, KU Leuven, Leuven, Belgium

Th840 The Effect of Oxytocin on Reinforcement Learning for Self and Other
Shengchuan Peng1, George Christopoulos2, Peari Chiu1, Brooks King-Casas3
1Virginia Tech Carilion Research Institute, Roanoke, VA, United States, 2Virginia Tech, Blacksburg, VA, United States, 3Nanyang Technological University, Singapore
Th841 Neural dynamics of racial categorization of faces
Yuqing Zhou1, Shihui Han2
1Peking University, Beijing, China, 2Peking University, Beijing, China

Th842 Different mindsets influence the neural correlates associated with social rejection
Ella Weik1, Anna Hyder1, Naznin Virji-Babul1, Christine Tipper1
1University of British Columbia, Vancouver, BC, Canada

Th843* Mapping the cytoarchitectonic basis of socio-emotional and cognitive processing in the insula
Julian Quaas1, Svenja Caspers2,3,4, Francesca Ionnilli5, Hartmut Mohlberg6, Sebastian Bludau2, Katrin Amunts1,2
1C. and O. Vogt Institute for Brain Research, Medical Faculty, Heinrich Heine University Duesseldorf, Dusseldorf, Germany, 2Institute for Anatomy I, Heinrich Heine University Duesseldorf, Dusseldorf, Germany, 3Institute of Neuroscience and Medicine INM-1, Research Centre Juelsch, Juelsch, Germany, 4JARA-BRAIN, Juelsch-Aachen Research Alliance, Juelsch, Germany

Th844 How different motives interact in the human brain
Anne Saulin1, Ulrike Horn2, Martin Lotze3, Jochen Kaiser4, Grit Hein1
1University Hospital Wuerzburg, Wuerzburg, Germany, 2Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, 3University of Greifswald, Greifswald, Deutschland, 4Goethe University, Frankfurt, Germany

Th845 Working with children influences recognition of mental states of childless adults
Jan Szczypinski2, Anna Alinski1, Marek Waligora2, Maciej Kopera2, Aleksandra Krasowska3, Aneta Michalska3, Hubert Suszek2, Andrzej Jakubczyk1, Marek Wypych1, Marcin Wojnar1, Artur Marchewka1
1Laboratory of Brain Imaging, Nencki Institute of Experimental Biology, PAS, Warsaw, Poland, 2Department of Psychiatry, Medical University of Warsaw, Warsaw, Poland, 3Faculty of Psychology, University of Warsaw, Warsaw, Poland, 4Laboratory of Neurobiology of Vision, Nencki Institute of Experimental Biology, PAS, Warsaw, Poland, 5Department of Psychiatry, University of Michigan, Ann Arbor, MI, United States

Th846 Brain activation for Theory of Mind and connectivity-parcellations of the Temporo-Parietal Junction
Matthias Schurz1, Sara Fernandez-Cabello2, Martin Kronbichler1, Rogier Mars3, Jerome Sallet1
1University of Oxford, Oxford, Oxfordshire, 2University of Salzburg, Salzburg, Salzburg, 3University of Oxford, Oxford, United Kingdom

Th847 Different Neural Network of Racial in-group and out-group in Empathy for Pain
Chenyu Pang1, Yuqing Zhou1, Shihui Han1
1School of Psychological and Cognitive Sciences, Peking University, Beijing, China

Th848 I feel you (not): Empathy correlates with intersubject correlation when viewing HIV patient stories
Tobias Otto1, Martin Sona1, Vincent van de Ven1, Rob Ruiter1
1Maastricht University, Maastricht, Netherlands

Th849 Neural representation of social expectations during interpersonal decisions
Paloma Díaz-Gutierrez1, Juan E. Arco1, Sonia Alguacil2, Carlos Gonzalez-Garcia3, Maria Ruz1
1University of Granada, Granada, Spain, 2University Isabel I, Burgos, Spain, 3Ghent University, Ghent, Belgium

Th850 Implicit brain response to social and affective words in a novel socio-emotional-Stroop task
Maria Arioli1, Gianpaolo Basso2, Stefano Coppa1, Paolo Poggi1, Nicola Canessa1
1University School for Advanced Studies IUSS, Milano, Italy, 2Università degli Studi di Milano-Bicocca, Milano, Italy, 3IRCCS Istituto Centro San Giovanni di Dio Fatebenefratelli, Brescia, Italy, 4IRCCS Fondazione Salvatore Maugeri Pavia, Pavia, Italy, 5University School for Advanced Studies IUSS, Pavia, Italy

Th851 Brain Networks Associated with Neuroticism in Traumatic Brain Injury and Role of Social Network Size
Janelle Beadle1, Arianna Rigoni1, Melissa Duff1
1University of Nebraska at Omaha, Omaha, NE, United States, 2Vanderbilt School of Medicine, Nashville, TN, United States

Th852 Brain representations of social knowledge during mental simulation
Daniel Acosta-Lopez1, David Sato1
‘Bosque Center on Cognition, Brain, and Language, San Sebastian, Spain

Th853 My friend and me in space: an fMRI study
Pia Rosenthal1, Matthew Walker1, Hollie Stewart2, Xiangyu Wang1, Johnny King L Lou2, Bradley Mattan3, Kimberly Quinn4
1University of Birmingham, Birmingham, United Kingdom, 2University of Reading, Reading, United Kingdom, 3University of Delaware, DE, United States, 4DePauw University, Chicago, IL, United States

Th854 Difference in Perspective Taking Depending on Personalities and Its Application
Sole Yoo1, Ji-Won Chun1, Hae-Yoon Choi1, Soo-Won Jo1, Hae-Jeong Park1,2
1Department of Cognitive Science, Yonsei University, Seoul, Korea, Republic of, 2Department of Psychology, Seoul St. Mary’s Hospital, Seoul, Korea, Republic of, 3Center for Systems and Translational Brain Sciences, Institute of Human Complexity, Yonsei University, Seoul, Korea, Republic of, 4Department of Nuclear Medicine, Yonsei University College of Medicine, Seoul, Korea, Republic of, 5BK21 PLUS Project for Medical Science, Yonsei University College of Medicine, Seoul, Korea, Republic of

Social Interaction

Th855 Connectome-based model predicts individual differences in propensity to trust
Xiapeng Lu1, Ting Li2, Zhichao Xiao2, Ruida Zhu2, Li Wang1, Yue-Jia Luo1, Chunliang Feng2, Frank Krueger3
1Shenzhen University, Shenzhen, China, 2Beijing Normal University, Beijing, China, 3George Mason University, Fairfax, China

Th856 Betrayal or engagement: EEG time indices of cooperation at the prisoner’s dilemma
Francisco Cervantes Constantin1, Santiago Garat1, Eliana Nicolaïsens-Sobesky2, Valentina Paz2, Eduardo Martinez-Montes2, Álvaro Cabana1, Dominique Kessel2, Victoria Gradiñ1
1Universidad de la República, Montevideo, Uruguay, 2Centro de Neurociencias de Cuba, Havana, Cuba, 3Università Autonoma de Madrid, Madrid, Spain
Th857 Resting state connectivity patterns related with attachment traits
Melanni Nanni1, Ana Linda Krause2, Lejla Colic1, Viola Borchard1, Meng Li4, Bernhard Strauss5, Anna Buchheim2, Dirk Wildgruber1, Peter Fonagy5, Tobias Noèle3, Martin Walter4
1University of Tübingen, Tübingen, Germany, 2Otto von Guericke University, Magdeburg, Germany, 3Leibniz Institute for Neurobiology, Magdeburg, Germany, 4University of Tübingen, Tübingen, Germany, 5Institute of Psychosocial Medicine and Psychotherapy, Jena, Germany, 6Institute of Psychology, University of Innsbruck, Innsbruck, Austria, 7Clinic for Psychiatry and Psychotherapy, Eberhard-Karls University, Tübingen, Germany, 8Research Department of Clinical, Educational and Health Psychology, London, United Kingdom, 9Wellcome Trust Centre for Neuroimaging, London, United Kingdom

Th858 Neural basis for social influence on numerical cognition modulated by observing others
Akihito Ogawa1, Tatsuya Kameda2, Hirohito Nakatani3
1Juntendo University, Tokyo, Japan, 2The University of Tokyo, Tokyo, Japan

Th859 Brain activity during reciprocal social interaction investigated using conversational robots
Birgit Rauchbauer1, Morgane Bourhis1, Thierry Chaminade1
1Aix-Marseille Université - CNRS, Marseille Cedex 05, France

Th860 Social inclusion in borderline personality disorder and non-suicidal self-injury
Kathrin Malejko1, Rebecca Brown2, Paul Piener1, Martina Bonenberger1, Birgit Abler1, Heiko Graf2
1Ulm University, Ulm, Germany, 2Medical University of Vienna, Vienna, Austria

Th861 EEG hyperscanning during cooperative and competitive tasks
Sunao Iwaki1
1AIST, Tsukuba, Japan

Th862 The effect of visual perspective on a better understanding of difficulties in hemiplegic movements
Rui Watanebe1, Yuri Kim2, Yoshiaki Kikuchi2
1Tokyo Medical and Dental University, Tokyo, Japan, 2Kyoto University, Aichi, Japan, 3Tokyo Metropolitan University, Tokyo, Japan

Th863 Classification between NSSI adolescents and controls during a simulated social interaction
Irene Perini1, Per Gustafsson1, Robin Kämpe2, Maria Zetterqvist1, Paul Hamilton3, Markus Heilig1
1AIST, Tsukuba, Japan, 2Otto von Guericke University, Magdeburg, Germany, 3National Institute for Physiological Sciences, Okazaki, Japan

Th864 Frontoparietal network activity during social navigation choices
Lu Zhang1, Ping Chen1, Lixiang Chen1, Jie Song1, Junjun Li1, Bolin Cao1, Shuai Wang1, Qinda Huang1, Qing Qi1, Ruixiang Huang1
1Center for the Study of Applied Psychology, South China Normal University, Guangzhou, China

Th865 The role of the anterior insular cortex in joint attention-related identification with the partner
Takahiko Koike1, Hiroki Tanabe2, Nonihiro Sadato3
1National Institute for Physiological Sciences, Okazaki, Aichi, 2Graduate School of Informatics, Nagoya University, Nagoya, Japan, 3National Institute for Physiological Sciences, Okazaki, Japan

Th866 Brain-to-brain Coupling during the Emergence of Social Communication System Based on Novel Symbol
Danni Chen1, Jieqiong Liu2, Ruqian Zhang3, Lilian Bei1, Xianchun Li1
1Department of Psychology, School of Psychology and Cognitive Science, East China Normal University, Shanghai, China

Th867 Shared and Distinct Neural Correlates of Being Imitated and Imitating: A Hyper-scanning fMRI Study
Kohei Miyata1, Takahiko Koike1, Eri Nakagawa1, Tokiko Harada1, Motofumi Sumiya1, Tetsuya Yamamoto1, Nonihiro Sadato1
1National Institute for Physiological Sciences, Okazaki, Aichi

Th868 Neural networks during a shared book reading in young children: A MEG study
Chiaki Hasegawa1, Tetsuya Takahashi1, Takashi Ikeda1, Yoko Yoshimura1, Sou Nobukawa1, Daisuke Saito2, Hirokazu Kumazaki1, Ken Yoo1, Mitsuru Kikuchi1
1Kanazawa University, Kanazawa City, Japan, 2Uozu Shinkei Sanatorium, Uozu City, Japan, 3Kanazawa University, Kanazawa City, Ishikawa, 4Chiba Institute of Technology, Narashino City, Japan

Th869 It still hurts – how childhood maltreatment hampers social distance and affective touch in adulthood
Ayline Moyer1, Caroline Gieling1, Luca Heinzen-Ludwig1, Vlad Stefan1, Johannes Schultz2, Onur Gunterkun3, Benjamin Becker4, Rene Hurlemann3, Dirk Scheie2
1Institute of Medical Psychology and Psychotherapy, University of Bonn, Bonn, Germany, 2Center for Economics and Neuroscience, University of Bonn, Bonn, Germany, 3Ruhr-University Bochum, Bochum, Germany, 4University of Electronic Science & Technology, Chengdu, China, 5Department of Psychiatry and Division of Medical Psychology, University of Bonn, Bonn, Germany

Th870 Event-Related Potentials during fair and unfair social interactions in Depression/Social Anxiety
Eliana Nicolaisen1, Valentina Poz1, Gabriela Fernandez-Theoduloz1, Francisco Cervantes Constantino1, Alfonso Pérez2, Eduardo Martinez-Montes3, Dominique Kessel1, Álvaro Cabana4, Victoria Gradin1
1Center for Basic Research in Psychology, Psychology Department, Universidad de la República, Montevideo, Uruguay, 2Centro de Neurociencias de Cuba, Havana, Cuba, 3Psychology Department, Universidad Autónoma de Madrid, Spain

Th871 Neural substrates of sharing preference between interactive two persons: a hyperscanning fMRI study
Ayumi Yoshioka1, Takahiko Koike1, Eri Nakagawa1, Motofumi Sumiya1, Nonihiro Sadato2, Hiroki Tanabe1
1National Institute for Physiological Sciences, Okazaki, Aichi, 2Graduate School of Informatics, Nagoya University, Nagoya City, Japan

Th872 Distinctive neural coupling in various interaction types: A hyperscanning study of the Pattern Game
Bedro Spilková1, Daniel Shaw1, Radek Marecek2, Milan Brazdil1
1Central European Institute of Technology, Masaryk University, Brno, Czech Republic, 2Applied Neuroscience Research Group, Central European Institute of Technology, Brno, Czech Republic

Th873 Relationship between prosocial behavior and myelination level in right DLPPC
Haruto Takagishi1, Atsushi Miyazaki1, Toru Ishihara1, Hiroki Tanaka1, Kei Kanari1, Kuniyuki Nishina1, Takayuki Fujii1, Mineyoshi Takahashi1, Tetsuya Matsuda1
1Tamaagawa University Brain Science Institute, Machida, Japan

Th874 Neurofunctional evidence on the predictive nature of human interactions
Lucia Maria Sacheli1, Chiara Verga2, Elisa Arangue1, Giuseppe Bonì1, Marco Tettamanti1, Erardo Paulessi1
1University of Milano-Bicocca, Milan, Italy, 2IRCCS Orthopedic Institute Galeazzi, Milan, Italy, 3Centro Interdipartimentale Mente/Cervello, Università degli Studi di Trento, Rovereto, Italy
Th875  Processing of negatively connotated social interactions by the mirror and mentalizing brain systems
Maria Arioli1, Gianpaoolo Bassoi2, Stefano Cappa3, Paolo Poggi4, nicola conessa5
1University School for Advanced Studies IUSS, Pavia, Italy, 2Pavia, Italy, 3Università degli Studi di Milano-Bicocca, Milano, Italy, 4IRCCS Istituto Centro San Giovanni di Dio Fatebenefratelli, Brescia, Italy, 5IRCCS Fondazione Salvatore Maugeri Pavia, pavia, Italy, 6University School for Advanced Studies IUSS, Pavia, Italy

Th876  Investigating Neurophysiological Correlates of Joint Action
Heesin Abbasi1, Dominik Dötsch2, Anna Schubo3
1Philips University Marburg, Marburg, Germany

Th877  Cortical synchronization between mother and infant during breastfeeding in infants at risk for ASD
Yasuyo Minagawa1, Masahiro Hata1, Eriko Yamamoto1, Satoshi Morimoto1
1Keio University, Yokohama, Kanagawa, Japan

Th878  Two-person Neuroscience: Multiple-brain Connectivity during Compassion and Altruistic Punishment
Angela Ciaramidaro1, Jelena Topp2, Chantal Casper3, Christine Freitag4, Michael Sniatchkin5, Laura Astolfi6
1Dept. of Education and Human Sciences, University of Modena and Reggio Emilia, Reggio Emilia, Italy, 2Sapienza University of Rome, Rome, Italy, 3Dept. of Child and Adolescent Psychiatry, Psychosomatics and Psychotherapy, Goethe-University, Frankfurt/M, Germany, 4Clinic of Child and Adolescent Psychiatry and Psychotherapy, Evangelical Hospital Bethel (EvKB), Bielefeld, Germany, 5Department of Computer, Control, and Management Engineering, University of Rome Sapienza, Rome, Italy

Th879  Imaging Aggression Using a Naturalistic Output
Eva Mishori1, Tali Weiss1, Daniella Honigstein1, Lior Gorodisky1, Aharon Weissbrad1, Ethan Livne1, Noam Sobel1
1Weizmann Institute of Science, Rehovot, Israel

Th880  Brain concordance supports patient/clinician alliance, facial mirroring, and placebo analgesia
1Department of Psychology, University of Oslo, Oslo, Norway, 2Martinos Center, Charlestown, United States, 3Clinical Medicine Division, Korea Institute of Oriental Medicine, Daejeon, Korea, Republic of, 4Martinos center, Charlestown, MA, United States, 5Martinos Center, Charles town, United States, 6University of Michigan, Ann Arbor, MI, United States, 7Massachusetts General Hospital, Charlestown, MA, United States, 8Department of Anaesthesiology, Perioperative and Pain Medicine, Brigham and Women’s Hospital, Boston, MA, United States, 9Endicott College, Beverly, MA, United States, 10Program in Placebo Studies & Therapeutic Encounter, Harvard Medical School, Boston, MA, United States, 11Martinos Center for Biomedical Imaging, Charlestown, MA, United States

Th881  Neural Underpinning of Global Orientations: Ethnic Protection Relates Default Mode Network Activity
Xiaomen Hu1, Xiao Chen2, Kaiping Peng3, Sylvia Chen1, Chao-Gan Yan4
1Department of Psychology, Tsinghua University, Beijing, China, 2Institute of Psychology, Chinese Academy of Sciences, Beijing, China, 3Department of Psychology, Tsinghua University, Beijing, China, 4Department of Applied Social Sciences, The Hong Kong Polytechnic University, Hong Kong, Hong Kong

Th882  Contribution of mentalizing brain areas to successful communication
Miael Solazar1, Daniel Shaw2, Michal Miki3
1Central European Institute of Technology, Brno, Czech Republic, 2CEITEC MU, Brno, 3CEITEC Masaryk University, Brno, DE

Th883  Finding the neural correlates of collaborative improvisation using 3-person fMRI hyperscanning
Hua Xie1, Amber Howell1, Meredith Schreier2, Kristen Shea3, Mai Manchanda4, Malte Jung5, Allan Reiss6, Manish Saggar7
1Stanford University, Palo Alto, CA, United States, 2Stanford University, Stanford, CA, United States, 3Cornell University, Ithaca, NY, United States

Th884  Contribution of mentalizing brain areas to successful communication
Miael Solazar1, Daniel Shaw2, Michal Miki3
1Central European Institute of Technology, Brno, Czech Republic, 2CEITEC MU, Brno, 3CEITEC Masaryk University, Brno, DE

Th885  Contribution of mentalizing brain areas to successful communication
Miael Solazar1, Daniel Shaw2, Michal Miki3
1Central European Institute of Technology, Brno, Czech Republic, 2CEITEC MU, Brno, 3CEITEC Masaryk University, Brno, DE

To view full abstract text and ePosters, visit www.aievolution.com/hbm1901

Social Neuroscience Other

Th887  AnPS traits predict the TPJ activity when making decisions for unfair offers under acute stress
Shia Li1, Jun Tang1, Zheng Li1, Xiuyan Guo1
1East China Normal University, Shanghai, China

Th888  Perceived control drives self-related outcome valuation, emotion, and behavioral preferences
David Stolz1, Laura Muller-Pinzler1, Soren Krach1, Frieder Paulus1
1University of Lubeck, Lubeck, Germany

Th889  The Regulation of Mindfulness Training on Empathy: Behavioral and ERP Evidences
Chenbo Wang1, Zhouchuang Shan1, Xiao-Wei Dong1
1East China Normal University, Shanghai City, China

Th890  Neurofunctional characterization of early prefrontal processes endorsing interpersonal guilt
Jose Sanchez-Garcia1, Javier Espuny1, David Hernandez-Gutierrez2, Pili Casado1, Francisco Muñoz1, Laura Jimenez-Ortega1, Sabela Fondevila1, Manuel Martin-Loeches1
1Center for Human Evolution and Behaviour - UCM - ISCIII, Madrid, Spain, 2Center for Human Evolution and Behaviour UCM-ISCIII, Madrid, Spain, 3Center UCM-ISCIII for Human Evolution and Behaviour, Madrid, Spain

Th891  How contextual influence the recognition of facial expressions of pain, an fMRI study
Gioia Dirupoli1, Corrado Corradi-Dell’Acqua1
1Université de Genève, Genève, Switzerland
Th892  Linking brain networks and social networks: connectomic correlates of empathy and closeness
Osulola Ajilore1, Alex Leow1, Sylvia Morelli1
1University of Illinois at Chicago, Chicago, IL, United States

Th893  Mechanisms involved in outgroup attitudes to humanoid robot
Zhegde Wei2, Ying Chen3, Xiaochu Zhang4
2Shanghai Jiao Tong University, Shanghai, China, 3University of Science & Technology of China, Hefei, China

Th894  Differential neural activation to explicit and implicit moral processing
Dan Tao1
1Southeast University, Nanjing, Jiangsu

Th895  Latent dimensions of affect, intelligence, and health relate to local grey- and white-matter density
Nicola Toschi1, salvatore nigro2, Antonio Terracciano1, Luca Passamonti1
1Martinos Center for Biomedical Imaging (MGH) and Harvard Medical School, Boston, MA, United States, 2Magnus Graecia University, Catanzaro, Italy

Th896  Social preference associated with the GABA level in the right DLPCF but not in the left DLPCF
Takayuki Fuji1, Atsushi Miyazaki1, Muneyoshi Takahashi1, Toru Ishihara1, Hiroaki Tanaka1, Hitode Kuribayashi1, Haruto Takagishi1, Tetsuya Matsuda2
1Tamagawa University Brain Science Institute, Machida, Japan, 2Siemens Healthcare KK, Tokyo, Japan

Th897  Brain structure links trait conscientiousness to academic performance
Song Wang1, Qiyong Gong1
1Huaxi MR Research Center (HMRRRC), Department of Radiology, West China Hospital of Sichuan University, Chengdu, China

Th898  High performance athletes in combat sports: understanding the neural bases of aggression
Eduardo González-Alemán1, María Bobes León2, Jorge Armony3, Anelin Rodríguez Olivera4, Luis González Carbaillo1, Dianela Milon Ricketts5
1Cuban Neuroscience Center, La Habana, CT, United States, 2Cuban Neuroscience Center, La Habana, Cuba, 3McGill University, Douglas Hospital Research Centre, Montreal, Quebec, Canada, 4Institute of Sports Medicine, Cerro Pelado, La Habana, Cuba, 5University of Havana, La Habana, Cuba

Th899  Differential brain activation in polygamous and monogamous men during a partner-preference paradigm
Katie Brodmann1, Raya Assef1, Oliver Gruber2
1Institute of Psychiatry, Psychology and Neuroscience, King’s College London, London, United Kingdom, 2University Medical Center Goettingen, Goettingen, Germany

Th900  Decreased inhibition and conflict monitoring activations in male batters during a stroop task
Juan David Cieres1, Sofia Amour2, Agar Marín-Morales1, María Ángeles García-León3, Natalia Bueso-Izquierdo2, Natalia Hidalgo-Ruzzante3, Andrés Catena-Martínez1, Miguel Pérez-García1, Juan Verdejo-Román2,3
1University of Granada, Granada, Spain, 2Mind, Brain and Behavior Research Center (CIMCYC-UGR), Granada, Spain, 3Universidad Complutense de Madrid, Madrid, Spain, 4Laboratory of Cognitive and Computational Neuroscience (UCM-UPM), Madrid, Spain

Th901  Emotion Regulation and Intimate Partner Violence
Agar Marín-Morales2,3, Juan David Cieres1, Sofia Amour2, María Ángeles García-León3, Natalia Bueso-Izquierdo2, Natalia Hidalgo-Ruzzante3, Andrés Catena-Martínez1, Miguel Pérez-García1, Juan Verdejo-Román2,3
1University of Granada, Granada, Spain, 2Mind, Brain and Behavior Research Center (CIMCYC-UGR), Granada, Spain, 3Universidad Complutense de Madrid, Madrid, Spain, 4Laboratory of Cognitive and Computational Neuroscience (UCM-UPM), Madrid, Spain

Th902  Neural response patterns to experienced and empathic pain and links to altruism
Katherine O’Connell1, Kristin Brethe-Haurwitz1, Shawn Rhoads2, Elise Cardinale1, Kruti Vekaria1, John VanMeter1, Abigail Marsh1
1Georgetown University, Washington, DC, United States

Th903  Neural Correlates of Pragmatic and Semantic Processing: fMRI study
Amparo Márquez1, Natalia Kozhemiako1, Adonay Nunes1, Teresa Cheung1, Xiaowei Song1, Sylvain Moreno1, Sam Doesburg1
1Simon Fraser University, Vancouver, BC, 2Simon Fraser University, Surrey, British Columbia, Canada, 3Fraser Health, Surrey, Canada

Th904  Neuropsychological Signatures for Imitation-Induced Social Buffering of Stress
Constantin Pisto1, Claudiu Papasteri1, Alessandro Sofonea2, Romino Sele1, Catalin Paolulung2, Miratena Tomescu1, Adrian Tilen2, Horea Murg2, Ioana Padina1, Dragos Cirne2, Catalin Nedelco1, Irina Popa1, Mihai Mailia1, Ioana Minruta1, Andrei Barborciua1, Alexandru Bercanu1, Robert Froemk1, Ioana Carceo2
1Bucharest University, Bucharest, Bucharest, 2UNATC, Bucharest, Bucharest, 3University Spiru Haret, University Spiru Haret, Bucharest, 4SUUB, Bucharest, Bucharest, 5Bucharest University, Bucharest, 6New York University, New York, NY, United States, 7Rutgers University, Newark, NJ, United States

Th905  Does personality affect presence in VR?: Psychological and physiological evidence
Jiyeon Lee1, Hakrim Kim2, Soowon Park1, Suyeon Jo1, Hayeon Song1, Yun-Jung Lee1
1SMG-SNU Boramae Medical Center, Seoul, Korea, Republic of, 2Seoul National University College of Medicine, Seoul, Korea, Republic of, 3Sejong University, Seoul, Korea, Republic of, 4Gachon University, Seoul, Korea, Republic of, 5Department of Psychiatry and Behavioral Science, Seoul National University Boramae medical center, Seoul, Korea, Republic of
AUTHOR INDEX

Bor, Daniel – M451, T716
Bora, Samrudhagupta – Th307
Boran, Ece – W730, W753
Boraxbekk, C. J. – T408
Borchardt, Viola – T022
Borchardt, Viola – Th507, T857, W935
Borchers, Friedrich – W103, W422
Bordet, Regis – M556
Bordier, Cecile – M748
Bordin, Valentina – W580
Boré, Arnaud – T199
Borelli, Eleonora – T800
Borelli, William – T414
Borghi, Renato – Th556
Borgerse, Sophia – T423
Borgatti, Renato – Th756
Borelli, Wyllians – T414
Borelli, Eleonora – T800
Bordin, Valentina – W580
Bordier, Cecile – M748
Bordet, Regis – M556
Borchers, Friedrich – W103, W422
Borchardt, Viola – T022
Borchardt, Viola – Th507, T857, W935
Borchers, Friedrich – W103, W422
Borchardt, Viola – T022

To view full abstract text and ePosters, visit www.aievolution.com/hbm1901
AUTHOR INDEX

Camacho, Valée – Th543
Camara, Estela – W260
Camaras Pop, Sorina – W574, W615
Camberos-Angulo, Cecilia – T190, W360
Cambon, Melissa – M560
Camino-Rosas, Jose – Th150
Cameron, Donnie – W742
Camilleri, Julia – M157
Camille, Guyon – Th512
Camilleri, Luisa – T313
Camino-Pontes, Borja – M673, M674, M698
Campbell, Claire – T489
Campbell, Doug – Th157, W512
Campbell, Karen – T405
Campbell, Kayleigh – T460
Campbell, Meghan – Th575
Campos, Bruno – T883, T884, Th486
Campos-Romo, Aurelio – W227
Campbell, Megan – Th575
Cantonas, Lucia – Th456
Cannon, Tyrone – M605
Cannon, Dara – T125
Cannito, Michael – W724
Canna, Antonietta – T043, W423
Cannito, Michael – W066
Carrière, Manon – M515
Carretero-Gómez, Laura – T45, T447, Th234
Carrasco, Diego – T230
Carreras, Manuel – M390, T267, T276, Th349, Th704, W210, W675
Carrero, Raquel – M167, W624
Carretero-Gómez, Laura – T45, T447, Th699
Carrière, Mary – M515
Carrière, Manon – Th542
Carrière, Manon – M639
Capobianco, Laura – W391
Capotosto, Paolo – M192, T666, Th455
Cappa, Stefano – Th275, Th322
Cappa, Stefano – Th850, Th875, W053
Cappa, Stefano – W523
Capra, Ruggero – Th238
Carboni, Margherita – Th437, Th438, Th699, W186, Th203, W204
Carbone, Margherita – W187
Caruso, Claudia – W272
Carcea, Ioana – Th904
Cardellicchio, Pasquale – Th656
Cardin, Velia – W742
Cardinale, Elise – Th902
Cardinale, Francesco – T629
Cardi, Nicola – T625, T672
Cardon, Garret – M046
Cardon, Lauren – M339
Cardona, Gemma – T236
Carducci, Filippo – W122
Carey, Daniel – T358
Carey, Leeanne – M162, M180
Carelli, Andrea – W159
Caria, Andrea – M256, W640
Carisi, Christina – M042
Carlsson, Chad – W421
Carlsson, Heather – T695
Carlsson, Helen – M184, M200, Th056
Carlsson, Sydnée – W724
Carmeli, Cristian – T448
Carmona, Joana – M689
Carmona, Susanna – Th45, T447, Th234, Th699, W702
Carnegie-Peake, Lily – Th510
Carolan, Patrick – Th478
Caron, Bradley – T662, Th752, W623, W630
Caron, Sylvie – W274
Carrell, Antonio – W106
Carpenter, Adrian – W539
Carper, Ruth – M025, M051, M753
Carr, Valerie – T105
Carrasco, Diego – T230
Carreras, Manuel – M390, T267, T276, Th349, Th704, W210, W675
Carrero, Raquel – M167, W624
Carretero-Gómez, Laura – T45, T447, Th699
Carrière, Mary – M515
Carrière, Manon – Th542
Carrière, Manon – M639
Carrión, Ignasi – Th543
Carrión, Ricardo – M605
Carrión, Victor – M415
Carrion-Castillo, Amalia – W280
Carron, Claire – M563
Carruthers, Clarissa – T238
Carruthers, Samuel – Th118, Th334
Carter, R Colin – Th441
Caruana, Fausto – Th618
Carvalho, Joana – T868, T874
Carvalho, Joana – Th540
Carvalho Neto, Arnott – T747
Casa, Douglas – M234
CASSADO, PILAR – Th811
Casado, Pili – Th890
Casali, Advenauer – Th116
Casarotto, Silvia – Th116, Th458
Casas-Roma, Jordi – Th345
Caseras, Xavier – M093, Th127
Casey, B – T492, Th513
Cashman, Neil – M076
Casorso, Jeremy – Th528
Casper, Chantal – M528, Th487
Caspi, Yaron – Th379
Casquero-Véga, Marta – M145
Cascorro, Silvia – Th116, Th458
Cassano, Alexander – T406, Th302
Cavendish, John – W054
Cavet, Paolo – T487
Cavet, Pommy – Th509
Cayeux, Isabelle – Th695
Cazzoli, Dario – Th047
Cears, Micah – M474
Cebon, Shannon – W144
Ceccarelli, Jenny – W900
Ceccetti, Luca – M290, M387, T328, T876, Th617, W352, W466
Cecchi, Guillermo – M151, W048, W213, W243, W275
Cecchin, Diego – M667, W094
Ceccon, Pietro – Th111, W865
Cek, Marta – W495
Celeghin, Alessia – Th732
Cesaria, Benedetto Maurizio – Th462
Celius, Elisabeth – Th250
Celi, Miriam – T682
Celli, Nicola – M159
Cen, Zhehang – W176
Cendes, Fernando – Th486, W273
Cengiz, Sevim – W254, W264
Cercignani, Maria – T221, W057, W889, W905
Cerda-González, Sofia – T544
Cerri, Esther – M223
Cermak, Sharon – M033
Cercueira, João – M645
Cerri, Gabriella – Th015
Cervantes-Covarrubias, Ana María – Th543
Cervantes-Covarrubias, Ana María – Th688
Catalina, Irene – W256
Catana, Ciprian – T215, W481
Catani, Marco – Th79, T306, T343, Th772, Th795, Th801, Th803, W805
Catena-Martinez, Andrés – Th901
Catricala, Eleonora – T275, Th322
Cattai, Tiziana – W827
Cattaneo, Luigi – Th629, Th635
Cattani, Anna – Th475
Cattinelli, Isabella – M814
Cauda, Franco – M808, M840, T108, T125, Th403, Th590
Caulo, Massimo – M352
Caulo, Massimo – M441
Cauzoz, Simone – W445
Cavaliere, Carlo – W106
Cavalli, Lena – M500
Cavedo, Enrica – W055
Caverzasi, Eduardo – Th254
Cavier, Alvaro – M140
Cavieu, Man – T406, Th302
Caviness, John – W054
Cavoretto, Paolo – T487
Cayetano, Kenroy – Th509
Cayeux, Isabelle – Th695
Cazzoli, Dario – Th047
Cears, Micah – M474
Cebon, Shannon – W144
Ceccarelli, Jenny – W900
Ceccetti, Luca – M290, M387, T328, T876, Th617, W352, W466
Cecchi, Guillermo – M151, W048, W213, W243, W275
Cecchin, Diego – M667, W094
Ceccon, Pietro – Th111, W865
Ceko, Marta – W495
Celeghin, Alessia – Th732
Celesia, Benedetto Maurizio – Th462
Celius, Elisabeth – Th250
Celi, Miriam – T682
Celli, Nicola – M159
Cen, Zhehang – W176
Cendes, Fernando – Th486, W273
Cengiz, Sevim – W254, W264
Cercignani, Maria – T221, W057, W889, W905
Cerda-González, Sofia – T544
Cerri, Esther – M223
Cermak, Sharon – M033
Cercueira, João – M645
Cerri, Gabriella – Th015
<table>
<thead>
<tr>
<th>Author Name</th>
<th>Author ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheng, Hu</td>
<td>M231</td>
</tr>
<tr>
<td>Cheng, Jian</td>
<td>M005</td>
</tr>
<tr>
<td>Cheng, Joshua</td>
<td>T797</td>
</tr>
<tr>
<td>Cheng, Joshua</td>
<td>Th226</td>
</tr>
<tr>
<td>Cheng, Luqi</td>
<td>T184, W776, W568</td>
</tr>
<tr>
<td>Cheng, Po-Wei</td>
<td>Th192</td>
</tr>
<tr>
<td>Cheng, Samuel</td>
<td>T802</td>
</tr>
<tr>
<td>Cheng, Wei</td>
<td>M327, T092, T160</td>
</tr>
<tr>
<td>Cheng, WenHong</td>
<td>T003</td>
</tr>
<tr>
<td>Cheng, WenHong</td>
<td>T007</td>
</tr>
<tr>
<td>Cheng, Yan</td>
<td>W002</td>
</tr>
<tr>
<td>Chennu, Srivas</td>
<td>T263</td>
</tr>
<tr>
<td>Cheong, Chaeeong</td>
<td>M408, Th161</td>
</tr>
<tr>
<td>Cheong, E-Nae</td>
<td>T008, Th161</td>
</tr>
<tr>
<td>Cheong, Tzi-Dar</td>
<td>T102</td>
</tr>
<tr>
<td>Cheong, Pearl</td>
<td>Th147, Th276, Th840</td>
</tr>
<tr>
<td>Chipika, Rangariroyashe</td>
<td>Th416</td>
</tr>
<tr>
<td>Chiosci, Francesco</td>
<td>T335</td>
</tr>
<tr>
<td>Chi, Wang</td>
<td>M528</td>
</tr>
<tr>
<td>Choe, Zang-Hee</td>
<td>Th776</td>
</tr>
<tr>
<td>Choe, Yeong-Sim</td>
<td>Th546</td>
</tr>
<tr>
<td>Choi, Jihe</td>
<td>W011, W021, W027</td>
</tr>
<tr>
<td>Choi, JongKwan</td>
<td>Th508, T522, T525, T527</td>
</tr>
<tr>
<td>Choi, Jongwoo</td>
<td>M477</td>
</tr>
<tr>
<td>Choi, Jung-Kyun</td>
<td>T071</td>
</tr>
<tr>
<td>Choi, David</td>
<td>M261</td>
</tr>
<tr>
<td>Choi, Hae-Yoon</td>
<td>M480, T650, T854</td>
</tr>
<tr>
<td>Choi, Hansol</td>
<td>T813</td>
</tr>
<tr>
<td>Choi, Hongsun</td>
<td>W608</td>
</tr>
<tr>
<td>Choi, Zang-Hee</td>
<td>Th776</td>
</tr>
<tr>
<td>Chiba, Toshinori</td>
<td>T010</td>
</tr>
<tr>
<td>Chiarelli, Antonio</td>
<td>M831, M366, M396</td>
</tr>
<tr>
<td>Chiatti, Gianluca</td>
<td>M148, M750, T050</td>
</tr>
<tr>
<td>Chiari, Antonino</td>
<td>T526</td>
</tr>
<tr>
<td>Chiari, Anna</td>
<td>M180</td>
</tr>
<tr>
<td>Chiari, Andrea</td>
<td>T196</td>
</tr>
<tr>
<td>Chiari, Anna</td>
<td>T140</td>
</tr>
<tr>
<td>Chiari, Andrea</td>
<td>T469</td>
</tr>
<tr>
<td>Chiarini, Dante</td>
<td>T583</td>
</tr>
<tr>
<td>Chiara, Patrizia</td>
<td>W055</td>
</tr>
<tr>
<td>Chiashi, Kaffrin</td>
<td>T585</td>
</tr>
<tr>
<td>Chiasso, Anna</td>
<td>W037</td>
</tr>
<tr>
<td>Chin, Rowena</td>
<td>T621</td>
</tr>
<tr>
<td>Chiric, Marta</td>
<td>T440</td>
</tr>
<tr>
<td>Chiric, Rastko</td>
<td>M067, T074, T454, T456, Th587, Th775, W571, W603</td>
</tr>
<tr>
<td>Chirilu, Mario</td>
<td>Th120</td>
</tr>
<tr>
<td>Cirignione, Luciana</td>
<td>M159, M256</td>
</tr>
<tr>
<td>Cimeci, Dragos</td>
<td>Th904</td>
</tr>
<tr>
<td>Ciisek, Paul</td>
<td>T282, Th286</td>
</tr>
<tr>
<td>Cividini, Camilla</td>
<td>Th236, W124</td>
</tr>
<tr>
<td>Civier, Oren</td>
<td>W070</td>
</tr>
<tr>
<td>Claassen, Daniel</td>
<td>M557</td>
</tr>
<tr>
<td>Clause, Peter</td>
<td>T568, T569</td>
</tr>
<tr>
<td>Claire, Beatrice</td>
<td>M879, Th273</td>
</tr>
<tr>
<td>Clanton, Roberta</td>
<td>T079, W454</td>
</tr>
<tr>
<td>Clarens, Juan</td>
<td>Th901, Th501</td>
</tr>
<tr>
<td>Clark, Chris</td>
<td>W190</td>
</tr>
<tr>
<td>Clark, Darren</td>
<td>Th153</td>
</tr>
<tr>
<td>Clark, Heather</td>
<td>W054</td>
</tr>
<tr>
<td>Clark, Kristi</td>
<td>Th286</td>
</tr>
<tr>
<td>Clark, Scott</td>
<td>M476</td>
</tr>
<tr>
<td>Clark, Vincent</td>
<td>Th444</td>
</tr>
<tr>
<td>Clauw, Daniel</td>
<td>T770, T776</td>
</tr>
<tr>
<td>Clauw, Dinhv</td>
<td>T445</td>
</tr>
<tr>
<td>Clemente, Adam</td>
<td>W776, W794</td>
</tr>
<tr>
<td>Clemente, Lucia</td>
<td>M814</td>
</tr>
<tr>
<td>Clerici, Mario</td>
<td>T221, T226, W261, W865</td>
</tr>
<tr>
<td>Clerjon, Sylvie</td>
<td>Th273</td>
</tr>
<tr>
<td>Clifton, Nicholas</td>
<td>M070</td>
</tr>
<tr>
<td>Clifton, Rachael</td>
<td>M063</td>
</tr>
<tr>
<td>Close, Thomas</td>
<td>M827</td>
</tr>
<tr>
<td>Coalson, Victoria</td>
<td>T445</td>
</tr>
<tr>
<td>Claudio, Tiziano</td>
<td>T297, W775, W079</td>
</tr>
<tr>
<td>Coalson, Timothy</td>
<td>T554, Th676, Th696, Th698</td>
</tr>
<tr>
<td>Coan, Ana</td>
<td>Th486</td>
</tr>
<tr>
<td>Coan, James</td>
<td>Th798</td>
</tr>
<tr>
<td>Cobden, Annalisa</td>
<td>W776</td>
</tr>
<tr>
<td>Cobigo, Yann</td>
<td>M548</td>
</tr>
<tr>
<td>Coccio, Luca</td>
<td>M612, M623, M668, T076, T434</td>
</tr>
<tr>
<td>Cochlin, John</td>
<td>T668</td>
</tr>
<tr>
<td>Cockroft, John</td>
<td>Th626</td>
</tr>
<tr>
<td>Coccozza, Sirio</td>
<td>W237, W315, W780, W790</td>
</tr>
<tr>
<td>Coccuzz, Carrisa</td>
<td>M461, M510</td>
</tr>
<tr>
<td>Coe, Brian</td>
<td>W250</td>
</tr>
<tr>
<td>Coehn, Alexander</td>
<td>T609</td>
</tr>
</tbody>
</table>

---

To view full abstract text and ePosters, visit vawe.aievolution.com/hbm1901
<table>
<thead>
<tr>
<th>Author Name</th>
<th>ID(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coelho, Ana</td>
<td>T585</td>
</tr>
<tr>
<td>Coelho, Pedro</td>
<td>T031</td>
</tr>
<tr>
<td>Coffey, Amina</td>
<td>Th416</td>
</tr>
<tr>
<td>Coffey, Emily</td>
<td>T748, T891</td>
</tr>
<tr>
<td>Coghill, Robert</td>
<td>Th578</td>
</tr>
<tr>
<td>Cohen, Daniel</td>
<td>T747, T158</td>
</tr>
<tr>
<td>Cohen, Jessica</td>
<td>T488, T500, T507, T510, T641</td>
</tr>
<tr>
<td>Cohen, Laurent</td>
<td>M512</td>
</tr>
<tr>
<td>Cohen, Lorenzo</td>
<td>T785</td>
</tr>
<tr>
<td>Cohen-Kadosh, Katrin</td>
<td>M761, T012</td>
</tr>
<tr>
<td>Colasanti, Alessandro</td>
<td>W671, W905</td>
</tr>
<tr>
<td>Colcombe, Stan</td>
<td>M665</td>
</tr>
<tr>
<td>Colcombe, Stanley</td>
<td>M763, W479</td>
</tr>
<tr>
<td>Cole, David</td>
<td>Th269</td>
</tr>
<tr>
<td>Cole, Michael</td>
<td>M461, M510, M765, W844</td>
</tr>
<tr>
<td>Coleman, Kelly</td>
<td>M234</td>
</tr>
<tr>
<td>Colenbier, Nigel</td>
<td>W201</td>
</tr>
<tr>
<td>Colenbier, Niger</td>
<td>M545</td>
</tr>
<tr>
<td>Colibazzi, Tiziano</td>
<td>M151</td>
</tr>
<tr>
<td>Colic, Lejla</td>
<td>Th587, W377, W522</td>
</tr>
<tr>
<td>Colle, Livia</td>
<td>M037</td>
</tr>
<tr>
<td>Collignon, Olivier</td>
<td>Th354, Th667</td>
</tr>
<tr>
<td>Collignon, Olivier</td>
<td>T764, T768</td>
</tr>
<tr>
<td>Collins, Louis</td>
<td>W576, Th471, W750, T416</td>
</tr>
<tr>
<td>Collins, Meghan</td>
<td>Th621</td>
</tr>
<tr>
<td>Collins, Michael</td>
<td>M230, M232, M233</td>
</tr>
<tr>
<td>Collins-Jones, Liam</td>
<td>Th518</td>
</tr>
<tr>
<td>Colliot, Olivier</td>
<td>M482, M497, M505, M508, M578, M788, Th565, W290, W619</td>
</tr>
<tr>
<td>Colonnese, Stefania</td>
<td>Th667</td>
</tr>
<tr>
<td>Colome,姿马</td>
<td>T074, T075, T076, W076, W077</td>
</tr>
<tr>
<td>Colombo, Cristina</td>
<td>Th167</td>
</tr>
<tr>
<td>Colonnese, Stefania</td>
<td>W827</td>
</tr>
<tr>
<td>Coman, Daniel</td>
<td>T099</td>
</tr>
<tr>
<td>Coman, Ioana</td>
<td>M091</td>
</tr>
<tr>
<td>Comission, Etienne</td>
<td>M393, W609, W685</td>
</tr>
<tr>
<td>Commiter, Giorgio</td>
<td>M192, W457</td>
</tr>
<tr>
<td>Compere, Laurie</td>
<td>Th132</td>
</tr>
<tr>
<td>Cona, Giorgia</td>
<td>T682, Th335</td>
</tr>
<tr>
<td>Conant, Lisa</td>
<td>W179, W183, W195, W421</td>
</tr>
<tr>
<td>Concha, Luis</td>
<td>Th344, W715</td>
</tr>
<tr>
<td>Concha, Luis</td>
<td>Th184</td>
</tr>
<tr>
<td>Cong, Fengyu</td>
<td>M695, W367, W427</td>
</tr>
<tr>
<td>Congdon, Eliza</td>
<td>Th194</td>
</tr>
<tr>
<td>Congdon, Eliza</td>
<td>M744, T149, Th173</td>
</tr>
<tr>
<td>Coni, Benedetta</td>
<td>M101, W391</td>
</tr>
<tr>
<td>Conjeti, Sailesh</td>
<td>M861, W205</td>
</tr>
<tr>
<td>Conley, May</td>
<td>Th492</td>
</tr>
<tr>
<td>Connally, Emily</td>
<td>Th342</td>
</tr>
<tr>
<td>Connolly, Alan</td>
<td>M162, M180, M478, M789, W105, W610, W765, W769</td>
</tr>
<tr>
<td>Connelly, Alan</td>
<td>Th479</td>
</tr>
<tr>
<td>Connelly, Alan</td>
<td>T498, W775</td>
</tr>
<tr>
<td>Conner, Benjamin</td>
<td>T334</td>
</tr>
<tr>
<td>Conrod, Patricia</td>
<td>W045</td>
</tr>
<tr>
<td>Conrod, Patricia</td>
<td>M527</td>
</tr>
<tr>
<td>Conroy, Paul</td>
<td>T340</td>
</tr>
<tr>
<td>Consortium, F-Tract</td>
<td>Th659</td>
</tr>
<tr>
<td>Consortium, GENUS</td>
<td>W295</td>
</tr>
<tr>
<td>Consortium, IMAGEN</td>
<td>T497</td>
</tr>
<tr>
<td>Consortium, NSPN</td>
<td>M888</td>
</tr>
<tr>
<td>Constable, R. Todd</td>
<td>M505, M507, M727</td>
</tr>
<tr>
<td>Constable, Todd</td>
<td>M499, Th598</td>
</tr>
<tr>
<td>Constans, Jean-Marc</td>
<td>Th119</td>
</tr>
<tr>
<td>Constantin, Adrien</td>
<td>Th661</td>
</tr>
<tr>
<td>Content, Alain</td>
<td>Th410</td>
</tr>
<tr>
<td>Contreras-Rodríguez, Oren</td>
<td>T049</td>
</tr>
<tr>
<td>Corcoran, Cheryl</td>
<td>M151</td>
</tr>
<tr>
<td>Coren, Robert</td>
<td>Th695, Th786, Th787, Th788, W786</td>
</tr>
<tr>
<td>Cortez, Jesus M.</td>
<td>M463, M670, M673, M674, M698, M843</td>
</tr>
<tr>
<td>Cortez, Jesus M.</td>
<td>W881, Th552, Th695, Th786, Th787, Th788, W792</td>
</tr>
<tr>
<td>Corrado, Daniela</td>
<td>M869</td>
</tr>
<tr>
<td>Cornellsens, Frans</td>
<td>M749, T540, T868, T874, W371</td>
</tr>
<tr>
<td>Cornelssen, Carena</td>
<td>Th104</td>
</tr>
<tr>
<td>Cornwell, Brian</td>
<td>M354</td>
</tr>
<tr>
<td>Corouge, Isabelle</td>
<td>W131</td>
</tr>
<tr>
<td>Corouge, Isabelle</td>
<td>Th530</td>
</tr>
<tr>
<td>Corp, Daniel</td>
<td>M551</td>
</tr>
<tr>
<td>Corradi-Dell’Acqua, Corrado</td>
<td>Th891</td>
</tr>
<tr>
<td>Correia, Ana Isabel</td>
<td>M315</td>
</tr>
<tr>
<td>Correia, João</td>
<td>T322</td>
</tr>
<tr>
<td>Correia, Marta</td>
<td>Th830</td>
</tr>
<tr>
<td>Correia, Stephen</td>
<td>Th791</td>
</tr>
<tr>
<td>Corsi, Maria</td>
<td>W537</td>
</tr>
<tr>
<td>Corsi, Maria-Constance</td>
<td>Th602, Th607, W827</td>
</tr>
<tr>
<td>Cortes, Jesus M.</td>
<td>M463, M670, M673, M674, M698, M843</td>
</tr>
<tr>
<td>Cortez, Jesus M.</td>
<td>Th950</td>
</tr>
<tr>
<td>Cortez, Jesus M.</td>
<td>M272, M599</td>
</tr>
<tr>
<td>Cortez, Jesus M.</td>
<td>W808, M840, Th108, Th125, Th403, Th590</td>
</tr>
<tr>
<td>Costa, Tommaso</td>
<td>M808, M840, Th108, Th125, Th403, Th590</td>
</tr>
<tr>
<td>Costa da Costa, Jaderson</td>
<td>Th414</td>
</tr>
<tr>
<td>Costable, Teresa</td>
<td>W315</td>
</tr>
<tr>
<td>Costagli, Mauro</td>
<td>M314</td>
</tr>
<tr>
<td>Costa, Alberto</td>
<td>W319</td>
</tr>
<tr>
<td>Costa, Gabriel</td>
<td>Th389</td>
</tr>
<tr>
<td>Costa, Patricio</td>
<td>M272, M599</td>
</tr>
<tr>
<td>Costello, Laura</td>
<td>Th123</td>
</tr>
<tr>
<td>Costers, Lars</td>
<td>M560, Th217, W821</td>
</tr>
<tr>
<td>Costers, Lars</td>
<td>M560</td>
</tr>
<tr>
<td>Costigan, Alison</td>
<td>W783</td>
</tr>
<tr>
<td>Coute, Cyril</td>
<td>Th324</td>
</tr>
<tr>
<td>Costumero, Víctor</td>
<td>M337, T634, W076, W077, W101</td>
</tr>
<tr>
<td>Cote, Samantha</td>
<td>W874</td>
</tr>
<tr>
<td>Cottaar, Michiel</td>
<td>W517, W526, W792</td>
</tr>
<tr>
<td>Cottone, Carlo</td>
<td>Th425, Th455</td>
</tr>
<tr>
<td>Costinacce, Penny</td>
<td>Th238, W352</td>
</tr>
<tr>
<td>Crivello, Fabrice</td>
<td>Th390, Th202, W280</td>
</tr>
<tr>
<td>Cronk, sewage</td>
<td>Th461, Th462, Th464, Th465, Th467, Th467, Th480, Th491, Th746, W792</td>
</tr>
<tr>
<td>Cropper, Daniel</td>
<td>Th184</td>
</tr>
<tr>
<td>Cross, Nathan</td>
<td>Th735</td>
</tr>
</tbody>
</table>

To view full abstract text and ePosters, visit ww5.aievolution.com/hbm1901
de Sousa, Paulo – M083
De Stefano, Pin – W196
De Tiège, Xavier – M360, T321, T324, Th217, Th410, W821
de Tommaso, Marina – T782
De Vareilles, Hélène – T505
De Vico Fallani, Fabrizio – M578, Th602, Th607, W827
De Voogd, Linda – W300
De Vos, Ann – W055
de Vos, Frank – M432, M449, M803, W090, W095, W113
De Vos, Maarten – W816
de Vries, Linda – T505
De Winter, François-Laurent – T066
de Wit, Stella – T045
De Witt Hamer, Philip – T610
De Zubicaray, Greig – W301
de Zwart, Jacco – M894, W336, W885
de Zwarte, Sonja – W308
Dean, Derek – Th085
Dean, Philip – M166, M213, W686
Deane Langle, Anne-Marie – T338, W700
de Lange, Siemon – M104
de Lara Rubio, Alfonso – T772
de le Sayette, Vincent – T144
de Leeuw, Christiaan – Th690
De Leeuw, Laura – M432, Th457
De Marinis, Maria – M250
De Martino, Riccardo – W905
De Martino, Federico – T123, Th725, W477, W560
De Morgan, Giuseppe – M384
De Moro, Rosa – W247
De Michele, Giuseppe – M384
De Nooj, Laura – Th410, Th705
De Novi, Gianluca – M161
de Oliveira, Pedro Paulo – T226
De Paep, Audrey – W260
De Pandis, Maria Francesca – Th460, Th461, W121
De Papisia, Nicola – M250
De Raedts, Hans – Th549
De Ribaupierre, Anik – W494
de Ribaupierre, Sandrine – T631, W494
de Rooy, Mark – M432, M449, W113
de Rooy, Jesse – W262
de Ruiter, Michiel – T032, T034
De Santiago Requejo, Francisco – Th772, W806
De Santis, Silvia – T395, Th248, W008, W532
De Simon, Sara – M240
De Souza, Paulo – M083
De Stefano, Pin – W196
De Tiège, Xavier – M360, T321, T324, Th217, Th410, W821
de Tommaso, Marina – T782
De Vareilles, Hélène – T505
De Vico Fallani, Fabrizio – M578, Th602, Th607, W827
De Voogd, Linda – W300
De Vos, Ann – W055
de Vos, Frank – M432, M449, M803, W090, W095, W113
De Vos, Maarten – W816
de Vries, Linda – T505
De Winter, François-Laurent – T066
de Wit, Stella – T045
De Witt Hamer, Philip – T610
De Zubicaray, Greig – W301
de Zwart, Jacco – M894, W336, W885
de Zwarte, Sonja – W308
Dean, Derek – Th085
Dean, Philip – M166, M213, W686
Deane Langle, Anne-Marie – T338, W700
de Lange, Siemon – M104
de Lara Rubio, Alfonso – T772
de le Sayette, Vincent – T144
de Leeuw, Christiaan – Th690
De Leeuw, Laura – M432, Th457
De Marinis, Maria – M250
De Martino, Riccardo – W905
De Martino, Maria – W404
de Mendonça, Alexandre – T568, W053
De Micco, Rosa – W247
De Michele, Giuseppe – M384
De Nooj, Laura – Th410, Th705
De Novi, Gianluca – M161
de Oliveira, Pedro Paulo – T226
De Paep, Audrey – W260
De Pandis, Maria Francesca – Th460, Th461, W121
De Papisia, Nicola – M250
De Raedts, Hans – Th549
De Ribaupierre, Anik – W494
de Ribaupierre, Sandrine – T631, W494
de Rooy, Mark – M432, M449, W113
de Rooy, Jesse – W262
de Ruiter, Michiel – T032, T034
De Santiago Requejo, Francisco – Th772, W806
De Santis, Silvia – T395, Th248, W008, W532
De Simon, Sara – M240
De Sousa, Paulo – M083
De Stefano, Pin – W196
De Tiège, Xavier – M360, T321, T324, Th217, Th410, W821
de Tommaso, Marina – T782
De Vareilles, Hélène – T505
De Vico Fallani, Fabrizio – M578, Th602, Th607, W827
De Voogd, Linda – W300
De Vos, Ann – W055
de Vos, Frank – M432, M449, M803, W090, W095, W113
De Vos, Maarten – W816
de Vries, Linda – T505
De Winter, François-Laurent – T066
de Wit, Stella – T045
De Witt Hamer, Philip – T610
De Zubicaray, Greig – W301
de Zwart, Jacco – M894, W336, W885
de Zwarte, Sonja – W308
Dean, Derek – Th085
Dean, Philip – M166, M213, W686
Deane Langle, Anne-Marie – T338, W700
de Lange, Siemon – M104
de Lara Rubio, Alfonso – T772
de le Sayette, Vincent – T144
de Leeuw, Christiaan – Th690
De Leeuw, Laura – M432, Th457
De Marinis, Maria – M250
De Martino, Riccardo – W905
De Martino, Maria – W404
de Mendonça, Alexandre – T568, W053
De Micco, Rosa – W247
De Michele, Giuseppe – M384
De Nooj, Laura – Th410, Th705
De Novi, Gianluca – M161
de Oliveira, Pedro Paulo – T226
De Paep, Audrey – W260
De Pandis, Maria Francesca – Th460, Th461, W121
De Papisia, Nicola – M250
De Raedts, Hans – Th549
De Ribaupierre, Anik – W494
de Ribaupierre, Sandrine – T631, W494
de Rooy, Mark – M432, M449, W113
de Rooy, Jesse – W262
de Ruiter, Michiel – T032, T034
De Santiago Requejo, Francisco – Th772, W806
De Santis, Silvia – T395, Th248, W008, W532
De Simon, Sara – M240
De Sousa, Paulo – M083
De Stefano, Pin – W196
De Tiège, Xavier – M360, T321, T324, Th217, Th410, W821
de Tommaso, Marina – T782
De Vareilles, Hélène – T505
De Vico Fallani, Fabrizio – M578, Th602, Th607, W827
De Voogd, Linda – W300
De Vos, Ann – W055
de Vos, Frank – M432, M449, M803, W090, W095, W113
De Vos, Maarten – W816
de Vries, Linda – T505
De Winter, François-Laurent – T066
de Wit, Stella – T045
De Witt Hamer, Philip – T610
De Zubicaray, Greig – W301
de Zwart, Jacco – M894, W336, W885
de Zwarte, Sonja – W308
Dean, Derek – Th085
Dean, Philip – M166, M213, W686
Deane Langle, Anne-Marie – T338, W700
de Lange, Siemon – M104
de Lara Rubio, Alfonso – T772
de le Sayette, Vincent – T144
de Leeuw, Christiaan – Th690
De Leeuw, Laura – M432, Th457
De Marinis, Maria – M250
De Martino, Riccardo – W905
De Martino, Maria – W404
de Mendonça, Alexandre – T568, W053
De Micco, Rosa – W247
De Michele, Giuseppe – M384
De Nooj, Laura – Th410, Th705
De Novi, Gianluca – M161
de Oliveira, Pedro Paulo – T226
De Paep, Audrey – W260
De Pandis, Maria Francesca – Th460, Th461, W121
De Papisia, Nicola – M250
De Raedts, Hans – Th549
De Ribaupierre, Anik – W494
de Ribaupierre, Sandrine – T631, W494
de Rooy, Mark – M432, M449, W113
de Rooy, Jesse – W262
de Ruiter, Michiel – T032, T034
De Santiago Requejo, Francisco – Th772, W806
De Santis, Silvia – T395, Th248, W008, W532
De Simon, Sara – M240
<table>
<thead>
<tr>
<th>Name</th>
<th>ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guo, Christine</td>
<td>M301, Th251, W501</td>
</tr>
<tr>
<td>Guntupalli, J.</td>
<td>W010, W233</td>
</tr>
<tr>
<td>Gunturkın, Onur</td>
<td>Th637, Th869</td>
</tr>
<tr>
<td>Guo, Chi-chi</td>
<td>Th176</td>
</tr>
<tr>
<td>Guo, Jia</td>
<td>M032</td>
</tr>
<tr>
<td>Guo, Jiahui</td>
<td>Th877</td>
</tr>
<tr>
<td>Guo, Lei</td>
<td>Th416</td>
</tr>
<tr>
<td>Guo, Lei</td>
<td>W139</td>
</tr>
<tr>
<td>Guo, Ruxue</td>
<td>Th195</td>
</tr>
<tr>
<td>Guo, Sijia</td>
<td>W444</td>
</tr>
<tr>
<td>Guo, Xiaojuan</td>
<td>M458</td>
</tr>
<tr>
<td>Guo, Xiaoli</td>
<td>M186</td>
</tr>
<tr>
<td>Guo, Xiuyan</td>
<td>Th887</td>
</tr>
<tr>
<td>Guo, Yifei</td>
<td>Th579</td>
</tr>
<tr>
<td>Guo, Ying</td>
<td>M851</td>
</tr>
<tr>
<td>Guo, Yuanshi</td>
<td>M433</td>
</tr>
<tr>
<td>Gupta, Bhanu</td>
<td>Th058</td>
</tr>
<tr>
<td>Gupta, Geetika</td>
<td>W558</td>
</tr>
<tr>
<td>Gupta, Pradeep</td>
<td>M146</td>
</tr>
<tr>
<td>Gupta, Tina</td>
<td>Th085</td>
</tr>
<tr>
<td>Gur, Raquel</td>
<td>M143, M703, M722, T454, T456, Th494, Th722</td>
</tr>
<tr>
<td>Gur, Raquel</td>
<td>M067, T074, Th775</td>
</tr>
<tr>
<td>Gur, Ruben</td>
<td>M067, M143, M703, M722, T074, T454, T456, Th494, Th722, Th775</td>
</tr>
<tr>
<td>Gurugui, Antoni</td>
<td>W535</td>
</tr>
<tr>
<td>Gurul, Wieland</td>
<td>Th196</td>
</tr>
<tr>
<td>Gurtubay, Ane</td>
<td>Th075</td>
</tr>
<tr>
<td>Gurunandan, Kishirap</td>
<td>Th349, W679</td>
</tr>
<tr>
<td>Gurvich, Caroline</td>
<td>M365</td>
</tr>
<tr>
<td>Gurvitz, Hakan</td>
<td>W254, W264, W639</td>
</tr>
<tr>
<td>Gustafsson, Hanna</td>
<td>M369</td>
</tr>
<tr>
<td>Gustafson, Per</td>
<td>Th863</td>
</tr>
<tr>
<td>Guthrie, Martin</td>
<td>Th767</td>
</tr>
<tr>
<td>Gutierrez, Daniel</td>
<td>M531</td>
</tr>
<tr>
<td>Gutierrez, Francisco</td>
<td>Th749</td>
</tr>
<tr>
<td>Gutkin, Boris</td>
<td>Th022</td>
</tr>
<tr>
<td>Gutman, Boris</td>
<td>W273, W590</td>
</tr>
<tr>
<td>Guy, Nitzan</td>
<td>W417</td>
</tr>
<tr>
<td>Guye, Maxime</td>
<td>W524</td>
</tr>
<tr>
<td>Guye, Amadour</td>
<td>Th985</td>
</tr>
<tr>
<td>Guyot, Alexis</td>
<td>W619</td>
</tr>
<tr>
<td>Guzmán-de-Villoria, Juan</td>
<td>W256</td>
</tr>
<tr>
<td>Gvozdanovic, Geraldine</td>
<td>Th285</td>
</tr>
<tr>
<td>Gwak, Jeonghwan</td>
<td>W072</td>
</tr>
<tr>
<td>Gwilliams, Laura</td>
<td>Th318</td>
</tr>
<tr>
<td>Hae, Seunggyun</td>
<td>M867</td>
</tr>
<tr>
<td>Haak, E.</td>
<td>M111</td>
</tr>
<tr>
<td>Haak, Koen</td>
<td>M654, M696, M749, T540, T623</td>
</tr>
<tr>
<td>Haak, Koen</td>
<td>W371</td>
</tr>
<tr>
<td>Haak, Koen</td>
<td>Th266, Th751, Th766</td>
</tr>
<tr>
<td>Haerts, Rianne</td>
<td>Th440</td>
</tr>
<tr>
<td>Haas, Sarah</td>
<td>Th558</td>
</tr>
<tr>
<td>Haas, Shalaila</td>
<td>M071, M081, M123, M129</td>
</tr>
<tr>
<td>Haass, Christian</td>
<td>W129</td>
</tr>
<tr>
<td>Haast, Roy</td>
<td>T551</td>
</tr>
<tr>
<td>Habak, Claudine</td>
<td>Th830</td>
</tr>
<tr>
<td>Habeck, Christian</td>
<td>Th357, W415</td>
</tr>
<tr>
<td>Habel, Ute</td>
<td>Th346, T837</td>
</tr>
<tr>
<td>Haber, Suzanne</td>
<td>M794</td>
</tr>
<tr>
<td>Haberling, Isabelle</td>
<td>Th181</td>
</tr>
<tr>
<td>Habermeyer, Benedikt</td>
<td>M111</td>
</tr>
<tr>
<td>Habert, Marie-Odile</td>
<td>W124, W228</td>
</tr>
<tr>
<td>Habert, Marie-Odile</td>
<td>M497, W619</td>
</tr>
<tr>
<td>Habib, Michel</td>
<td>Th294</td>
</tr>
<tr>
<td>Habib, Assal</td>
<td>Th375, Th687</td>
</tr>
<tr>
<td>Habs, Maximilian</td>
<td>W516</td>
</tr>
<tr>
<td>Hachisuka, Keisuke</td>
<td>Th848</td>
</tr>
<tr>
<td>Hackett, Katherine</td>
<td>Th886</td>
</tr>
<tr>
<td>Hadar, Edad</td>
<td>W754</td>
</tr>
<tr>
<td>Haddad, Elizabeth</td>
<td>T202</td>
</tr>
<tr>
<td>Hadid, Vanessa</td>
<td>Th730</td>
</tr>
<tr>
<td>Hadida, Jonathan</td>
<td>Th805, W819</td>
</tr>
<tr>
<td>Hadzi-Pavlovic, Dusan</td>
<td>T084</td>
</tr>
<tr>
<td>Haenen, Stephan</td>
<td>W408</td>
</tr>
<tr>
<td>Haenschel, Corinna</td>
<td>M075, T826</td>
</tr>
<tr>
<td>Haering, Hans-Ulrich</td>
<td>M331</td>
</tr>
<tr>
<td>Haffey, Anthony</td>
<td>M050</td>
</tr>
<tr>
<td>Hagberg, Gisela</td>
<td>Th353</td>
</tr>
<tr>
<td>Hagen, Kristen</td>
<td>T045</td>
</tr>
<tr>
<td>Haggard, Patrick</td>
<td>T187</td>
</tr>
<tr>
<td>Hagler, Donald</td>
<td>M069, T317, Th577</td>
</tr>
<tr>
<td>Haigoer, Peter</td>
<td>M370, Th305, W845</td>
</tr>
<tr>
<td>Hahamy, Avital</td>
<td>T847, W708</td>
</tr>
<tr>
<td>Hahn, Andreas</td>
<td>M312, M488, Th138, Th186</td>
</tr>
<tr>
<td>Hahn, Peter</td>
<td>W442, W752</td>
</tr>
<tr>
<td>Hahn, Sage</td>
<td>M527</td>
</tr>
<tr>
<td>Hahn, Tim</td>
<td>M474, M485, M511, M890</td>
</tr>
<tr>
<td>Hainfern, Jonashe</td>
<td>Th206</td>
</tr>
<tr>
<td>Hajnal, Jo</td>
<td>T465, T467, T480, T491, T496, T497, Th476, W792</td>
</tr>
<tr>
<td>Hajnal, Joseph</td>
<td>Th561, T074, T170, W569</td>
</tr>
<tr>
<td>Hakuno, Yoko</td>
<td>Th885</td>
</tr>
<tr>
<td>Hakwak, Law</td>
<td>T010</td>
</tr>
<tr>
<td>Halai, Ayay</td>
<td>Th340, Th748</td>
</tr>
<tr>
<td>Halamek, Josef</td>
<td>W846</td>
</tr>
<tr>
<td>Halbersta, Hinke</td>
<td>M749, W371</td>
</tr>
<tr>
<td>Halchenko, Yaroslav</td>
<td>M864, M875, T666, W571, W575, W586, W588</td>
</tr>
<tr>
<td>Halchenko, Yaroslav</td>
<td>W604</td>
</tr>
<tr>
<td>Haley, Anat</td>
<td>Th162</td>
</tr>
<tr>
<td>Haley, Andreana</td>
<td>T398</td>
</tr>
<tr>
<td>Haley, Robert</td>
<td>Th215</td>
</tr>
<tr>
<td>Hall, Caitlin</td>
<td>M623</td>
</tr>
<tr>
<td>Hall, Emma</td>
<td>M089</td>
</tr>
<tr>
<td>Hall, Geoffrey</td>
<td>M242</td>
</tr>
<tr>
<td>Hallahan, Brian</td>
<td>M102, Th688</td>
</tr>
<tr>
<td>Hallahan, Brian</td>
<td>Th123, Th125</td>
</tr>
<tr>
<td>Hallahan, Brian</td>
<td>Th122</td>
</tr>
<tr>
<td>Hallier, Simone</td>
<td>M761</td>
</tr>
<tr>
<td>Haller, Sven</td>
<td>M417, W704</td>
</tr>
<tr>
<td>Halliett, Mark</td>
<td>M747</td>
</tr>
<tr>
<td>Halli, Patrick</td>
<td>M672</td>
</tr>
<tr>
<td>Halliday, Glenda</td>
<td>T349</td>
</tr>
<tr>
<td>Hallquist, Michael</td>
<td>Th291, Th292</td>
</tr>
<tr>
<td>Hallsmid, Manfred</td>
<td>Th346</td>
</tr>
<tr>
<td>Ham, Byung-Joo</td>
<td>M513</td>
</tr>
<tr>
<td>Ham, Tomoko</td>
<td>M297, W542</td>
</tr>
<tr>
<td>Hamada, Masashi</td>
<td>W714</td>
</tr>
<tr>
<td>Hamamci, Andac</td>
<td>T219</td>
</tr>
<tr>
<td>Hamamoto, Yumi</td>
<td>Th830</td>
</tr>
<tr>
<td>Hamamoto, Yumi</td>
<td>Th732</td>
</tr>
<tr>
<td>Haman, Ewa</td>
<td>Th145</td>
</tr>
<tr>
<td>Haman, Simon</td>
<td>M608</td>
</tr>
<tr>
<td>Hamano, Yuki</td>
<td>Th634</td>
</tr>
<tr>
<td>Hamborg, Madeline</td>
<td>Th124</td>
</tr>
<tr>
<td>Hamilton, Antonia</td>
<td>Th505, Th510, Th511</td>
</tr>
<tr>
<td>Hamilton, J. Paul</td>
<td>W333</td>
</tr>
<tr>
<td>Hamilton, Julia</td>
<td>W844</td>
</tr>
<tr>
<td>Hamilton, Paul</td>
<td>Th863</td>
</tr>
<tr>
<td>Ham, Alphonse</td>
<td>M279, M281, T005</td>
</tr>
<tr>
<td>Ham, Feng</td>
<td>W538</td>
</tr>
<tr>
<td>Han, Joan</td>
<td>W313</td>
</tr>
<tr>
<td>Han, Jung Eun</td>
<td>Th331</td>
</tr>
<tr>
<td>Han, Meizhen</td>
<td>T260</td>
</tr>
<tr>
<td>Han, Meizhen</td>
<td>Th081, Th170, W569</td>
</tr>
<tr>
<td>Han, Peng</td>
<td>M345</td>
</tr>
<tr>
<td>Han, Shao-Qiang</td>
<td>Th149</td>
</tr>
<tr>
<td>Han, Shao-Qiang</td>
<td>Th149</td>
</tr>
<tr>
<td>Han, Shao-Qiang</td>
<td>Th149</td>
</tr>
<tr>
<td>Han, Xiujie</td>
<td>M175</td>
</tr>
<tr>
<td>Han, Xu</td>
<td>W010</td>
</tr>
<tr>
<td>Han, Ying</td>
<td>M438</td>
</tr>
<tr>
<td>Han, Yu</td>
<td>M175</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Affiliation(s)</td>
</tr>
<tr>
<td>---------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Hermans, Erno</td>
<td>W486</td>
</tr>
<tr>
<td>Hermansson, Miriam</td>
<td>M697</td>
</tr>
<tr>
<td>Hermes, Dora</td>
<td>T875, Th632</td>
</tr>
<tr>
<td>Hermesdorff, Marco</td>
<td>M485, M511</td>
</tr>
<tr>
<td>Hermosillo, Robert</td>
<td>T534</td>
</tr>
<tr>
<td>Hennel, Caroline</td>
<td>T584</td>
</tr>
<tr>
<td>Hernandez-Castaño, David</td>
<td>T811, Th890</td>
</tr>
<tr>
<td>Hernandez, Mireia</td>
<td>T280</td>
</tr>
<tr>
<td>Hernandez-Castaño, Carlos</td>
<td>T566</td>
</tr>
<tr>
<td>Hernandez-Fernandez, Moises</td>
<td>W517</td>
</tr>
<tr>
<td>Hernandez-Fernandez, Moises</td>
<td>W809</td>
</tr>
<tr>
<td>Hernandez-Francisco, Jorge</td>
<td>Th190, W360</td>
</tr>
<tr>
<td>Hernandez-Garcia, Luis</td>
<td>Th089</td>
</tr>
<tr>
<td>Hernandez-Gutiérrez, David</td>
<td>T235</td>
</tr>
<tr>
<td>Hernandez-Kathleen</td>
<td>W180</td>
</tr>
<tr>
<td>Herpers, Jerome</td>
<td>M372</td>
</tr>
<tr>
<td>Herzog, Hans</td>
<td>Th476</td>
</tr>
<tr>
<td>Herrero, Jose L</td>
<td>T871</td>
</tr>
<tr>
<td>Herrling, Jim</td>
<td>M372</td>
</tr>
<tr>
<td>Herrler, Andreas</td>
<td>T083, T103</td>
</tr>
<tr>
<td>Hermann, Christoph</td>
<td>Th633</td>
</tr>
<tr>
<td>Herren, Martin</td>
<td>W138</td>
</tr>
<tr>
<td>Hermann, Nathan</td>
<td>W062</td>
</tr>
<tr>
<td>Herrenberger, Barbel</td>
<td>W761</td>
</tr>
<tr>
<td>Herrozo Ruiz, Maria del Carmen</td>
<td>Th034</td>
</tr>
<tr>
<td>Herron, Timothy</td>
<td>T252</td>
</tr>
<tr>
<td>Hertz-Pannier, Lucie</td>
<td>M276, Th477</td>
</tr>
<tr>
<td>Hervais-Adelman, Alexis</td>
<td>T325, W533</td>
</tr>
<tr>
<td>Hervé, Pierre-Yves</td>
<td>M630</td>
</tr>
<tr>
<td>Herz, Michael</td>
<td>W516</td>
</tr>
<tr>
<td>Herzog, Han</td>
<td>Th476</td>
</tr>
<tr>
<td>Herr, Michael</td>
<td>M072, T852</td>
</tr>
<tr>
<td>Heslenfeld, Dirk</td>
<td>T122</td>
</tr>
<tr>
<td>Hesseliard, Guido</td>
<td>M103, W315</td>
</tr>
<tr>
<td>Hetherington, Hoby</td>
<td>M414, M626, T535</td>
</tr>
<tr>
<td>Hettenschel, Leon</td>
<td>M861, T160</td>
</tr>
<tr>
<td>Hétha, Sébastien</td>
<td>Th271</td>
</tr>
<tr>
<td>Heuer, Katja</td>
<td>Th569</td>
</tr>
<tr>
<td>Heunis, Stephan</td>
<td>W357</td>
</tr>
<tr>
<td>Heravin, Mark</td>
<td>Th416</td>
</tr>
<tr>
<td>Hesselmüller, Guido</td>
<td>M291, T199</td>
</tr>
<tr>
<td>Heyse, Natalie</td>
<td>Th047</td>
</tr>
<tr>
<td>Hezemans, Frank</td>
<td>Th738, Th74</td>
</tr>
<tr>
<td>Hiba, Bassem</td>
<td>T121</td>
</tr>
<tr>
<td>Hickok, Alex</td>
<td>W040</td>
</tr>
<tr>
<td>Hickok, Gregory</td>
<td>T344</td>
</tr>
<tr>
<td>Hicks, Rod</td>
<td>W163</td>
</tr>
<tr>
<td>Hickson, Brennan</td>
<td>T398</td>
</tr>
<tr>
<td>Hidalgo, Patricia</td>
<td>M156</td>
</tr>
<tr>
<td>Hidalgo-Marques, Marcia</td>
<td>M291, T199</td>
</tr>
<tr>
<td>Hidalgo-Ruzzante, Natalia</td>
<td>Th900, Th901</td>
</tr>
<tr>
<td>Hebel, Hannah</td>
<td>Th660</td>
</tr>
<tr>
<td>Heike, Svea</td>
<td>T365</td>
</tr>
<tr>
<td>Hiemstra, Marlies</td>
<td>Th237</td>
</tr>
<tr>
<td>Henert, Marcus</td>
<td>Th138</td>
</tr>
<tr>
<td>Higgins, Cameron</td>
<td>M880, T618</td>
</tr>
<tr>
<td>Higgins, James</td>
<td>M197, T639</td>
</tr>
<tr>
<td>Higgins, Stephen</td>
<td>W757</td>
</tr>
<tr>
<td>Higgs, Suzanne</td>
<td>T023, Th273, Th346</td>
</tr>
<tr>
<td>Hilderley, Alicia</td>
<td>M184</td>
</tr>
<tr>
<td>Hilderley, Alicia</td>
<td>M200</td>
</tr>
<tr>
<td>Hilfiker, Peter</td>
<td>M131, W193, W683, W753, W841</td>
</tr>
<tr>
<td>Hilgen, Dominique</td>
<td>W224</td>
</tr>
<tr>
<td>Hilgetag, Claus</td>
<td>M608, T116</td>
</tr>
<tr>
<td>Hill, Ryan</td>
<td>M361, M388, W842</td>
</tr>
<tr>
<td>Hill-Bowen, Lauren</td>
<td>Th100, W037</td>
</tr>
<tr>
<td>Hillebrand, Arjan</td>
<td>M353, T610, W106</td>
</tr>
<tr>
<td>Hiellemans, Manon</td>
<td>M431, T115</td>
</tr>
<tr>
<td>Hiller, Sonja</td>
<td>M069</td>
</tr>
<tr>
<td>Hiller, Sonja</td>
<td>W645</td>
</tr>
<tr>
<td>Hils, Argye</td>
<td>M196, W144</td>
</tr>
<tr>
<td>Hillman, Elisabeth</td>
<td>W890</td>
</tr>
<tr>
<td>Hillman, Hanna</td>
<td>W643</td>
</tr>
<tr>
<td>Hilt, Pauline</td>
<td>Th654, Th656</td>
</tr>
<tr>
<td>Hittunen, Jaana</td>
<td>Th770</td>
</tr>
<tr>
<td>Himmelbach, Marc</td>
<td>Th652, Th728, Th730</td>
</tr>
<tr>
<td>Himmert, Lea</td>
<td>Th891</td>
</tr>
<tr>
<td>Hinaukt, Thomas</td>
<td>Th331, W833</td>
</tr>
<tr>
<td>Hins, Sidney</td>
<td>M122, M225</td>
</tr>
<tr>
<td>Hinds, Walter</td>
<td>Th905</td>
</tr>
<tr>
<td>Hinger, Barbara</td>
<td>Th237</td>
</tr>
<tr>
<td>Hino, Shoyoku</td>
<td>M349</td>
</tr>
<tr>
<td>Hinschaw, Stephen</td>
<td>Th296</td>
</tr>
<tr>
<td>Hinson, Emily</td>
<td>Th830, W858</td>
</tr>
<tr>
<td>Hinton, Kendra</td>
<td>M062</td>
</tr>
<tr>
<td>Hipko, Scott</td>
<td>Th156</td>
</tr>
<tr>
<td>Hipp, Joerg</td>
<td>W512, W896</td>
</tr>
<tr>
<td>Hirschi, Gisela</td>
<td>Th361</td>
</tr>
<tr>
<td>Hirano, Jinichi</td>
<td>Th172</td>
</tr>
<tr>
<td>Hirano, Kanan</td>
<td>Th338, Th830</td>
</tr>
<tr>
<td>Hirano, Kanan</td>
<td>Th732</td>
</tr>
<tr>
<td>Hirayama, Jun-ichiro</td>
<td>Th598</td>
</tr>
<tr>
<td>Hirjak, Dusan</td>
<td>M144</td>
</tr>
<tr>
<td>Hiroe, Nobuo</td>
<td>Th598</td>
</tr>
<tr>
<td>Hirotsawa, Tetsu</td>
<td>M349, T482</td>
</tr>
<tr>
<td>Hirotsawa, Toru</td>
<td>Th075</td>
</tr>
<tr>
<td>Hirotsuyu, Tomoyuki</td>
<td>M543, M799, T577, T713, T714, T715, T848, Th515, W736, W739</td>
</tr>
<tr>
<td>Hisscox, Lucy</td>
<td>W572</td>
</tr>
<tr>
<td>Hishimoto, Akiyoto</td>
<td>Th100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Affiliation(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hiyasa, Satotu</td>
<td>M543, M799, T577, T713, T714, T715, T848, Th515, W736, W789</td>
</tr>
<tr>
<td>Hjelmervik, Helene</td>
<td>M094</td>
</tr>
<tr>
<td>Hlinka, Jaroslav</td>
<td>M681, M801, W459, W843</td>
</tr>
<tr>
<td>Hlustik, Petr</td>
<td>M189, W245</td>
</tr>
<tr>
<td>Ho, Ming-Chou</td>
<td>T117</td>
</tr>
<tr>
<td>Ho, Nerissa</td>
<td>M594, M598</td>
</tr>
<tr>
<td>Ho, Pei-Shan</td>
<td>Th137</td>
</tr>
<tr>
<td>Ho, Rachelle</td>
<td>M242</td>
</tr>
<tr>
<td>Ho, Roger Chun Man</td>
<td>T058</td>
</tr>
<tr>
<td>Hoagay, David</td>
<td>T353, T426</td>
</tr>
<tr>
<td>Hobel, Samuel</td>
<td>W612</td>
</tr>
<tr>
<td>Hochmann, Jean-Remy</td>
<td>T866</td>
</tr>
<tr>
<td>Hocke, Lia</td>
<td>Th509</td>
</tr>
<tr>
<td>Hodaei, Mogan</td>
<td>T194, Th775, Th777, Th785, Th792, Th226</td>
</tr>
<tr>
<td>Hodges, Steven</td>
<td>Th166</td>
</tr>
<tr>
<td>Hodges, John</td>
<td>W063, W151</td>
</tr>
<tr>
<td>Hoehn, Mathias</td>
<td>Th082</td>
</tr>
<tr>
<td>Hoekstra, Pieter</td>
<td>T122</td>
</tr>
<tr>
<td>Hoekzema, Eiseline</td>
<td>T145, T447, W702</td>
</tr>
<tr>
<td>Hoeppli, Marie-Eve</td>
<td>Th578</td>
</tr>
<tr>
<td>Hoehsels, Mauritius</td>
<td>Th112</td>
</tr>
<tr>
<td>Hoexter, Marcelo</td>
<td>M435</td>
</tr>
<tr>
<td>Hoff, Per Kristian</td>
<td>Th314</td>
</tr>
<tr>
<td>Hoffman, william</td>
<td>W039, W040</td>
</tr>
<tr>
<td>Hoffmann, André</td>
<td>Th363</td>
</tr>
<tr>
<td>Hoffmann, Barbara</td>
<td>T377</td>
</tr>
<tr>
<td>Hoffmann, Chen</td>
<td>M239</td>
</tr>
<tr>
<td>Hoffmann, Michael</td>
<td>Th187, T844, Th868, W696</td>
</tr>
<tr>
<td>Hofier, Margit</td>
<td>T660</td>
</tr>
<tr>
<td>Hofstetter, Felix</td>
<td>W214</td>
</tr>
<tr>
<td>Hofstetter, Shir</td>
<td>Th810</td>
</tr>
<tr>
<td>Hofstetter, Shir</td>
<td>Th404</td>
</tr>
<tr>
<td>Hoge, W Scott</td>
<td>W379</td>
</tr>
<tr>
<td>Hoge, Ira</td>
<td>T580</td>
</tr>
<tr>
<td>Hohenschurz-Schmidt, David</td>
<td>W370</td>
</tr>
<tr>
<td>Hohlfeld, Reinhard</td>
<td>Th249</td>
</tr>
<tr>
<td>Hok, Pavel</td>
<td>M189, W245</td>
</tr>
<tr>
<td>Hokkanen, Laura</td>
<td>W440</td>
</tr>
<tr>
<td>Holder, Graham</td>
<td>Th822</td>
</tr>
<tr>
<td>Holdsworth, Samantha</td>
<td>M816</td>
</tr>
<tr>
<td>Holiga, Stefan</td>
<td>T620, W224</td>
</tr>
<tr>
<td>Holingue, Calliope</td>
<td>M056</td>
</tr>
<tr>
<td>Holla, Bharath</td>
<td>Th142</td>
</tr>
<tr>
<td>Hollander, Matthew</td>
<td>Th187</td>
</tr>
<tr>
<td>Hollarek, Miriam</td>
<td>M688</td>
</tr>
<tr>
<td>Holma, Milla</td>
<td>M220</td>
</tr>
<tr>
<td>Author</td>
<td>Conference</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td>Kononenova, Yelisaveta</td>
<td></td>
</tr>
<tr>
<td>Konopkina, Ksenia</td>
<td></td>
</tr>
<tr>
<td>Konrad, Boris</td>
<td></td>
</tr>
<tr>
<td>Konrad, Kerstin</td>
<td></td>
</tr>
<tr>
<td>Kontos, Anthony</td>
<td></td>
</tr>
<tr>
<td>Konušik, Ender</td>
<td></td>
</tr>
<tr>
<td>Koopman, Anne</td>
<td></td>
</tr>
<tr>
<td>Koops, Sanne</td>
<td></td>
</tr>
<tr>
<td>Koopel, Michael</td>
<td></td>
</tr>
<tr>
<td>Kopaera, Maciej</td>
<td></td>
</tr>
<tr>
<td>Koponen, Lari</td>
<td></td>
</tr>
<tr>
<td>Kopp, Bruno</td>
<td></td>
</tr>
<tr>
<td>Kopp, Ute</td>
<td></td>
</tr>
<tr>
<td>Koppel, Vincent</td>
<td></td>
</tr>
<tr>
<td>Koppelmans, Vincent</td>
<td></td>
</tr>
<tr>
<td>Koppers, Simon</td>
<td></td>
</tr>
<tr>
<td>Kor, Sebastian</td>
<td></td>
</tr>
<tr>
<td>Korchmaros, Annachiara</td>
<td></td>
</tr>
<tr>
<td>Koczurczk, Amos</td>
<td></td>
</tr>
<tr>
<td>Korgaonkar, Mayuresh</td>
<td></td>
</tr>
<tr>
<td>Korhonen, Veske</td>
<td></td>
</tr>
<tr>
<td>Kornak, John</td>
<td></td>
</tr>
<tr>
<td>Kornojvic, Christine</td>
<td></td>
</tr>
<tr>
<td>Kornigut, Lawrence</td>
<td></td>
</tr>
<tr>
<td>Kortum, Viktoria</td>
<td></td>
</tr>
<tr>
<td>Kosaka, Hirotaka</td>
<td></td>
</tr>
<tr>
<td>Koschatz, Karl</td>
<td></td>
</tr>
<tr>
<td>Kosciessa, Julian</td>
<td></td>
</tr>
<tr>
<td>Kösem, Anne</td>
<td></td>
</tr>
<tr>
<td>Koshimori, Yuko</td>
<td></td>
</tr>
<tr>
<td>Koskinen, Sanna</td>
<td></td>
</tr>
<tr>
<td>Koskio, Majja</td>
<td></td>
</tr>
<tr>
<td>Kosmisid, Ioannis</td>
<td></td>
</tr>
<tr>
<td>Kosson, David</td>
<td></td>
</tr>
<tr>
<td>Kossorotoff, Manoeilie</td>
<td></td>
</tr>
<tr>
<td>Kossowsky, Bartosz</td>
<td></td>
</tr>
<tr>
<td>Kossowsky, Bartosz</td>
<td></td>
</tr>
<tr>
<td>Kostic, Vladimir</td>
<td></td>
</tr>
<tr>
<td>Kostejn, Antoni</td>
<td></td>
</tr>
<tr>
<td>Kostovic, Ivica</td>
<td></td>
</tr>
<tr>
<td>Kosugi, Akito</td>
<td></td>
</tr>
<tr>
<td>Kotani, Yasunori</td>
<td></td>
</tr>
<tr>
<td>Kothchoubev, Boris</td>
<td></td>
</tr>
<tr>
<td>Kothapalli, Deydeep</td>
<td></td>
</tr>
<tr>
<td>Kotz, Sonja</td>
<td></td>
</tr>
<tr>
<td>Koudeleka, Vlastmil</td>
<td></td>
</tr>
<tr>
<td>Kourtz, Zoe</td>
<td></td>
</tr>
<tr>
<td>Koush, Yury</td>
<td></td>
</tr>
<tr>
<td>Koush, Yury</td>
<td></td>
</tr>
<tr>
<td>Kousiss, Nikitas</td>
<td></td>
</tr>
<tr>
<td>Koutsouleris, Nikolaos</td>
<td></td>
</tr>
<tr>
<td>Koutouli, Stella</td>
<td></td>
</tr>
<tr>
<td>Koval, Igor</td>
<td></td>
</tr>
<tr>
<td>Kovalfova, Anezka</td>
<td></td>
</tr>
<tr>
<td>Kovarski, Klara</td>
<td></td>
</tr>
<tr>
<td>Kovas, Yulia</td>
<td></td>
</tr>
<tr>
<td>Kowlczak, Magdalena</td>
<td></td>
</tr>
<tr>
<td>Kowlczak, Mateusz</td>
<td></td>
</tr>
<tr>
<td>Kowlczak, Natalia</td>
<td></td>
</tr>
<tr>
<td>Kowlczak, Oliva</td>
<td></td>
</tr>
<tr>
<td>Kayama, Shuji</td>
<td></td>
</tr>
<tr>
<td>Kaye, Sanmi</td>
<td></td>
</tr>
<tr>
<td>Kozhemiak, Natalia</td>
<td></td>
</tr>
<tr>
<td>Kozzemiak, Natalia</td>
<td></td>
</tr>
<tr>
<td>Kozlova, Ksenia</td>
<td></td>
</tr>
<tr>
<td>Krabbendam, Lydia</td>
<td></td>
</tr>
<tr>
<td>Krach, Sören</td>
<td></td>
</tr>
<tr>
<td>Kraemer, Bernd</td>
<td></td>
</tr>
<tr>
<td>Krafnick, Anthony</td>
<td></td>
</tr>
<tr>
<td>Krafnick, Anthony</td>
<td></td>
</tr>
<tr>
<td>Kroegel, Philip</td>
<td></td>
</tr>
<tr>
<td>Krakuljac, Nina</td>
<td></td>
</tr>
<tr>
<td>Krajočivicova, Lenka</td>
<td></td>
</tr>
<tr>
<td>Král, Tammí</td>
<td></td>
</tr>
<tr>
<td>Králíč, Alešej</td>
<td></td>
</tr>
<tr>
<td>Králíč, Alešej</td>
<td></td>
</tr>
<tr>
<td>Kramer, Joel</td>
<td></td>
</tr>
<tr>
<td>Kramer, Julia</td>
<td></td>
</tr>
<tr>
<td>Kramer, Thomas</td>
<td></td>
</tr>
<tr>
<td>Kramer, Timo</td>
<td></td>
</tr>
<tr>
<td>Krámer, Ulrike</td>
<td></td>
</tr>
<tr>
<td>Kranz, Georg</td>
<td></td>
</tr>
<tr>
<td>Krasowska, Aleksandra</td>
<td></td>
</tr>
<tr>
<td>Krause, Anna Linda</td>
<td></td>
</tr>
<tr>
<td>Krause, Florian</td>
<td></td>
</tr>
<tr>
<td>Krause, Amanda</td>
<td></td>
</tr>
<tr>
<td>Krause, Roland</td>
<td></td>
</tr>
<tr>
<td>Krebs, Ruth</td>
<td></td>
</tr>
<tr>
<td>Kreilkamp, Barbara</td>
<td></td>
</tr>
<tr>
<td>Kreisel, William</td>
<td></td>
</tr>
<tr>
<td>Kreitewolf, Jens</td>
<td></td>
</tr>
<tr>
<td>Kremen, William</td>
<td></td>
</tr>
<tr>
<td>Kremer, Thomas</td>
<td></td>
</tr>
<tr>
<td>Krentz, Martin</td>
<td></td>
</tr>
<tr>
<td>Krenz, Valentina</td>
<td></td>
</tr>
<tr>
<td>Kress, Shalyuin</td>
<td></td>
</tr>
<tr>
<td>Kressig, Reto</td>
<td></td>
</tr>
<tr>
<td>Krieger, Orran</td>
<td></td>
</tr>
</tbody>
</table>

**Kriegeskorte, Nikolaus** | | M299, M793 | |
**Kriegstein, Alan** | | Th554 | |
**Krimmel, Samuel** | | Th247 | |
**Kringelbach, Morten** | | M638, M645, M704, T078, Th287, Th387, W853 | |
**Kringelbach, Morten** | | M663 | |
**Krnisky-Mchale, Sharon** | | W128 | |
**Krishnamurthy, Lisa** | | M204, T427 | |
**Krisnan, Anjali** | | M826, T802 | |
**Krisnan, Michelle** | | W279 | |
**Krisnan, Saloni** | | T334, T345 | |
**Kroemer, Nils** | | M072, Th177, Th283, W522 | |
**Krohn, Stephan** | | Th208 | |
**Krohn, Rune** | | M904 | |
**Kroll, Tina** | | Th855 | |
**Kronichler, Lisa** | | W482 | |
**Kronichler, Martin** | | M479, M616, W482 | |
**Kronichler, Martin** | | Th846 | |
**Kroneberg, Daniel** | | Th005 | |
**Kroner, Alexander** | | M254 | |
**Kronfeld-Duenias, Vered** | | Th336 | |
**Kruget, Britta** | | Th336 | |
**Krug, Alex** | | M010, W292 | |
**Krug, Axel** | | M273, Th137, T139 | |
**Krug, Kristine** | | Th763 | |
**Krumm, Sabine** | | W137 | |
**Kruppa, Jana** | | Th57 | |
**Kruschwitz, Johann** | | M276, M751 | |
**Krust, Florent** | | Th661 | |
**Kram, Dominik** | | Th284 | |
**Kubicki, Antoni** | | M744, T149, Th173, Th197 | |
**Kubicki, Antoni** | | Th194 | |
**Kubicki, Marek** | | T201, T203, T442, Th721 | |
**Kubicki, Marek** | | M091 | |
**Kublik, Ewa** | | Th320, Th326 | |
**Kuboshiba, Ryo** | | T463 | |
**Kuceyeski, Amy** | | M416 | |
**Kuceyeski, Amy** | | Th666, W815 | |
**Kuchensky, Gregory** | | M683 | |
**Kudoh, Suguru** | | Th415 | |
**Kudra, Aleksandra** | | T168 | |
**Kuehnn, Esther** | | Th380 | |
**Kuek, Nicole M. Y.** | | M439, T892 | |
**Kuemmerer, Dorothee** | | M205 | |
**Kuhr, Patrick** | | Th240 | |
**Kuhlmann, Levin** | | W894 | |
**Kühn, Andrea** | | Th001, Th004, Th005 | |
**Kühn, Matysch** | | Th114 | |
**Kühn, Simone** | | M596, M693 | |
AUTHOR INDEX

Marti, Daniel – T765, T350, T605, Th414, Th417, Th418, Th622, W515, W840, W848
Manuel, Jorge – W461
Manuello, Jordi – M808, M840, T108, T125, Th403, Th408
Manza, Peter – W331
Manzano, Jose Pedro – T165
Manzoni, Valerio – W160
Manzoni, Amirhossein – Th806, Th810, Th813
Marin, Antonio – M702
Marin, Roque – Th187, W515, W840, W848
Marino, Marco – Th754, W688
Marioni, Riccardo – Th170
Maris, Eric – M857
Markello, Ross – M076, M841, W236
Markett, Sebastian – M568
Markin, Yevtush – M035, M636
Markiewicz, Christopher – Th587, W571, W621
Marko, Martha – Th206
Markovic, Vladana – W266, W268
Markow, Zachary – Th504
Markus, Marcello – T109
Marni, Zoltan – Th786
Margulies, Daniel – Th339
Margulies, Daniel – M594, M598, T007, W508
Margiotoudi, Konstantina – T281
Mares, Ines – Th443
Marenco, Stefano – Th700
Marek, Scott – Th574
Marek, Scott – W515, Th209
Marek, Scott – T765
Marek, Scott – W508
Mareckova, Klara – T004
Mareck, Scott – M570, Th198
Mareck, Scott – M725
Marko, Martha – Th206
Marquard, Andre – M370, M489, M848
Marqueland, Justus – W192
Marquez, Amparo – Th903
Marquez, Jorge – M825, M845
Marquand, Andre – M654, M696, M781, M884, T467
Marquetand, Justus – W192
Marsh, Abigail – Th902
Marsh, Laura – W665
Martell, Jonathan – T728
Martens, Louise – W522
Marti, Charlotte – M515, M639, T706
Martin, Aisling – Th434
Martin, Amber – W791
Martin, Andrea – W745
Martin, Benoit – Th565
Martin, Chris – T878
Martin, Elizabeth – T023
Martin, Jason – M258, M260
Martin, Markus – M205
Martin, Marta – M126
Martin, Mike – T407
Martín, Aimara – Th209
Martín, Carlos – Th625, T672, W515
Martín, Chau – Th570
Martin, Daniel – W508
Martin, Diego – T362, T852
Martin, Elise – Th418
Martin, Francesc – W531
Martin, Fiona – Th125
Maruyama, Toru – T010
Marveld, Cherie – M503, Th366
Maxen, Michael – W017, W197
Maxen, Michael – T022, W596
May, Alison – Th144
Marzban, Eman – M422
Marzetti, Laura – M352, M359, M362, M460, M791, M793
Marzetti, Laura – M831, T664, W838
Marzi, Carlo – T625, T672, Th516
Marzi, Chiara – M570, Th810
Mas-Herrerro, Ernest – Th371
Mascalchi, Mario – Th715
Masci, Daniele – T043
Mascarenhas, Antonio – Th119
Mascaro, Lorella – T112
Maseude, Joseph – M230, M232, M233, M706, T582
Masellis, Mario – W191
Masellis, Mario – Th539, W053
Mashima, Kyoko – W158
Masiero, Stefano – Th442
Mason, Graeme – T909
Mason, Luke – Th518, Th521
Masoudi, Maryam – M048
Massaccesi, Claudia – M308, M332
Massar, Stijn – M266
Massimi, Marcello – M195, Th116, Th475
Masson, Rémy – T652, T654
Masson, Remy – T402
Mast, Fred – T741
Matsuda, Yutaka – M023
Matsumoto, Yukiko – M085
Matsumoto, Kenji – M555, Th747
Matsumoto, Koichi – M028, T007, W832
Matsuda, Tetsuya – Th749
Mattinger, Justin – W192
Mattheisen, Tatjana – W596
Matias, Goncalves – T166, W571
Matheisen, Tatjana – W596
Mathis, Jedidiah – M014
Mathis, Jean-Luc – W063
Mathis, Thomas – Th749
Mathis, Christian – W218, W241
Mathis, Christopher – Th546, Th749
Matheisen, Tatjana – W596
Mathis, Jean-Luc – W063
Mathis, Thomas – Th749
Mathis, Christian – W218, W241
Mathis, Christopher – T349, W489
Mathis, Jean-Luc – W063
Mathis, Thomas – Th749
Mathis, Christian – W218, W241
Mathis, Christopher – T349, W489
Mathis, Jean-Luc – W063
Mathis, Thomas – Th749
Mathis, Christian – W218, W241
Mathis, Christopher – T349, W489
Mathis, Jean-Luc – W063
Mathis, Thomas – Th749
Mathis, Christian – W218, W241
Mathis, Christopher – T349, W489
Mathis, Jean-Luc – W063
Mathis, Thomas – Th749
Mathis, Christian – W218, W241
Mathis, Christopher – T349, W489
Mathis, Jean-Luc – W063
Mathis, Thomas – Th749
Mathis, Christian – W218, W241
Mathis, Christopher – T349, W489
<table>
<thead>
<tr>
<th>Author</th>
<th>Index(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>McCloskey, Michael</td>
<td>T300</td>
</tr>
<tr>
<td>McCloskey, Mike</td>
<td>T029</td>
</tr>
<tr>
<td>McClore, Patrick</td>
<td>T567</td>
</tr>
<tr>
<td>McColgan, Peter</td>
<td>Th673, Th708, W232</td>
</tr>
<tr>
<td>McCre, Michael</td>
<td>M230, M232, M233</td>
</tr>
<tr>
<td>McCreedy, Holly</td>
<td>W039, W040</td>
</tr>
<tr>
<td>Mattioni, Stefania</td>
<td>T758, T764, T768, W689</td>
</tr>
<tr>
<td>Mattout, Jeremie</td>
<td>T553</td>
</tr>
<tr>
<td>Mattout, Jeremy</td>
<td>T545</td>
</tr>
<tr>
<td>Matur, Zelina</td>
<td>W718</td>
</tr>
<tr>
<td>Matuszewski, Jacek</td>
<td>T223</td>
</tr>
<tr>
<td>Mazibuko, Ndaba</td>
<td>W871, W902</td>
</tr>
<tr>
<td>Mayhew, Stephen</td>
<td>T665, W884, W887</td>
</tr>
<tr>
<td>May, Anne</td>
<td>T034</td>
</tr>
<tr>
<td>Mayberg, Helen</td>
<td>Th007, Th91</td>
</tr>
<tr>
<td>Mayell, Ahmad</td>
<td>Th54, Th446, Th471</td>
</tr>
<tr>
<td>Mayer, Andrew</td>
<td>M084, W518</td>
</tr>
<tr>
<td>Mayer, AnnaLisa</td>
<td>Th825</td>
</tr>
<tr>
<td>Mayer, Carola</td>
<td>T224</td>
</tr>
<tr>
<td>Mayes, Andrew</td>
<td>W665</td>
</tr>
<tr>
<td>Mayhew, Stephen</td>
<td>T665, W884, W887</td>
</tr>
<tr>
<td>Mazibuko, Ndaba</td>
<td>W871, W902</td>
</tr>
<tr>
<td>Maziero, Danilo</td>
<td>M795</td>
</tr>
<tr>
<td>Maziero, Stephanie</td>
<td>M429</td>
</tr>
<tr>
<td>Mazlioum, Reza</td>
<td>W992</td>
</tr>
<tr>
<td>Mazoyer, Bernard</td>
<td>M630, T390, T432, Th202, W280</td>
</tr>
<tr>
<td>Mazzetti, Cecilia</td>
<td>M375</td>
</tr>
<tr>
<td>Mazzi, Chiara</td>
<td>Th516</td>
</tr>
<tr>
<td>McCloskey, Michael</td>
<td>T300</td>
</tr>
<tr>
<td>McCloskey, Mike</td>
<td>T029</td>
</tr>
<tr>
<td>McClore, Patrick</td>
<td>T567</td>
</tr>
<tr>
<td>McColgan, Peter</td>
<td>Th673, Th708, W232</td>
</tr>
<tr>
<td>McCre, Michael</td>
<td>M230, M232, M233</td>
</tr>
<tr>
<td>McCreedy, Holly</td>
<td>W039, W040</td>
</tr>
<tr>
<td>Mattioni, Stefania</td>
<td>T758, T764, T768, W689</td>
</tr>
<tr>
<td>Mattout, Jeremie</td>
<td>T553</td>
</tr>
<tr>
<td>Mattout, Jeremy</td>
<td>T545</td>
</tr>
<tr>
<td>Matur, Zelina</td>
<td>W718</td>
</tr>
<tr>
<td>Matuszewski, Jacek</td>
<td>T223</td>
</tr>
<tr>
<td>Mazibuko, Ndaba</td>
<td>W871, W902</td>
</tr>
<tr>
<td>Mayhew, Stephen</td>
<td>T665, W884, W887</td>
</tr>
<tr>
<td>May, Anne</td>
<td>T034</td>
</tr>
<tr>
<td>Mayberg, Helen</td>
<td>Th007, Th91</td>
</tr>
<tr>
<td>Mayell, Ahmad</td>
<td>Th54, Th446, Th471</td>
</tr>
<tr>
<td>Mayer, Andrew</td>
<td>M084, W518</td>
</tr>
<tr>
<td>Mayer, AnnaLisa</td>
<td>Th825</td>
</tr>
<tr>
<td>Mayer, Carola</td>
<td>T224</td>
</tr>
<tr>
<td>Mayes, Andrew</td>
<td>W665</td>
</tr>
<tr>
<td>Mayhew, Stephen</td>
<td>T665, W884, W887</td>
</tr>
<tr>
<td>Mazibuko, Ndaba</td>
<td>W871, W902</td>
</tr>
<tr>
<td>Maziero, Danilo</td>
<td>M795</td>
</tr>
<tr>
<td>Maziero, Stephanie</td>
<td>M429</td>
</tr>
<tr>
<td>Mazlioum, Reza</td>
<td>W992</td>
</tr>
<tr>
<td>Mazoyer, Bernard</td>
<td>M630, T390, T432, Th202, W280</td>
</tr>
<tr>
<td>Mazzetti, Cecilia</td>
<td>M375</td>
</tr>
<tr>
<td>Mazzi, Chiara</td>
<td>Th516</td>
</tr>
<tr>
<td>McCloskey, Michael</td>
<td>T300</td>
</tr>
<tr>
<td>McCloskey, Mike</td>
<td>T029</td>
</tr>
<tr>
<td>McClore, Patrick</td>
<td>T567</td>
</tr>
<tr>
<td>McColgan, Peter</td>
<td>Th673, Th708, W232</td>
</tr>
<tr>
<td>McCre, Michael</td>
<td>M230, M232, M233</td>
</tr>
<tr>
<td>McCreedy, Holly</td>
<td>W039, W040</td>
</tr>
<tr>
<td>Mattioni, Stefania</td>
<td>T758, T764, T768, W689</td>
</tr>
<tr>
<td>Mattout, Jeremie</td>
<td>T553</td>
</tr>
<tr>
<td>Mattout, Jeremy</td>
<td>T545</td>
</tr>
<tr>
<td>Matur, Zelina</td>
<td>W718</td>
</tr>
<tr>
<td>Name</td>
<td>Page Numbers</td>
</tr>
<tr>
<td>-----------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Menon, Vinod</td>
<td>M003, M030, M059, M415, T217, T311, Th296, W018</td>
</tr>
<tr>
<td>Mensch, Arthur</td>
<td>W570</td>
</tr>
<tr>
<td>Mensing, Ashley</td>
<td>Th357</td>
</tr>
<tr>
<td>Menzel, Miriam</td>
<td>Th549</td>
</tr>
<tr>
<td>Meola, Giovanni</td>
<td>Th280</td>
</tr>
<tr>
<td>Merabet, Lotfi</td>
<td>T843</td>
</tr>
<tr>
<td>Meram, Thomas</td>
<td>Th143, Th156</td>
</tr>
<tr>
<td>Merchant, Hugo</td>
<td>W715</td>
</tr>
<tr>
<td>Merchant, Junaid</td>
<td>M063</td>
</tr>
<tr>
<td>Mercier, Corentin</td>
<td>T212</td>
</tr>
<tr>
<td>Mercuri, Pasqua</td>
<td>Th425</td>
</tr>
<tr>
<td>Merhof, Dorothea</td>
<td>Th487</td>
</tr>
<tr>
<td>Mériaux, Sebastian</td>
<td>M645</td>
</tr>
<tr>
<td>Méritall, Susan</td>
<td>T359, T375, T407, T410</td>
</tr>
<tr>
<td>Merissari, Harri</td>
<td>T576</td>
</tr>
<tr>
<td>Merla, Angelico</td>
<td>M831, Th510</td>
</tr>
<tr>
<td>Merrill, Brian</td>
<td>M106</td>
</tr>
<tr>
<td>Mersch, Dieter</td>
<td>M313</td>
</tr>
<tr>
<td>Mertins, Alfred</td>
<td>Th516</td>
</tr>
<tr>
<td>Mervis, Carolyn</td>
<td>T124</td>
</tr>
<tr>
<td>Metzker, Rudi</td>
<td>W115</td>
</tr>
<tr>
<td>Metzak, Paul</td>
<td>T067</td>
</tr>
<tr>
<td>Metsäranta, Marjo</td>
<td>W724</td>
</tr>
<tr>
<td>Metoki, Athanasia</td>
<td>M613</td>
</tr>
<tr>
<td>Messina, Irene</td>
<td>M268</td>
</tr>
<tr>
<td>Messina, Irene</td>
<td>M139</td>
</tr>
<tr>
<td>Metoki, Athanasia</td>
<td>M613</td>
</tr>
<tr>
<td>Metzak, Peter</td>
<td>T067</td>
</tr>
<tr>
<td>Metzger, Brian</td>
<td>Th516</td>
</tr>
<tr>
<td>Metzker, Helena</td>
<td>T011</td>
</tr>
<tr>
<td>Metzler-Baddeley, Claudia</td>
<td>W058</td>
</tr>
<tr>
<td>Meuleman, Ben</td>
<td>M264</td>
</tr>
<tr>
<td>Meuli, Reitu</td>
<td>M171</td>
</tr>
<tr>
<td>Meurier, David</td>
<td>M052, M359, M380, M393, T797, W609</td>
</tr>
<tr>
<td>Meuth, Sven</td>
<td>Th224, Th230</td>
</tr>
<tr>
<td>Mevel, Katell</td>
<td>Th305</td>
</tr>
<tr>
<td>Meyer, Antje</td>
<td>W745</td>
</tr>
<tr>
<td>Meyer, Benjamin</td>
<td>M282, T011</td>
</tr>
<tr>
<td>Meyer, Francisco</td>
<td>M062</td>
</tr>
<tr>
<td>Meyer, Francois</td>
<td>W115</td>
</tr>
<tr>
<td>Meyer, Georg</td>
<td>Th73</td>
</tr>
<tr>
<td>Meyer, Kyle</td>
<td>W588, W604</td>
</tr>
<tr>
<td>Meyer, Martin</td>
<td>T896</td>
</tr>
<tr>
<td>Meyer, Meghan</td>
<td>Th819</td>
</tr>
<tr>
<td>Meyer, Nathalie</td>
<td>T150</td>
</tr>
<tr>
<td>Meyer, Sofie</td>
<td>W832</td>
</tr>
<tr>
<td>Meyer zu Schwabedissen, Georg</td>
<td>W038</td>
</tr>
<tr>
<td>Meyer-Lindenberg, Andreas</td>
<td>M144, M680, T155, T445</td>
</tr>
<tr>
<td>Meyer-Lindenberg, Andreas</td>
<td>M144, M680, T155, T445</td>
</tr>
<tr>
<td>Meyer-Lindenberg, Andreas</td>
<td>M144, M680, T155, T445</td>
</tr>
<tr>
<td>Miki, Michal</td>
<td>Th883, W917, W490, W491, W600</td>
</tr>
<tr>
<td>Miklody, Daniel</td>
<td>Th485</td>
</tr>
<tr>
<td>Mikulas, Ezequiel</td>
<td>Th475</td>
</tr>
<tr>
<td>Milán Ricketts, Daniela</td>
<td>Th989</td>
</tr>
<tr>
<td>Milani, Stefano</td>
<td>W129</td>
</tr>
<tr>
<td>Milazzo, Anna-Clare</td>
<td>W773</td>
</tr>
<tr>
<td>Milberg, William</td>
<td>M215</td>
</tr>
<tr>
<td>Mildner, Toralf</td>
<td>T090</td>
</tr>
<tr>
<td>Miles, Laura</td>
<td>T214, T229</td>
</tr>
<tr>
<td>Milič, Davor</td>
<td>T009</td>
</tr>
<tr>
<td>Miltic, Steven</td>
<td>W394</td>
</tr>
<tr>
<td>Miliev, Roumen</td>
<td>M504, W614</td>
</tr>
<tr>
<td>Milham, Michael</td>
<td>M055</td>
</tr>
<tr>
<td>Milham, Michael</td>
<td>M502, M665, M763, M850, T165, T564, T645, T646, T723, T738, Th584, W479</td>
</tr>
<tr>
<td>Mill, Ravi</td>
<td>W844</td>
</tr>
<tr>
<td>Millán, José</td>
<td>Th449</td>
</tr>
<tr>
<td>Miller, Bruce</td>
<td>M548, M549, W057, W084, W100</td>
</tr>
<tr>
<td>Miller, Derek</td>
<td>W691</td>
</tr>
<tr>
<td>Miller, Freeman</td>
<td>Th491</td>
</tr>
<tr>
<td>Miller, Jacob</td>
<td>T694, Th702</td>
</tr>
<tr>
<td>Miller, Joe</td>
<td>T660</td>
</tr>
<tr>
<td>Miller, Karla</td>
<td>T664</td>
</tr>
<tr>
<td>Miller, Kristi</td>
<td>Th237</td>
</tr>
<tr>
<td>Miller, Michael</td>
<td>M576</td>
</tr>
<tr>
<td>Miller, Mickey</td>
<td>T637, W651</td>
</tr>
<tr>
<td>Miller, Robyn</td>
<td>M584, M574</td>
</tr>
<tr>
<td>Miller, Sarah</td>
<td>Th533</td>
</tr>
<tr>
<td>Miller, Steven</td>
<td>M619, T460</td>
</tr>
<tr>
<td>Miller, Zachary</td>
<td>W084</td>
</tr>
<tr>
<td>Miller-Thomas, Michelle</td>
<td>T348</td>
</tr>
<tr>
<td>Mills, Edward</td>
<td>M549</td>
</tr>
<tr>
<td>Mills, Kathryn</td>
<td>Th720</td>
</tr>
<tr>
<td>Mills-Finnerty, Colleen</td>
<td>Th104</td>
</tr>
<tr>
<td>Milos, Gabriella</td>
<td>T026</td>
</tr>
<tr>
<td>Miloserdov, Kristina</td>
<td>T644, T645, T646, T723, T738, Th584, W479</td>
</tr>
<tr>
<td>Mitelman, Serge</td>
<td>M016</td>
</tr>
<tr>
<td>Mitin, Maria</td>
<td>Th118</td>
</tr>
<tr>
<td>Mitto, Remiko</td>
<td>T205, W105</td>
</tr>
<tr>
<td>Mitto, Remiko</td>
<td>T498, W775</td>
</tr>
<tr>
<td>Mittra, Jimi</td>
<td>M230, M233</td>
</tr>
<tr>
<td>Mitsu, Georgios</td>
<td>T424, T630, T757</td>
</tr>
<tr>
<td>Mittal, Vijay</td>
<td>M149, M564, Th085</td>
</tr>
<tr>
<td>Miura, Naoki</td>
<td>Th830</td>
</tr>
<tr>
<td>Miwa, Naoyuki</td>
<td>Th606</td>
</tr>
<tr>
<td>Miyagishi, Yoshiaki</td>
<td>M349</td>
</tr>
<tr>
<td>Miyazaki, Yuko</td>
<td>Th261</td>
</tr>
<tr>
<td>Miyata, Keiichi</td>
<td>Th687</td>
</tr>
<tr>
<td>Miyazaki, Atsushi</td>
<td>T299, Th747, Th783, Th986</td>
</tr>
<tr>
<td>Mizuno, Kei</td>
<td>T385</td>
</tr>
<tr>
<td>Mizutani, Yuki</td>
<td>T030</td>
</tr>
<tr>
<td>Moberger, Torger</td>
<td>Th697</td>
</tr>
<tr>
<td>Modinos, Gemma</td>
<td>M100</td>
</tr>
<tr>
<td>Moebus, Susanne</td>
<td>T377</td>
</tr>
<tr>
<td>Mociver, Beatrix</td>
<td>M834, M844, W462</td>
</tr>
<tr>
<td>Moghim, Sahar</td>
<td>Th372</td>
</tr>
<tr>
<td>Moglia, Cristina</td>
<td>T236</td>
</tr>
<tr>
<td>Mohajer, Bahram</td>
<td>M048, W086</td>
</tr>
<tr>
<td>Mohamed, Abdallah</td>
<td>W429</td>
</tr>
<tr>
<td>Mohamed, Abdallah</td>
<td>T041</td>
</tr>
<tr>
<td>Mohamed, Esmaeil</td>
<td>W086</td>
</tr>
<tr>
<td>Mohamed, Negar</td>
<td>W182</td>
</tr>
<tr>
<td>Mohamed, Siawoosh</td>
<td>Th773, Th796, W536, W785</td>
</tr>
<tr>
<td>Author Name</td>
<td>Page Numbers</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Richard, Marie Anne</td>
<td>W874</td>
</tr>
<tr>
<td>Richard, Hugo</td>
<td>M462, W895, W556</td>
</tr>
<tr>
<td>Richard, Nathalie</td>
<td>T213</td>
</tr>
<tr>
<td>Richardson-Klavehn, Alan</td>
<td>W678</td>
</tr>
<tr>
<td>Richter, Louis</td>
<td>W035</td>
</tr>
<tr>
<td>RICHIARDI, Jonas</td>
<td>M171, W296</td>
</tr>
<tr>
<td>Richie-Halford, Adam</td>
<td>W624, W763</td>
</tr>
<tr>
<td>Richter, Anja</td>
<td>M324</td>
</tr>
<tr>
<td>Richter, Anni</td>
<td>W678</td>
</tr>
<tr>
<td>Rick, Adams</td>
<td>M888</td>
</tr>
<tr>
<td>Ridderbusch, Isabelle</td>
<td>T005</td>
</tr>
<tr>
<td>Riddle, Justin</td>
<td>W754</td>
</tr>
<tr>
<td>Rideaux, Reuben</td>
<td>T869</td>
</tr>
<tr>
<td>Ridwan, Abdur Raquib</td>
<td>W550, W551, W555</td>
</tr>
<tr>
<td>Riečansky, Igor</td>
<td>Th832</td>
</tr>
<tr>
<td>Reckner, Martin</td>
<td>Th360</td>
</tr>
<tr>
<td>Reckmann, Anna</td>
<td>M328, W868</td>
</tr>
<tr>
<td>Redel, Christian</td>
<td>Th002</td>
</tr>
<tr>
<td>Redel, Michael</td>
<td>M732, T040, T805, Th308, W602, W650</td>
</tr>
<tr>
<td>Redel, Philipp</td>
<td>W017</td>
</tr>
<tr>
<td>Redel, Valentín</td>
<td>M713, W120</td>
</tr>
<tr>
<td>Redel, Valentín</td>
<td>M548, Th534, W255, W869</td>
</tr>
<tr>
<td>Riegel, Monika</td>
<td>W682</td>
</tr>
<tr>
<td>Riemann, Georg</td>
<td>Th869</td>
</tr>
<tr>
<td>Rier, Lukas</td>
<td>M387</td>
</tr>
<tr>
<td>Ries, Anja</td>
<td>Th717</td>
</tr>
<tr>
<td>Rietschel, Marcelia</td>
<td>Th155</td>
</tr>
<tr>
<td>Riggins, Tracy</td>
<td>T494</td>
</tr>
<tr>
<td>Righetti, Giulia</td>
<td>Th757</td>
</tr>
<tr>
<td>Rigon, Arianna</td>
<td>Th851</td>
</tr>
<tr>
<td>Rigoux, Lionel</td>
<td>Th369</td>
</tr>
<tr>
<td>Ribeau, Pierre</td>
<td>M205</td>
</tr>
<tr>
<td>Riklin Raviv, Tammy</td>
<td>M446</td>
</tr>
<tr>
<td>Rilling, James</td>
<td>M104, Th790</td>
</tr>
<tr>
<td>Rimbaut, Daniel</td>
<td>M413</td>
</tr>
<tr>
<td>Ring, Priscilla</td>
<td>M033, M037</td>
</tr>
<tr>
<td>Rinke, Daniel</td>
<td>Th250</td>
</tr>
<tr>
<td>Rio, Marlene</td>
<td>W779</td>
</tr>
<tr>
<td>Riot, Guillermette</td>
<td>M052</td>
</tr>
<tr>
<td>Rivone, Piero</td>
<td>W593, W615, W629</td>
</tr>
<tr>
<td>Ripolles, Pablo</td>
<td>Th279</td>
</tr>
<tr>
<td>Ripp, Isabelle</td>
<td>W699, W746, W747</td>
</tr>
<tr>
<td>Rippe, James</td>
<td>Th639</td>
</tr>
<tr>
<td>Riquelme, Thomas</td>
<td>W286</td>
</tr>
<tr>
<td>Rischka, Lucas</td>
<td>Th138, Th186</td>
</tr>
<tr>
<td>Rispoli, Joseph</td>
<td>W611</td>
</tr>
<tr>
<td>Rissman, Jesse</td>
<td>Th200</td>
</tr>
<tr>
<td>Rispancic, Ivanka</td>
<td>Th865</td>
</tr>
<tr>
<td>Ritakari, Tuula</td>
<td>Th165</td>
</tr>
<tr>
<td>Ritchie, Stuart</td>
<td>Th800</td>
</tr>
<tr>
<td>Ritschel, Franziska</td>
<td>Th024</td>
</tr>
<tr>
<td>Ritschel, Franziska</td>
<td>Th020</td>
</tr>
<tr>
<td>Ritter, Aaron</td>
<td>M656, M657, Th788, W143</td>
</tr>
<tr>
<td>Ritter, Chantal</td>
<td>Th159</td>
</tr>
<tr>
<td>Ritter, Markus</td>
<td>T821, T822</td>
</tr>
<tr>
<td>Ritter, Petra</td>
<td>Th650</td>
</tr>
<tr>
<td>Riva, Federica</td>
<td>Th807</td>
</tr>
<tr>
<td>Riva, Giuseppe</td>
<td>W106</td>
</tr>
<tr>
<td>Riva, Giuseppe</td>
<td>M379</td>
</tr>
<tr>
<td>Riva, Nilo</td>
<td>Th236</td>
</tr>
<tr>
<td>Riva, Hassan</td>
<td>Th796</td>
</tr>
<tr>
<td>River, Diego</td>
<td>M670</td>
</tr>
<tr>
<td>River-Bonet, Charlene</td>
<td>W719, W813</td>
</tr>
<tr>
<td>Riveros, Vanessa</td>
<td>M156</td>
</tr>
<tr>
<td>Rivère, Denis</td>
<td>Th477, T705, T560, Th561, W107, W563</td>
</tr>
<tr>
<td>Rizor, Elizabeth</td>
<td>W046</td>
</tr>
<tr>
<td>Rizzo, Giuseppe</td>
<td>Th590</td>
</tr>
<tr>
<td>Rizzo, Marco</td>
<td>Th122</td>
</tr>
<tr>
<td>Rizzo, Rossella</td>
<td>Th356</td>
</tr>
<tr>
<td>Rizzolatti, Giacomo</td>
<td>Th618</td>
</tr>
<tr>
<td>Ro, Tony</td>
<td>Th711, Th725</td>
</tr>
<tr>
<td>Roal, David</td>
<td>M067, T074, T177, T475, Th494, Th775, W784</td>
</tr>
<tr>
<td>Roche, Philippe</td>
<td>Th380</td>
</tr>
<tr>
<td>Robbins, Trevor</td>
<td>Th738, Th740</td>
</tr>
<tr>
<td>Roberts, Gill</td>
<td>M388</td>
</tr>
<tr>
<td>Roberts, Gillian</td>
<td>M361, W842</td>
</tr>
<tr>
<td>Roberts, Gloria</td>
<td>Th084</td>
</tr>
<tr>
<td>Roberts, Hannah</td>
<td>Th424</td>
</tr>
<tr>
<td>Roberts, Hannah</td>
<td>Th258, Th259</td>
</tr>
<tr>
<td>Roberts, James</td>
<td>M668, M769, M828, M871, T076, T434, T529</td>
</tr>
<tr>
<td>Roberts, Mark</td>
<td>T322, W174</td>
</tr>
<tr>
<td>Roberts, Sophie</td>
<td>M160</td>
</tr>
<tr>
<td>Robertson, Edwin</td>
<td>Th622</td>
</tr>
<tr>
<td>Robertson, Frances</td>
<td>M403, W510</td>
</tr>
<tr>
<td>Robertson, Frances</td>
<td>Th679</td>
</tr>
<tr>
<td>Robertson, Frances</td>
<td>M405</td>
</tr>
<tr>
<td>Robertson, Ian</td>
<td>Th356</td>
</tr>
<tr>
<td>Robertson, Jo</td>
<td>Th105</td>
</tr>
<tr>
<td>Robertson, Naianna</td>
<td>Th306, T343</td>
</tr>
<tr>
<td>Robin, Don</td>
<td>W659</td>
</tr>
<tr>
<td>Robin, Donald</td>
<td>Th691</td>
</tr>
<tr>
<td>Robins, Richard</td>
<td>Th198</td>
</tr>
<tr>
<td>Robinson, Emma</td>
<td>Th461, T462, T464, T465, Th480, Th496, W763, W770, W792</td>
</tr>
<tr>
<td>Robinson, Jason</td>
<td>W007</td>
</tr>
<tr>
<td>Robinson, Jennifer</td>
<td>Th805, Th737, W424</td>
</tr>
<tr>
<td>Robinson, John</td>
<td>W052</td>
</tr>
<tr>
<td>Robinson, Meghan</td>
<td>M215</td>
</tr>
<tr>
<td>Robinson, Paul</td>
<td>Th359</td>
</tr>
<tr>
<td>Robinson, Peter</td>
<td>M572, M610, T827, T831, W381, W496</td>
</tr>
<tr>
<td>Robinson, Stephen</td>
<td>Th829</td>
</tr>
<tr>
<td>Robinson, A.J.</td>
<td>M148</td>
</tr>
<tr>
<td>Robinson, Ryan</td>
<td>Th585</td>
</tr>
<tr>
<td>Robotham, Ro Julia</td>
<td>M156</td>
</tr>
<tr>
<td>Robou, Silan</td>
<td>M089</td>
</tr>
<tr>
<td>Rocca, Paola</td>
<td>T108</td>
</tr>
<tr>
<td>Rocca, Roberta</td>
<td>T274</td>
</tr>
<tr>
<td>Roccatagliata, Luca</td>
<td>Th097</td>
</tr>
<tr>
<td>Rocchi, Lorenzo</td>
<td>Th120</td>
</tr>
<tr>
<td>Rocha, Cristiane</td>
<td>W273</td>
</tr>
<tr>
<td>Rocha, Rodrigo</td>
<td>M582</td>
</tr>
<tr>
<td>Rochas, Vincent</td>
<td>W196</td>
</tr>
<tr>
<td>Rocke, Christine</td>
<td>Th407</td>
</tr>
<tr>
<td>Rockers, Elijah</td>
<td>M706, T582</td>
</tr>
<tr>
<td>Rodan, Sara</td>
<td>T027</td>
</tr>
<tr>
<td>Rodgers, Christopher</td>
<td>Th740, W272</td>
</tr>
<tr>
<td>Rodgers, Christopher</td>
<td>W539</td>
</tr>
<tr>
<td>Rodgers, Erin</td>
<td>W723</td>
</tr>
<tr>
<td>Rodriguez, Estrella</td>
<td>M165</td>
</tr>
<tr>
<td>Rodriguez, Amanda</td>
<td>Th151</td>
</tr>
<tr>
<td>Rodriguez, Raul</td>
<td>Th344, Th341, Th662, W043</td>
</tr>
<tr>
<td>Rodriguez, Karen</td>
<td>T353, T426</td>
</tr>
<tr>
<td>Rodrigues, Erika</td>
<td>Th754, W688</td>
</tr>
<tr>
<td>Rodrigues, Julia</td>
<td>Th506</td>
</tr>
<tr>
<td>Rodrigues, Paulo</td>
<td>M126</td>
</tr>
<tr>
<td>Rodriguez, Alfredo</td>
<td>T190, W360</td>
</tr>
<tr>
<td>Rodriguez, Lluviania</td>
<td>Th699</td>
</tr>
<tr>
<td>Rodriguez Cruces</td>
<td>Th344</td>
</tr>
<tr>
<td>Rodriguez, Larios, Julio</td>
<td>Th457</td>
</tr>
<tr>
<td>Rodriguez, Moreno, Diana</td>
<td>W200</td>
</tr>
<tr>
<td>Rodriguez Olivera, Anelín</td>
<td>Th898</td>
</tr>
<tr>
<td>Rodriguez-Cruces, Raúl</td>
<td>W184</td>
</tr>
<tr>
<td>Rodriguez-Dechicha, Nadia</td>
<td>W260</td>
</tr>
<tr>
<td>Rodriguez-Fornells, Antoni</td>
<td>Th036, T236</td>
</tr>
<tr>
<td>Rodriguez-Fornells, Antoni</td>
<td>M220</td>
</tr>
<tr>
<td>Rodriguez-Fornells, Antoni</td>
<td>Th641</td>
</tr>
<tr>
<td>Rodriguez-Izquierdo, Alberto</td>
<td>Th879</td>
</tr>
<tr>
<td>Rodriguez-Jimenez, Roberto</td>
<td>Th120</td>
</tr>
<tr>
<td>Rodriguez-Oroz, María Cruz</td>
<td>W210</td>
</tr>
<tr>
<td>Rodriguez-Pérez, Noelia</td>
<td>M132</td>
</tr>
<tr>
<td>Rodriguez-Raecke, Rea</td>
<td>Th239, Th306</td>
</tr>
<tr>
<td>Roe, Anna</td>
<td>Th855, Th013</td>
</tr>
<tr>
<td>Roe, James</td>
<td>Th419</td>
</tr>
<tr>
<td>Roe-Velvét, Nuria</td>
<td>W534, W705</td>
</tr>
<tr>
<td>Roedel, Sigrun</td>
<td>Th209</td>
</tr>
<tr>
<td>Roebers, Claudia</td>
<td>W482</td>
</tr>
<tr>
<td>Roebroek, Alard</td>
<td>Th860</td>
</tr>
<tr>
<td>Roecckner, Alyssa</td>
<td>M193</td>
</tr>
<tr>
<td>Roefs, Anne</td>
<td>W423</td>
</tr>
<tr>
<td>Author Name</td>
<td>Page Numbers</td>
</tr>
<tr>
<td>---------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Stein, Jason</td>
<td>W281</td>
</tr>
<tr>
<td>Stein, Frederike</td>
<td>T137, T139, W292</td>
</tr>
<tr>
<td>Stein, Elliot</td>
<td>Th129</td>
</tr>
<tr>
<td>Stein, Dan</td>
<td>T046</td>
</tr>
<tr>
<td>Stein, Marlene</td>
<td>T274</td>
</tr>
<tr>
<td>Staines, Donald</td>
<td>Th227, W380</td>
</tr>
<tr>
<td>Stajduhar, Andrija</td>
<td>Th707</td>
</tr>
<tr>
<td>Stam, Cornelis</td>
<td>Th468</td>
</tr>
<tr>
<td>Stam, Daphne</td>
<td>Th794</td>
</tr>
<tr>
<td>Samatakas, Emmanuel</td>
<td>M592, T716</td>
</tr>
<tr>
<td>Samudio, Claudio</td>
<td>Th347</td>
</tr>
<tr>
<td>Stampfl, Philipp</td>
<td>M335, Th655</td>
</tr>
<tr>
<td>Stancak, Andrej</td>
<td>Th258, Th259, Th424</td>
</tr>
<tr>
<td>Stankewitz, Anne</td>
<td>T794</td>
</tr>
<tr>
<td>Stankovic, Iva</td>
<td>W266, W268</td>
</tr>
<tr>
<td>Stanley, Jeffrey</td>
<td>M41</td>
</tr>
<tr>
<td>Stanley, Jeffrey</td>
<td>M48</td>
</tr>
<tr>
<td>Stano Kozubik, Laura</td>
<td>T004</td>
</tr>
<tr>
<td>Stanziano, Mario</td>
<td>T720</td>
</tr>
<tr>
<td>Staples, Ryan</td>
<td>T312</td>
</tr>
<tr>
<td>Stark, Martina</td>
<td>W738</td>
</tr>
<tr>
<td>Stark, Craig</td>
<td>T105</td>
</tr>
<tr>
<td>Stark, Eloise</td>
<td>Th387</td>
</tr>
<tr>
<td>Starkstein, Sergio</td>
<td>W534</td>
</tr>
<tr>
<td>Starfelt, Randi</td>
<td>M164</td>
</tr>
<tr>
<td>Stasko, Melissa</td>
<td>W19</td>
</tr>
<tr>
<td>Stathi, Afroditi</td>
<td>T579</td>
</tr>
<tr>
<td>Staveland, Brooke</td>
<td>M261</td>
</tr>
<tr>
<td>Stapfmi, Philipp</td>
<td>W399</td>
</tr>
<tr>
<td>Steber, Sarah</td>
<td>M302, T234</td>
</tr>
<tr>
<td>Stecher, Ximena</td>
<td>Th277, Th278, Th279, Th310</td>
</tr>
<tr>
<td>Steed, Kerry</td>
<td>Th741</td>
</tr>
<tr>
<td>Steegens, Cathelline</td>
<td>T159</td>
</tr>
<tr>
<td>Steele, Christopher</td>
<td>M194</td>
</tr>
<tr>
<td>Steele, Douglas</td>
<td>M275, Th724</td>
</tr>
<tr>
<td>Steele, Vaughn</td>
<td>Th444</td>
</tr>
<tr>
<td>Steenwijck, Martijn</td>
<td>T404</td>
</tr>
<tr>
<td>Stefan, Vlad</td>
<td>Th869</td>
</tr>
<tr>
<td>Stefanova, Elka</td>
<td>W266, W268</td>
</tr>
<tr>
<td>Stegmaier, Sophia</td>
<td>M293</td>
</tr>
<tr>
<td>Steiger, Bettina</td>
<td>M313, W841</td>
</tr>
<tr>
<td>Stein, Alan</td>
<td>Th837</td>
</tr>
<tr>
<td>Stein, Dan</td>
<td>T046</td>
</tr>
<tr>
<td>Stein, Elliot</td>
<td>Th133, W018, W037</td>
</tr>
<tr>
<td>Stein, Frederike</td>
<td>T137, T139, W292</td>
</tr>
<tr>
<td>Stein, Jason</td>
<td>W281</td>
</tr>
</tbody>
</table>

To view full abstract text and ePosters, visit www.aievolution.com/hbm1901
<table>
<thead>
<tr>
<th>Author</th>
<th>Code(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tursic, Anita</td>
<td>Th609</td>
</tr>
<tr>
<td>Tuscher, Oliver</td>
<td>M282, T412, T635, Th342, W351</td>
</tr>
<tr>
<td>Tuulari, Jetro</td>
<td>Th576</td>
</tr>
<tr>
<td>Tuyisenge, Viau</td>
<td>Th010, Th014</td>
</tr>
<tr>
<td>Tuyisenge, Viau</td>
<td>Th659</td>
</tr>
<tr>
<td>Tuzhilina, Elena</td>
<td>M261</td>
</tr>
<tr>
<td>Tye, Charlotte</td>
<td>Th422</td>
</tr>
<tr>
<td>Tylén, Kristian</td>
<td>T274</td>
</tr>
<tr>
<td>Tyler, Lorraine</td>
<td>T358</td>
</tr>
<tr>
<td>Tymofiyeva, Olga</td>
<td>T317</td>
</tr>
<tr>
<td>Ulasoglu-Yildiz, Ugawa</td>
<td>W639, W718</td>
</tr>
<tr>
<td>Ulasoglu-Yildiz, Ugawa</td>
<td>T36</td>
</tr>
</tbody>
</table>
Wang, Qin – M438
Wang, Qin – W519, W855
Wang, Qushi – T525, W549
Wang, Shan – M217
Wang, Sheng – Th58
Wang, Sheng – M872, T629
Wang, Shengpe – W383
Wang, Shu-Li – T089, T175, T176
Wang, Shuai – Th864, W372, W388
Wang, Shu-Juan – Th205, Th218
Wang, Shu-Li – T089, T175, T176
Wang, Shuai – M672, W355
Wang, Shuang – T323
Wang, Tao – Th406
Wang, Tao – W154
Wang, Tina – T425
Wang, Victor – W576
Wang, Wei – M421
Wang, Wen-dan – T335
Wang, Wen-xiao – T72
Wang, Xiaoying – Th53
Wang, Xiao-Jing – W322
Wang, Xiao-ying – W505
Wang, Xiao-yu – M873, Th483
Wang, Xin – Th406, Th574
Wang, Xin – Th270
Wang, Xin – M167
Wang, Xind – Th243, W326, W626, W636
Wang, Xind – Th568
Wang, Xin-yi – M434
Wang, Xin-yu – Th815
Wang, Xiuy – M598, T255
Wang, Xiuyuan – M514
Wang, Xu – M186
Wang, Xue-ping – Th090
Wang, Xue-ping – T525
Wang, Xue-zhao – Th517
Wang, Xue-Qing – T858
Wang, Yal – Th555
Wang, Yan – M613
Wang, Yan-pei – W861
Wang, Yingji – Th063
Wang, Yinshan – M617, W431, W589
Wang, Yixin – M797
Wang, Yi-ju – M257
Wang, Yu-Ping – M759, W672
Wang, Yuan-Wei – W230
Wang, Yuan-Wei – T016, T017, T056, W329
Wang, Yue – W493
Wang, Yue-fang – T844
Wang, Yun – Th121, Th164, Th166
Wang, Yun – W068
Wang, Yun-hong – T858
Wang, Zhen-chang – T735
Wang, Zhen – M537, W559
Wang, Zhen – M604
Wang, Zhen-guo – W67, W618
Wang, Zhi-hao – M575
Wang, Zhi-hua – M17
Wang, Zhi-shun – T218
Wang, Zhi-shun – M345, Th95, W202
Wang, Zhi-yun – M217
Wang, Wei – W405
Wanigasinghe, Jithangi – T320
Ward, Chadwick – W554
Ward, David – T342
Ward, Phillip – M539, Th541, W627
Ward, Thomas – T390
Ware, Ashley – T147, T158
Warfield, Simon – T499
Warfield, Simon – T469
Warner, John – W213, W243, W275
Warren, David – W672
Warrington, Shaun – W787
Warton, Christopher – T037, T441, T572
Warton, Yvonne – T276
Waschull, Karolin – Th027
Waspe, Adam – T98
Wassenaar, Thomas – M759, Th734
Wassenaar, Thomas – W517
Wassermann, Demian – T217, T311, Th701
Wassermann, Eric – T663
Watanabe, Hama – T501, Th714
Watanabe, Fleur – T441, Th276
Watanabe, Karyn – T357
Watanabe, Kyosuke – Th385
Watanabe, Rui – Th862
Watanabe, Yasuyoshi – T385
Wattersta, Gunnar – T806
Watkins, Kate – T334, Th338, T342, T345, Th763
Watkins, Roger – M367
Watson, Rebecca – M294
Watson, Jennifer – W339
Watts, Richard – T492, T513, Th577, Th683
Wathe, Apurva – W399
Weaver, Nick – W777
Webb, Christina – T353
Weber, Bernhard – W717
Weber, Christine – M288
Weber, Heike – T005
Weber, Kenneth – Th360
Weber, Lillian – T790
Weber, Lillian Aline Elizabeth – Th784, Th432
Weber, Mareen – M222
Weber, Michel – M313
Weber, Rachel – Th761
Weeda, Wouter – M835, W838
Wegrzynek, Martin – M295, M307, W191
Wehenkel, Marie – W115
Wehrmann, Katharina – W109
Wei, Dongtao – Th60
Wei, Duan – Th431
Wei, Hua – Th420
Wei, Long – W311
Wei, Wei – Th409
Wei, Yanjun – Th396
Wei, Yongbin – M217
Wei, Yongbin – M104
Wei, Zhenduo – T393
Wei, Zhi-xiang – T858
Weihs, Janine – W396
Weihs, Kerstin – T024
Weigard, Alex – M883
Weigel, Matthias – Th791
Weigelt, Sarah – T468
Weik, Elia – Th842
Weil, Georg – T308
Weiller, Cornelius – T170, M205
Weinberger, Daniel – Th51
Weiner, Kevin – Th864, Th881, Th693, Th694, Th702
Weiner, Michael – T162, W150, W766
Weinrich, Luise – Th727
Weinstein, Alejandro – M410, Th870, Th608
Weinstock, Marta – T602
Weisz, A. – Th308
Weisz, Carissa – M547, T008
Weiß, Eleen – Th517
Weiss, Luca – Th412
Weiss, Luca – T175
Weiß, Magdalene – Th309, Th577, Th683
Weiß, Mathias – T175
Weissebacher, Sara – T201
Weise, Mark – M741
Weiske, Johanna – W081
Weiskopf, Nikolaus – Th803, T013, T128, T210, Th497, Th708, W394
Weiskopf, Nikolaus – T090, Th673, W408, W832
Weiss, Elisabeth – W717
Weiss, Emma – Th113
Weiss, Franziska – M672, W355
Weiss, Hannah – Th741
Weiss, Kilian – W412
Weiss, Luca – W840
Weiss, Michael – Th603
Weiss, Peter – Th304, Th343
Weiss, Ralph – Th696, W697, Th879
Weiss, Thomas – M901
Weiss, Lucas – Carolin – Th057
Weissbrod, Aharon – Th879
Weissmann, David – Th198
Weisz, Nathan – T719
Welchman, Andrew – Th869
Weldon, Kimberly – W500
Weller, Barbara – T251
Weltstein, Katharina – M34, T547, T784, Th269
Weltstein, Katharina – T780
Welsh, Robert – Th255
Weltens, Nathalie – W909
Welton, Thomas – T231
Welton, Tom – W811
Wen, Jun-hao – M505, M508, W154, W619
Wen, Zung-Kuen – Th793
Wen, Wei – T364, T370, T390, T432, W050, W087
Wen, Xiaoting – M587
Wen, Xiu – Th396
Wen, Xuyuan – M472, T483, T526, T533
Wenderoth, Nicole – M305, M636, Th023, Th210, Th417, Th439, Th613, Th623
Wendt, Julia – M279, M281
Weng, Jian – W711
Weng, Jian – T458
Weng, Jun-Cheng – M456, T089, T117, T175, T176
Weng, Kechu – W716
Weng, Yifei – Th677, W617, W68
Weng, Yihe – W372, W388
Wengenroth, Martina – Th712
Wens, Vincent – T321, T324, Th217, W821
Wens, Vincent – Th410
Wensing, Tobias – M105, M346
Wenzel, Gregor – T001
Wenzel, Julian – M129, M259
Werdin, Emilio – M207
Werker, Janet – M619
Wermser, Marieke – W465
Wethers, Tobias – T529
<table>
<thead>
<tr>
<th>Name</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yeagle, Erin</td>
<td>T871, W668</td>
</tr>
<tr>
<td>Yeates, Keith</td>
<td>T47, T158</td>
</tr>
<tr>
<td>Yeatman, Jason</td>
<td>W606, W624, W763</td>
</tr>
<tr>
<td>Yebga Hot, Raissa</td>
<td>Th671, Th749</td>
</tr>
<tr>
<td>Yee, Yohan</td>
<td>W327</td>
</tr>
<tr>
<td>Yeh, Chun-Hung</td>
<td>M162, M180, M478</td>
</tr>
<tr>
<td>Yeh, Dah-Cheng</td>
<td>M456</td>
</tr>
<tr>
<td>Yeh, Jia-Rong</td>
<td>W834</td>
</tr>
<tr>
<td>Yeh, Lu-Chun</td>
<td>T669</td>
</tr>
<tr>
<td>Yeh, Su-Ling</td>
<td>T429</td>
</tr>
<tr>
<td>Yeh, Yei-Yu</td>
<td>Th669, T819</td>
</tr>
<tr>
<td>Yen, Nai-Shing</td>
<td>Th268</td>
</tr>
<tr>
<td>Yener, Gorsev</td>
<td>T356, W461, W088, W121, W222</td>
</tr>
<tr>
<td>Yeneng, Zwi</td>
<td>Th460</td>
</tr>
<tr>
<td>Yeo, B. T. Thomas</td>
<td>M068, M439, M528, M585, M588, T552, T627, T644, T892, Th571, Th685, W060, W241, W259</td>
</tr>
<tr>
<td>Yeo, Marilyn</td>
<td>T300</td>
</tr>
<tr>
<td>Yeon, Jiwon</td>
<td>T815</td>
</tr>
<tr>
<td>Yetf, Jérôme</td>
<td>T101</td>
</tr>
<tr>
<td>Yetkin, Ahmet Emin</td>
<td>T219</td>
</tr>
<tr>
<td>Yi, Mahmoud</td>
<td>M523</td>
</tr>
<tr>
<td>Yi, Doo, Th522</td>
<td></td>
</tr>
<tr>
<td>Yi, Hu, Th512</td>
<td></td>
</tr>
<tr>
<td>Yi, Jinyao</td>
<td>M767, W455</td>
</tr>
<tr>
<td>Yildirim, Ebru</td>
<td>W223</td>
</tr>
<tr>
<td>Yildirim, Ebru</td>
<td>W221</td>
</tr>
<tr>
<td>Yin, Dazhi</td>
<td>M537</td>
</tr>
<tr>
<td>Yin, Lijun</td>
<td>T546</td>
</tr>
<tr>
<td>Yin, Lijun</td>
<td>Th256</td>
</tr>
<tr>
<td>Yin, Soo, Th362, T393</td>
<td></td>
</tr>
<tr>
<td>Yin, Ting</td>
<td>W081</td>
</tr>
<tr>
<td>Yin, Weiyan</td>
<td>T161, T488, T500, T507, T510</td>
</tr>
<tr>
<td>Yin, Xinzheng</td>
<td>W276</td>
</tr>
<tr>
<td>Yin, Yayan</td>
<td>T632, W732</td>
</tr>
<tr>
<td>Yin, Yayan</td>
<td>W872</td>
</tr>
<tr>
<td>Yizhar, Or</td>
<td>Th657</td>
</tr>
<tr>
<td>Yinlen, Aarnete</td>
<td>M220</td>
</tr>
<tr>
<td>Yogarow, Kieran</td>
<td>Th163</td>
</tr>
<tr>
<td>Yogarajah, Mahinda</td>
<td>W165</td>
</tr>
<tr>
<td>Yogev-Seligmann, Gaia</td>
<td>W130</td>
</tr>
<tr>
<td>Yokota, Susumu</td>
<td>M023</td>
</tr>
<tr>
<td>Yokoyama, Chihiro</td>
<td>Th676</td>
</tr>
<tr>
<td>Yolkent, Robert</td>
<td>M112</td>
</tr>
<tr>
<td>Yonezawa, Hironobu</td>
<td>M300</td>
</tr>
<tr>
<td>Yoo, Han Soo</td>
<td>M522</td>
</tr>
<tr>
<td>Yoo, Shinjye</td>
<td>W068</td>
</tr>
<tr>
<td>Yoo, Sole</td>
<td>Th854, W132</td>
</tr>
<tr>
<td>Yoo, Woo-Kyoungh</td>
<td>Th038</td>
</tr>
<tr>
<td>Yoo, Woo-Kyoungh</td>
<td>Th181</td>
</tr>
<tr>
<td>Yoon, Cindy W</td>
<td>W070</td>
</tr>
<tr>
<td>Yoon, Su-Jung</td>
<td>Th231</td>
</tr>
<tr>
<td>Yoon, Uicheul</td>
<td>Th594</td>
</tr>
<tr>
<td>Yor, Ashley</td>
<td>Th593</td>
</tr>
<tr>
<td>Yor, Gerald</td>
<td>M212, M225</td>
</tr>
<tr>
<td>Yoshida, Akhiro</td>
<td>M436, Th605</td>
</tr>
<tr>
<td>Yoshida, Nobuiko</td>
<td>M289, M553</td>
</tr>
<tr>
<td>Yoshida, Sooiti</td>
<td>Th515</td>
</tr>
<tr>
<td>Yoshihara, Yujin</td>
<td>W566</td>
</tr>
<tr>
<td>Yoshikawa, Etsuji</td>
<td>Th075</td>
</tr>
<tr>
<td>Yoshikawa, Naganobu</td>
<td>M085</td>
</tr>
<tr>
<td>Yoshimura, Yoko</td>
<td>M349, M378, T482, Th868</td>
</tr>
<tr>
<td>Yoshiohiki, Ayumi</td>
<td>Th781</td>
</tr>
<tr>
<td>You, Bo, B. Th739</td>
<td></td>
</tr>
<tr>
<td>You, Wonseo</td>
<td>M021</td>
</tr>
<tr>
<td>You, Xiaozhen</td>
<td>M063</td>
</tr>
<tr>
<td>You, Xiaozhen</td>
<td>M576</td>
</tr>
<tr>
<td>Young, Christina</td>
<td>M418</td>
</tr>
<tr>
<td>Young, Kaelin</td>
<td>W424</td>
</tr>
<tr>
<td>Young, Kym</td>
<td>Th312</td>
</tr>
<tr>
<td>Young, Kym</td>
<td>Th312</td>
</tr>
<tr>
<td>Young, Kyberly</td>
<td>T082</td>
</tr>
<tr>
<td>Young, Larry</td>
<td>M342</td>
</tr>
<tr>
<td>Young, Peter</td>
<td>W868</td>
</tr>
<tr>
<td>Yorkef, Behnaz</td>
<td>T648</td>
</tr>
<tr>
<td>Yu, Chi-Lin</td>
<td>T245</td>
</tr>
<tr>
<td>Yu, Chi-Lin</td>
<td>T246</td>
</tr>
<tr>
<td>Yu, Chunshui</td>
<td>M438</td>
</tr>
<tr>
<td>Yu, Chunshui</td>
<td>M101</td>
</tr>
<tr>
<td>Yu, Dahau</td>
<td>W202, W203</td>
</tr>
<tr>
<td>Yu, Dahau</td>
<td>W204</td>
</tr>
<tr>
<td>Yu, Elsa</td>
<td>W149</td>
</tr>
<tr>
<td>Yu, Geojong</td>
<td>Th448</td>
</tr>
<tr>
<td>Yu, Hao, Th151</td>
<td></td>
</tr>
<tr>
<td>Yu, Haoyong</td>
<td>M181</td>
</tr>
<tr>
<td>Yu, Hsin-Yen</td>
<td>T835, Th389</td>
</tr>
<tr>
<td>Yu, Jing</td>
<td>T351</td>
</tr>
<tr>
<td>Yu, Ju-Chi</td>
<td>W208</td>
</tr>
<tr>
<td>Yu, JyeHyoun</td>
<td>T739</td>
</tr>
<tr>
<td>Yu, Kyung-Ho</td>
<td>M637</td>
</tr>
<tr>
<td>Yu, Qiujing</td>
<td>T105</td>
</tr>
<tr>
<td>Yu, Qingbo</td>
<td>W337</td>
</tr>
<tr>
<td>Yu, Ronjung</td>
<td>Th261, Th820</td>
</tr>
<tr>
<td>Yu, Shuying</td>
<td>T591, T637, W651</td>
</tr>
<tr>
<td>Yu, WenWen</td>
<td>W559</td>
</tr>
<tr>
<td>Yu, Xi</td>
<td>T298</td>
</tr>
<tr>
<td>Yuan, Justin</td>
<td>Th317</td>
</tr>
<tr>
<td>Yuan, Kaimi</td>
<td>W022, W203, W024</td>
</tr>
<tr>
<td>Yuan, Li-Xia</td>
<td>W435</td>
</tr>
<tr>
<td>Yuan, Lihua</td>
<td>Th218, Th195</td>
</tr>
<tr>
<td>Yuan, Lihua</td>
<td>M345</td>
</tr>
<tr>
<td>Yuan, Liuming</td>
<td>M661, W528</td>
</tr>
<tr>
<td>Yuan, Zejian</td>
<td>T880</td>
</tr>
<tr>
<td>Yuan-Mou Yang Joseph</td>
<td>T182, Th216</td>
</tr>
<tr>
<td>Yucel, Meryem</td>
<td>Th747</td>
</tr>
<tr>
<td>Yucel, Murat</td>
<td>M061, Th289, W006</td>
</tr>
<tr>
<td>Yue, Guang</td>
<td>Th777</td>
</tr>
<tr>
<td>Yue, Ling</td>
<td>W514</td>
</tr>
<tr>
<td>Yue, Weihua</td>
<td>Th151</td>
</tr>
<tr>
<td>Yue, Yu, Ryan</td>
<td>T539</td>
</tr>
<tr>
<td>Yuen, Kenneth</td>
<td>M326, Th401, W351</td>
</tr>
<tr>
<td>Yuk, Veronica</td>
<td>M004</td>
</tr>
<tr>
<td>Yun, Hyuk Jin</td>
<td>T573, Th717</td>
</tr>
<tr>
<td>Yun, Sang Moon</td>
<td>M182</td>
</tr>
<tr>
<td>Yun, Seo Jung</td>
<td>Th364</td>
</tr>
<tr>
<td>Yun, Seules</td>
<td>W545</td>
</tr>
<tr>
<td>Yurgelung-Todd, Deborah</td>
<td>M664</td>
</tr>
<tr>
<td>Yushkevich, Paul</td>
<td>T105</td>
</tr>
<tr>
<td>Yushmanov, Victor</td>
<td>M441, T355</td>
</tr>
<tr>
<td>Zabicki, Adam</td>
<td>Th361</td>
</tr>
<tr>
<td>Zabibi, Mariam</td>
<td>M489</td>
</tr>
<tr>
<td>Záca, Domenico</td>
<td>M073</td>
</tr>
<tr>
<td>Záca, Domenico</td>
<td>T225</td>
</tr>
<tr>
<td>Zaccarella, Emiliano</td>
<td>T273</td>
</tr>
<tr>
<td>Zacharias, Norman</td>
<td>M651, W103, W422</td>
</tr>
<tr>
<td>Zachlod, Daniel</td>
<td>W328</td>
</tr>
<tr>
<td>Zafar, Aneesha</td>
<td>Th038</td>
</tr>
<tr>
<td>Zaharchuk, Greg</td>
<td>M816</td>
</tr>
<tr>
<td>Zahedmanesh, Homa</td>
<td>W266</td>
</tr>
<tr>
<td>Zahedmanesh, Homa</td>
<td>W268</td>
</tr>
<tr>
<td>Zaidi, Ali</td>
<td>W704</td>
</tr>
<tr>
<td>Zajkowski, Wojciech</td>
<td>Th284</td>
</tr>
<tr>
<td>Zak, Jamil</td>
<td>Th819</td>
</tr>
<tr>
<td>Zald, David</td>
<td>M062, Th744</td>
</tr>
<tr>
<td>Zaleshin, Mikhail</td>
<td>Th473</td>
</tr>
<tr>
<td>Zalesky, Andrew</td>
<td>M098, M612, M662, M828, W428</td>
</tr>
<tr>
<td>Zalesky, Andrew</td>
<td>M544, M565, M611, T434</td>
</tr>
<tr>
<td>Zalesky, Andrew</td>
<td>M167</td>
</tr>
<tr>
<td>Zama, Takuro</td>
<td>Th029</td>
</tr>
<tr>
<td>Zamani, Esfahani, Farnaz</td>
<td>M597</td>
</tr>
<tr>
<td>Zamboni, Elisa</td>
<td>T842, T869</td>
</tr>
<tr>
<td>Zamboni, Giovanna</td>
<td>T096, W580</td>
</tr>
<tr>
<td>Zammit, Christian</td>
<td>Th778</td>
</tr>
<tr>
<td>Zamora-López, Gorka</td>
<td>M571</td>
</tr>
<tr>
<td>Zamarano, Anna</td>
<td>Th381, Th392</td>
</tr>
<tr>
<td>Zamarano, Francisco</td>
<td>T495, Th277, Th278, Th310, W727</td>
</tr>
<tr>
<td>Zamarano, Francisco</td>
<td>Th279</td>
</tr>
<tr>
<td>Zamyadi, Mojdeh</td>
<td>M504, M659, W614</td>
</tr>
<tr>
<td>Zanelli, Sara</td>
<td>T244</td>
</tr>
<tr>
<td>Zanette, Michela</td>
<td>Th221</td>
</tr>
<tr>
<td>Zang, Yu, Feng</td>
<td>Th050, Th055, Th450</td>
</tr>
<tr>
<td>Author Name</td>
<td>W582</td>
</tr>
<tr>
<td>------------------</td>
<td>------</td>
</tr>
<tr>
<td>Zheng, Charles</td>
<td>305</td>
</tr>
<tr>
<td>Zheng, Charles</td>
<td>M467</td>
</tr>
<tr>
<td>Zheng, Dang</td>
<td>Th164</td>
</tr>
<tr>
<td>Zheng, Hongna</td>
<td>M481</td>
</tr>
<tr>
<td>Zheng, Li</td>
<td>W176</td>
</tr>
<tr>
<td>Zheng, Nanning</td>
<td>T880</td>
</tr>
<tr>
<td>Zheng, Senning</td>
<td>T880</td>
</tr>
<tr>
<td>Zheng, Xiaochen</td>
<td>T337</td>
</tr>
<tr>
<td>Zheng, Xiaoxiao</td>
<td>T104</td>
</tr>
<tr>
<td>Zheng, Xiaoxiao</td>
<td>Th164</td>
</tr>
<tr>
<td>Zheng, Yanting</td>
<td>M444</td>
</tr>
<tr>
<td>Zheng, Ying-Qiu</td>
<td>M712</td>
</tr>
<tr>
<td>Zhong, Allison</td>
<td>M372</td>
</tr>
<tr>
<td>Zhong, Jidan</td>
<td>W177</td>
</tr>
<tr>
<td>Zhong, Mingtian</td>
<td>M767</td>
</tr>
<tr>
<td>Zhou, Beinan</td>
<td>W311</td>
</tr>
<tr>
<td>Zhou, Bo</td>
<td>M438</td>
</tr>
<tr>
<td>Zhou, Changsong</td>
<td>W530</td>
</tr>
<tr>
<td>Zhou, Chengshu</td>
<td>M175</td>
</tr>
<tr>
<td>Zhou, Chenguang</td>
<td>M182</td>
</tr>
<tr>
<td>Zhou, Dan</td>
<td>M175</td>
</tr>
<tr>
<td>Zhou, Feng</td>
<td>W434</td>
</tr>
<tr>
<td>Zhou, Guifei</td>
<td>W403</td>
</tr>
<tr>
<td>Zhou, Hao</td>
<td>T541</td>
</tr>
<tr>
<td>Zhou, Hongliang</td>
<td>W824</td>
</tr>
<tr>
<td>Zhou, Hui</td>
<td>W692</td>
</tr>
<tr>
<td>Zhou, Jie</td>
<td>M127</td>
</tr>
<tr>
<td>Zhou, Jin</td>
<td>T296</td>
</tr>
<tr>
<td>Zhou, Jingyang</td>
<td>T875</td>
</tr>
<tr>
<td>Zhou, Juan</td>
<td>M181</td>
</tr>
<tr>
<td>Zhou, Liangfu</td>
<td>T243</td>
</tr>
<tr>
<td>Zhou, Lili</td>
<td>M115</td>
</tr>
<tr>
<td>Zhou, Quan</td>
<td>M716</td>
</tr>
<tr>
<td>Zhou, Quan</td>
<td>M716</td>
</tr>
<tr>
<td>Zhou, Renlai</td>
<td>Th414</td>
</tr>
<tr>
<td>Zhou, Renlai</td>
<td>Th420</td>
</tr>
<tr>
<td>Zhou, Shujin</td>
<td>T888</td>
</tr>
<tr>
<td>Zhou, Sizhong</td>
<td>T888</td>
</tr>
<tr>
<td>Zhou, Tiangang</td>
<td>T880</td>
</tr>
<tr>
<td>Zhou, Wei</td>
<td>T302</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Author Name</th>
<th>W108</th>
<th>W824</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zhou, Wenyang</td>
<td>305</td>
<td>305</td>
</tr>
<tr>
<td>Zhou, Xiaowei</td>
<td>M823</td>
<td></td>
</tr>
<tr>
<td>Zhou, Xinqi</td>
<td>W434</td>
<td></td>
</tr>
<tr>
<td>Zhou, Xinqi</td>
<td>T615</td>
<td></td>
</tr>
<tr>
<td>Zhou, Yan</td>
<td>W310</td>
<td></td>
</tr>
<tr>
<td>Zhou, Yuan</td>
<td>M733</td>
<td>Th121</td>
</tr>
<tr>
<td>Zhou, Yuqing</td>
<td>Th841</td>
<td></td>
</tr>
<tr>
<td>Zhou, Yuqing</td>
<td>Th834</td>
<td></td>
</tr>
<tr>
<td>Zhou, Yuqing</td>
<td>Th847</td>
<td></td>
</tr>
<tr>
<td>Zhou, Yuqing</td>
<td>M438</td>
<td></td>
</tr>
<tr>
<td>Zhu, Alyssa</td>
<td>T202</td>
<td>W302</td>
</tr>
<tr>
<td>Zhu, Alyssa</td>
<td>M767</td>
<td>W607</td>
</tr>
<tr>
<td>Zhu, Bi</td>
<td>M481</td>
<td></td>
</tr>
<tr>
<td>Zhu, Bing</td>
<td>M186</td>
<td></td>
</tr>
<tr>
<td>Zhu, Chunyan</td>
<td>Th448</td>
<td></td>
</tr>
<tr>
<td>Zhu, Dajiang</td>
<td>W139</td>
<td></td>
</tr>
<tr>
<td>Zhu, Hongtu</td>
<td>T161</td>
<td>T483</td>
</tr>
<tr>
<td>Zhu, Hongtu</td>
<td>T500</td>
<td>T526</td>
</tr>
<tr>
<td>Zhu, Jennifer</td>
<td>Th716</td>
<td>Th723</td>
</tr>
<tr>
<td>Zhu, Jennifer</td>
<td>T534</td>
<td></td>
</tr>
<tr>
<td>Zhu, Linlin</td>
<td>Th604</td>
<td></td>
</tr>
<tr>
<td>Zhu, Lusha</td>
<td>Th147</td>
<td>Th293</td>
</tr>
<tr>
<td>Zhu, Rongen</td>
<td>W244</td>
<td></td>
</tr>
<tr>
<td>Zhu, Rongen</td>
<td>Th880</td>
<td></td>
</tr>
<tr>
<td>Zhu, Wenbin</td>
<td>W611</td>
<td></td>
</tr>
<tr>
<td>Zhu, Xinyi</td>
<td>T382</td>
<td>T393</td>
</tr>
<tr>
<td>Zhu, Xionghao</td>
<td>M767</td>
<td></td>
</tr>
<tr>
<td>Zhu, Xuyang</td>
<td>M421</td>
<td></td>
</tr>
<tr>
<td>Zhu, Yanan</td>
<td>M280</td>
<td></td>
</tr>
<tr>
<td>Zhu, Yencheng</td>
<td>T202</td>
<td></td>
</tr>
<tr>
<td>Zhu, Yinchuan</td>
<td>M119</td>
<td></td>
</tr>
<tr>
<td>Zhu, Yu</td>
<td>M617</td>
<td></td>
</tr>
<tr>
<td>Zhu, Zhenchen</td>
<td>M756</td>
<td></td>
</tr>
<tr>
<td>Zhuang, Xiaowei</td>
<td>M648</td>
<td>M656</td>
</tr>
<tr>
<td>Zhuang, Xiaowei</td>
<td>M657</td>
<td>M818</td>
</tr>
<tr>
<td>Zhuang, Xiaowei</td>
<td>M824</td>
<td>M881</td>
</tr>
<tr>
<td>Zhuang, Xiaowei</td>
<td>Th552</td>
<td>Th695</td>
</tr>
<tr>
<td>Zhuang, Xiaowei</td>
<td>Th786</td>
<td>Th787</td>
</tr>
<tr>
<td>Zhuang, Xiaowei</td>
<td>Th788</td>
<td>W414</td>
</tr>
<tr>
<td>Zhuang, Xiaowei</td>
<td>W145</td>
<td>W249</td>
</tr>
<tr>
<td>Zhuang, Xiaowei</td>
<td>W795</td>
<td></td>
</tr>
<tr>
<td>Zhuo, Chuanjun</td>
<td>M427</td>
<td></td>
</tr>
<tr>
<td>Zhuo, Kaisim</td>
<td>M155</td>
<td></td>
</tr>
<tr>
<td>Zhuo, Yan</td>
<td>Th880</td>
<td></td>
</tr>
<tr>
<td>Zhuo, Yu</td>
<td>W611</td>
<td>T401</td>
</tr>
<tr>
<td>Zich, Catharina</td>
<td>M761</td>
<td>W858</td>
</tr>
<tr>
<td>Zidda, Francesca</td>
<td>W706</td>
<td></td>
</tr>
<tr>
<td>Ziegler, Gabriell</td>
<td>M888</td>
<td>T587</td>
</tr>
<tr>
<td>Ziegler, Sibylle</td>
<td>W516</td>
<td></td>
</tr>
<tr>
<td>Ziemann, Ulf</td>
<td>Th112</td>
<td>T112</td>
</tr>
<tr>
<td>Zolfin, Simeon</td>
<td>Th712</td>
<td></td>
</tr>
<tr>
<td>Zhou, Ping</td>
<td>T303</td>
<td></td>
</tr>
<tr>
<td>Zhou, Qinhou</td>
<td>T888</td>
<td>T895</td>
</tr>
<tr>
<td>Zhou, Qinhou</td>
<td>T632</td>
<td>T895</td>
</tr>
<tr>
<td>Zhou, Qihong</td>
<td>T795</td>
<td></td>
</tr>
<tr>
<td>Zhou, Xiaowei</td>
<td>W867</td>
<td></td>
</tr>
<tr>
<td>Zhou, Yuying</td>
<td>M540</td>
<td></td>
</tr>
<tr>
<td>Zoubi, Obada</td>
<td>M530</td>
<td></td>
</tr>
<tr>
<td>Zrenner, Christoph</td>
<td>Th112</td>
<td></td>
</tr>
<tr>
<td>Zrenka, Ludvic</td>
<td>Th724</td>
<td></td>
</tr>
<tr>
<td>Zsido, Rachel</td>
<td>T154</td>
<td></td>
</tr>
<tr>
<td>Zsdal, Renikó</td>
<td>W580</td>
<td></td>
</tr>
<tr>
<td>zu Eulenburg, Peter</td>
<td>Th737</td>
<td>Th820</td>
</tr>
<tr>
<td>Zuiderbaan, Wietse</td>
<td>Th810</td>
<td>Th586</td>
</tr>
<tr>
<td>Zuk, Jennifer</td>
<td>T298</td>
<td></td>
</tr>
<tr>
<td>Zuo, Nianming</td>
<td>M427</td>
<td></td>
</tr>
<tr>
<td>Zuo, Xi-Nian</td>
<td>M589</td>
<td>M585</td>
</tr>
<tr>
<td>Zvončak, Vojtech</td>
<td>Th34</td>
<td></td>
</tr>
<tr>
<td>Zwaneburg, Jako</td>
<td>W465</td>
<td></td>
</tr>
</tbody>
</table>