OHBM 2015
HONOLULU HAWAII

Poster Listings

21ST ANNUAL MEETING OF THE
ORGANIZATION FOR HUMAN BRAIN MAPPING

June 14-18, 2015 | Hawaii Convention Center

www.humanbrainmapping.org/OHBM2015

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HONOLULU 2015

Poster Listings

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POSTER CATEGORY KEY

Monday and Tuesday Posters

Poster Numbers #1000-2451 (MT)

- Display Days: Your poster should be displayed on your assigned poster board on Monday and Tuesday.
- Set-Up Time: Please set-up your poster from 8:00 – 9:00 am on Monday morning.
- Poster Stand-By Times:
  - Even numbered posters between #1000-2450 will stand-by and present their poster on Monday, June 15 from 12:45 – 14:45.
  - Odd numbered posters between #1000-2451 will stand-by and present their poster on Tuesday, June 16 from 12:45 – 14:45.
- Poster Reception: All Monday and Tuesday poster presenters will have a poster reception on Tuesday, June 16 from 17:00 – 18:30.
- Poster Teardown: Monday and Tuesday presenters should remove their posters by 19:30 on Tuesday night.

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Bayesian Modeling	2181-2194
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EEG/MEG Modeling and Analysis	2231-2274
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PET Modeling and Analysis	2278-2280
Task-Independent and Resting-State Analysis	2281-2357
Motor Behavior	
Brain Machine Interface	2358-2375
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Visuo-Motor Functions	2417-2424
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Wednesday and Thursday Posters

Poster Numbers #3000-4462 (WTh)

- Display Days: Your poster should displayed on your assigned poster board on Wednesday and Thursday.
- Set-Up Time: Please set-up your poster from 8:00 – 9:00 am on Wednesday.
- Poster Stand-By Times:
  - Even numbered posters between #3000-4462 will stand-by and present their poster on Wednesday, June 17 from 12:45 – 14:45.
  - Odd numbered posters between #3000-4463 will stand-by and present their poster on Thursday, June 18 from 12:45 – 14:45.
- Poster Reception: All Wednesday and Thursday poster presenters will have a poster reception on Thursday, June 18 from 16:00 – 17:30.
- Poster Teardown: Wednesday and Thursday presenters should remove their posters by 18:30 on Thursday night.

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Non-invasive Magnetic/TMS	3033-3039
Non-Invasive Stimulation Methods Other	3040-3042
Sonic/Ultrasound	3043
TDCS	3044-3057
TMS	3058-3073
Disorders of the Nervous System	
Addictions	3074-3134
Alzheimer's Disease and Other Dementias	3135-3207
Autism	3208-3257
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Eating Disorders	3301-3306
Epilepsy	3307-3357
Medical illness with CNS impact (e.g. chemotherapy, diabetes, hypertension)	3358-3385
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Genetic Modeling and Analysis Methods	3419-3430
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Reasoning and Problem Solving	3485-3500
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Informatics Other	3528-3533
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Perception and Attention Other	4206-4212
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Perception: Multisensory and Crossmodal	4233-4249
Perception: Pain and Visceral	4250-4284
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Monday, June 15, 2015 and Tuesday, June 16, 2015

* Indicates poster will also be presented during an Oral Session. The oral session number is indicated in parantheses after the poster title.

Information listed, including author affiliations, appear as submitted.

Disorders of the Nervous System

Anxiety Disorders

1000* Modeling effective connectivity in the extended emotion processing network using DCM at 7T, (0-T2)

Ronald Sladky[1], Andreas Hahn[2], Inga-Lisa Stürkat[3], André Hoffmann[1], Georg Kranz[2], Martin Tik[1], Rene Seiger[2], Daniela Pfabigan[3], Rupert Lanzenberger[2], Claus Lamm[3], Christian Windischberger[1]
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1001 The effect of threat on BOLD activity evoked by working memory maintenance and manipulation

Nicholas Balderston[1], Elizabeth Hale[1], Salvatore Torrisi[1], Monique Ernst[1], Christian Grillon[1]
[1]National Institute of Mental Health, Bethesda, MD

1002 Individual Differences in Functional Connectivity Under Sustained Threat of Shock

Janine Bijsterbosch[1,2], Stephen Smith[1], Sonia Bishop[2,1]
[1]FMRIB Centre, Nuffield Department of Clinical Neurosciences, University of Oxford, Oxford, United Kingdom, [2]Department of Psychology and Helen Wills Neuroscience Institute, University of California Berkeley, Berkeley, CA

1003 Tract-based Analysis of White Matter Disruption in PTSD

Emily Dennis[1], Vatche Baboyan[1], Yan Jin[2], Clifford Jack[3], Michael Weiner[4], Paul Thompson[1]
[1]Imaging Genetics Center, Institute for Neuroimaging and Informatics, USC, Los Angeles, CA, [2]Imaging Genetics CeImaging Genetics Centernter, Institute for Neuroimaging and Informatics, USC Keck School of Medicine, Los Angeles, CA, [3]Department of Radiology, Mayo Clinic and Foundation, Rochester, MN, [4]University of California at San Francisco, San Francisco, CA

1004 The cortical correlates of emotional face processing in PTSD: A magnetoencephalographic study

Benjamin Dunkley[1], Marc Lalancette[1], Sam Doesburg[1], Elizabeth Pang[1], Margot Taylor[1]
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1005 Extent of Myelination in the Habenula Correlates with Human Behavior

Benjamin Ely[1], Joo-won Kim[1], Emily Stern[1], Junqian Xu[1]
[1]Icahn School of Medicine at Mount Sinai, New York, NY

1006 Imaging the genetic influence of the 5-HTTLPR polymorphism on the neural anxiety network

Johanna Gechter[1], André Wittmann[2], Carolin Liebscher[1], Florian Schlagenhauf[3], Claudia Gählsdorf[4], Ulrike Lueken[5], Hans-Ulrich Wittchen[5], Bettina Pfleiderer[6], Volker Arolt[7], Tilo Kircher[8], Benjamin Straube[9], Jürgen Deckert[10], Andreas Reif[11], Andreas Ströhle[12]
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1007 Neural correlates of trauma memory recall
Geraldine Gvozdanovic[1], Philipp Staempfli[2], Sarah Schoch[1], Marco Bigica[1], Erich Seifritz[3], Bjoern Rasch[4]
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1008 Oxytocin and neural responses to mortality threat
Shihui Han[1], Dian Yu[1]
[1]Peking University, Beijing, China

1009 Binding potential of 5-HTT in patients with obsessive compulsive disorder during SSRI treatment
Euitae Kim[1], Bo-Hyung Kim[2], Jin Woo Park[3], Jun Soo Kwon[4]
[1]Seoul National University Bundang Hospital, Seoul, Korea, Republic of, [2]Kyung Hee University Hospital, Seoul, Korea, Republic of, [3]Seoul National University Hospital, Seoul, Korea, Republic of, [4]Department of Psychiatry, Seoul National University College of Medicine, Seoul, Korea, Republic of

1010 Self-Face Evaluation and Implicit Self-Esteem in Social Anxiety Disorder
Min-Kyeong Kim[1], Yu-Bin Shin[2], Seung-Koo Lee[3], Jae-Jin Kim[2]
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1011 Neural effects of cognitive behavioral and pharmacotherapy in panic disorder with agoraphobia
Carolin Liebscher[1], André Wittmann[1], Johanna Gechter[1], Florian Schlagenhauf[1], Ulrike Lueken[2], Jens Plag[1], Bettina Pfleiderer[3], Alexander Gerlach[4], Tilo Kircher[5], Hans-Ulrich Wittchen[2], Volker Arolt[6], Andreas Ströhle[1]
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1012 Neural mechanisms of placebo anxiolysis
Benjamin Meyer[1], Nenad Polomac[2], Matthias Ertl[3], Kenneth Yuen[4], Christian Büchel[5], Christoph Mulert[6], Raffael Kalisch[7]
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1013 Brain response to phobic pictures in spider, blood and social phobics: A combined EEG/fMRI study
Jaroslaw Michalowski[1], Dawid Droździel[1], Katarzyna Jednoróg[2], Artur Marchewka[3], Jacek Matuszewski[1]
[1]University of Warsaw, Warsaw, Poland, [2]Nencki Institute of Experimental Biology, Warszawa, Poland, [3]The Nencki Institute of Experimental Biology, Warszawa, Poland

1014 MPFC activation during feedback processing is modulated by feedback source in social anxiety
Jutta Peterburs[1], Carolin Sandrock[2], Thomas Straube[3]
[1]University of Münster, Münster, Germany, [2]University of Jena, Germany, Germany, [3]University of Muenster, Muenster, Germany

1015 Patterns of functional connectivity within the reward circuitry predict future outcome in youth
Liana Portugal[1], Maria Joao Rosa[2], Anil Rao[2], Genna Bebko[3], Michele Bertocci[3], Mary Fristad[4], Robert Kowatch[5], Eugene Arnold[6], Eric Youngstom[7], Scott Holland[8], Mirtes Pereira[1], Leticia De Oliveira[9], Mary Phillips[10], Janaina Mourao-Miranda[11]
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1016 Static and Dynamic Functional Connectivity Impairments in Soldiers with PTSD and PCS

D Rangaprakash[1], Gopikrishna Deshpande[1,2], Thomas Daniel[2], Adam Goodman[2], Jeffrey Katz[1,2], Nouha Salibi[1,3], Thomas Denney[1,2], Michael Dretsch[4,5]
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1017 Neural Correlates of Response Inhibition Improved by Threat of Shock

Salvatore Torrisi[1], Oliver Robinson[2], Katherine O'Connell[1], Andrew Davis[1], Nicholas Balderston[1], Monique Ernst[1], Christian Grillon[1]
[1]National Institute of Mental Health, Bethesda, MD, [2]Institute of Cognitive Neuroscience at UCL, London, United Kingdom

1018 Opioid System Contributes to Anxiety by Modulating The Functional Connectivity of the Amygdala

Lauri Tuominen[1], Enrico Glerean[2], Tiina Saanijoki[3], Sirius Vuorikoski[2], Kari Kalliokoski[3], Jussi Hirvonen[4], Lauri Nummenmaa[5]
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1019 Early changes in emotion appraisal activation of PTSD patients after MVC and involvement of mTBI

Xin Wang[1], Hong Xie[1], Andrew Cotton[1], Marijo Tamburrino[1], Kristopher Brickman[1], Jon Elhai[1], Samuel McLean[2], Eric Ferguson[3], Israel Liberzon[4]
[1]University of Toledo, Toledo, OH, [2]University of North Carolina at Chapel Hill, Chapel Hill, NC, [3]ProMedica Toledo Hospital, Toledo, OH, [4]University of Michigan, Ann Arbor, MI

1020 Attention Training Improves Inhibition Function in Social Anxiety Individuals: An ERP Study

Yi Wang[1], Xuebing Li[1]
[1]Institute of Psychology, Chinese academy of sciences, Beijing, China

1021 Long-term effects of acute event experiences on prefrontal-limbic system in the healthy adult

Dong-Tao Wei[1,2,3], Qing-Lin Zhang[1], Xue Du[1], Jiang Qiu[2,1]
[1]Department of Psychology, Southwest University, Chongqing, China, [2]Key laboratory of cognition and personality, Ministry of Education, Chongqing, China, [3]Post-doctoral station of mathematics, Chongqing, China

1022 Effects of cognitive-behavioral therapy on neural activations in panic disorder and agoraphobia

André Wittmann[1], Florian Schlagenhauf[1], Anne Guhn[1], Lueken Ulrike[2], Meline Stoy[1], Felix Bermpohl[1], Thomas Fydrich[3], Bettina Pfleiderer[4], Alexander Gerlach[5], Benjamin Straube[6], Hans-Ulrich Wittchen[2], Volker Arolt[7], Andreas Heinz[1], Tilo Kircher[6], Andreas Ströhle[1]
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1023 Dysfunction of ventrolateral prefrontal cortex underlying social anxiety disorder

Chika Yokoyama[1,2], Hisanobu Kaiya[1], Hiroaki Kumano[1,3], Masaru Kinou[4], Tadashi Umekage[1,5], Shin Yasuda[1,6,7], Kunio Takei[1,8], Masami Nishikawa[1,9], Tsukasa Sasaki[1,10], Yui Kaneko[1,11], Shin-ichi Suzuki[1,3], Hisashi Tanii[2], Yuji Okazaki[12]
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1024 Role of anterior cingulate cortex in fMRI neurofeedback training of amygdala in veterans with PTSD

Han Yuan[1], Raquel Phillips[1], Vadim Zotev[1], Masaya Misaki[1], Chung-Ki Wong[1], Brent Wurfel[1], Matthew Meyer[1,2], Frank Krueger[3,1], Matthew Feldner[4], Jerzy Bodurka[1,5]
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1025 RtfMRI Neurofeedback with Concurrent EEG in Combat-related PTSD: EEG Measures of Treatment Response
Vadim Zotev[1], Raquel Phillips[1], Masaya Misaki[1], Chung Ki Wong[1], Brent Wurfel[1], Matthew Meyer[1,2], Frank Krueger[3,1], Matthew Feldner[4,1], Jerzy Bodurka[1,5]
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Disorders of the Nervous System

Bipolar Disorders

1026* A comprehensive probabilistic tractography study in sibling pairs discordant for bipolar disorder, (O-M2)
Emma Sprooten[1,2,3], Emma Knowles[1,2], David Reese Mckay[1,2], Samuel Mathias[1,2], Jennifer Barrett[2], Margaret Brumbaugh[2], Stefanie Landau[2], Lindsay Cyr[2], Peter Kochunov[4], Anderson Winkler[5], Godfrey Pearlson[1,2], David Glahn[1,2]
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1027 Manic episodes are related to progressive cortical changes in frontal brain regions
Christoph Abé[1], Carl-Johan Ekman[2], Carl Sellgren[2], Predrag Petrovic[2], Martin Ingvar[1], Mikael Landén[3]
[1]Karolinska Institutet, Stockholm, Sweden, [2]Karolinska Institutet, Stockholm, Stockholm, Sweden, [3]Sahlgrenska Academy at the Gothenburg, Gothenburg, Sweden

1028 Volumes and Functional Connectivity of Auditory Cortices in Schizophrenia and Bipolar Disorder
Murat Ilhan Atagün[1], Burak Akın[2], Oktay Algin[3], Elif Şıkoğlu[4], Serdar Can[1], Semra Ulusoy-Kaymak[3], Ali Çayköylü[1], Constance Moore[5], Mary Phillips[6], Dost Öngür[7]
[1]Yıldırım Beyazıt University, Faculty of Medicine, Ankara, Turkey, [2]University of Freiburg Medical Center, Department of Radiology, Medical Physics, Freiburg, Germany, [3]Ankara Atatürk Training and Education Hospital, Ankara, Turkey, [4]University of Massachusetts, Center for Comparative Neuroimaging, Worcester, MA, [5]University of Massachusetts Medical School, Worcester, MA, [6]University of Pittsburgh, Medical School, Pittsburgh, PA, [7]Harvard Medical School, McLean Hospital, Boston, MA

1029 Shape modeling reveals subcortical differences in large cohort of bipolar disorder subtypes
Christopher Ching[1], Boris Gutman[2], Derrek Hibar[2], Neda Jahanshad[2], Benson Mwangi[3], Jair Soars[3], Paul Thompson[2]
[1]Interdepartmental Neuroscience Graduate Program, UCLA, Imaging Genetics Center USC, Los Angeles, United States, [2]University of Southern California Imaging Genetics Center, Marina del Rey, CA, [3]University of Texas Health Science Center at Houston, Houston, TX

1030 Cortical Thickness and Surface Area Abnormalities in Bipolar Disorder
Derrek Hibar[1], Lars Westlye[2], Paul Thompson[3], Ole Andreassen[4], ENIGMA Bipolar Disorder Working Group[5]
[1]University of Southern California, Los Angeles, CA, [2]Center for the Study of Human Cognition, Department of Psychology, University of Oslo, Oslo, Norway, [3]Keck School of Medicine of USC, Los Angeles, CA, [4]University of Oslo, Oslo, Norway, [5]International, Los Angeles, CA

1031 Distinct Functional Connectivity Abnormalities are Present in Pediatric Bipolar Disorder and ADHD
Melissa Lopez-Larson[1], Lubdha Shah[1], Jeffrey Anderson[1]
[1]University of Utah, Salt Lake City, UT

1032 Fronto-limbic tractography and psychotic symptoms in bipolar disorder: a sibling study
Emma Sprooten[1,2,3], Emma Knowles[1,2], David Reese Mckay[1,2], Samuel Mathias[1,2], Jennifer Barrett[2], Margaret Brumbaugh[2], Stefanie Landau[2], Lindsay Cyr[2], Peter Kochunov[4], Anderson Winkler[5], Godfrey Pearlson[1,2], David Glahn[1,2]
[1]Department of Psychiatry, Yale University, New Haven, CT, [2]Olin Neuropsychiatric Research Center, Hartford, CT, [3]Department of Psychiatry, Icahn School of Medicine at Mount Sinai, New York, NY, [4]Maryland Psychiatric Research Center, Baltimore, MD, [5]University of Oxford, Oxford, United Kingdom

1033 Differential Effects of Quetiapine & Lithium Treatment on Brain Biochemistry in First Episode Mania
Chao Suo[1], Michael Berk[2], Rothanthi Daglas[3], Orwa Dandash[1], Patrick McGorry[4], Ellen Stavrinos[1], Murat Yücel[1], Alex Fornito[1], Christos Pantelis[5]
[1]Monash University, Melbourne, Australia, [2]Deakin university, Geelong, Australia, [3]University of Melbourne, melbourne, Australia, [4]University of Melbourne, Melbourne, Australia, [5]Melbourne Neuropsychiatry Centre, Department of Psychiatry, the University of Melbourne, Melbourne, Australia

1034 Affective lability in youth at risk for bipolar disorder predicts neural response to familiar faces
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1035 Two patterns of anterior insular functional connectivity in bipolar disorder and schizophrenia
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1036 Functional Connectivity during Self-reflection in Bipolar Disorder
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Disorders of the Nervous System

Depressive Disorders

1037* Nucleus Accumbens Responses to Gain and Loss Revealed Symptom Subtypes of Major Depressive Disorder, (0-M2)
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1038* Hippocampal subfield analysis to compare the depression and neurodegeneration spectrum, (O-M2)
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1039 Effects of Quetiapine XL on Amygdala Activation and Connectivity in Anxious Depression:an fMRI Study
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1040 Heightened aversion to risk and loss in depressed patients with a history of suicide attempt
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1041 The relationship between somatic and cognitive-affective depression symptoms and cognitive control
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1042 Voxel Based Morphometry Analysis of the Cerebellum in Healthy and Depressed Subjects
Yoon-Hee Cha[1,2], Hideo Suzuki[1], Diamond Urbano[1], Masaya Misaki[1], Jerzy Bodurka[1,3]
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1043 A neuroimaging study of adolescent Irritability and its relationship with psychiatric disorders
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1044 Abnormal neural activity in major depression: An fMRI study of emotional and color-word Stroop tasks

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1045 Magnetization Transfer Imaging of Suicidal Patients with Major Depressive Disorder

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1046 Altered amygdala subregional functional connectivity due to depression recovered after ECT treatment

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1047 Disrupted white matter connectivity in dyslexic children: a multivariate pattern analysis

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1048 A Spectroscopic Approach to Diagnosing Depression: Local Metabolism Meets Functional Connectivity

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1049 Interferon-α induced fatigue is predicted by acute changes in stratal magnetisation transfer (qMT)

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1050 A Resting-state fMRI Research about Traditional Chinese Medicine Syndrome Types of Major Depression

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1051 Brain Grey Matter Alterations in First-Episode Medication-Free Patients with MDD: a Meta-analysis

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1052 Depressive ruminations and emotional control circuit – an EEG localization and connectivity study

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1053 Decreased insula-salience network functional connectivity indicates treatment resistant depression
Hanneke Geugies[1,2], Esther Opmeer[2], Nic van der Wee[3], André Aleman[2], Brenda Penninx[4], Dick J. Veltman[4], Robert Schoevers[1], Henricus Ruhé[1,2]
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1054 Region-specific alterations in large-scale networks differentiate unipolar and bipolar depression
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1055 An fMRI study of social interactions in depression using behavioral economic paradigms
Victoria Gradin[1], Alfonso Pérez[1], Jennifer MacFarlane[2], Ian Cavin[2], Gordon Waiter[3], Jan Engelmann[4], Barbara Dritschel[5], Andrés Pomi[1], Keith Matthews[6], Douglas Steele[6]
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1056 Neurobiological signatures of depression in functional brain networks revealed by naturalistic fMRI
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1057 Effects of repetitive TMS on Major Depressive Disorder: an ASL study of working memory
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1058 Altered Amygdala and IFG Activation during an Emotional Stop Signal Task in Adolescent Depression
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1059 Abnormal Resting-State Networks in Adolescent Depression: A Graph Analysis
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1060 Abnormal Structural Networks in Major Depressive Disorder with Self-harm: A Connectome Analysis
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1061 Structure of mouse brain in stress-induced depression and recovary with stem cell-conditioned medium
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1062 Aberrant striato-frontal connectivity in recurrent major depressive disorder
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1063 Abnormal Volume and Shape of Brain Structures Characterize Major Depressive Disorder with Self-harm
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1064 Effects of NMDA antagonism on striatal functional connectivity in healthy subjects
Meng Li[1], Marie Wölfer[2], Liliana Demenescu[3], Anton Lord[4], Walter Martin[5]
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1065 Brain GABAergic Alterations in Major Depressive Disorder: A Meta-analysis of 1H-MRS Studies
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1066 Impaired rich club connectivity in patients with major depressive disorder
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1067 Altered spontaneous neuronal activity in the default mode network of recurrent depression
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1068 The Core Neural Mechanisms underlying Depression Disorder: A Meta-analysis of fMRI Studies
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1069 Hippocampal and caudate volumes in relation to mRNA expression levels in Major Depressive Disorder
Siqi Ma[1], Hideo Suzuki[2], Julie Marino[3], Kent Teague[3,4,5], Masaya Misaki[2], Teresa Victor[2], Jonathan Savitz[2,6], Brett McKinney[6], Wayne Drevets[2,7], Jerzy Bodurka[2,8]
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1070 Aberrant microstructural white matter is associated with the number of episodes in depression
Chun Meng[1], Josef Bäuml[2], Hans Förstl[2], Valentin Riedl[3], Felix Brandl[4], Martin Scherr[5], Dirk Schwerthoffer[5], Claus Zimmer[6], Afra Wohlschläger[7], Christian Sorg[8]
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1071 Neural Predictors of Escitalopram Drug Response in Major Depressive Disorder
Bernhard Meyer[1], Ulrich Rabl[2], Lucie Bartova[2], Ana Popovic[2], Julia Huemer[2], Christian Windischberger[3], Harald Sitte[2], Siegfried Kasper[4], Harald Esterbauer[2], Ewald Moser[5], Lukas Pezawas[6]
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1072 Functional Neuroimaging of Major Depressive Disorder (MDD) in Youth: A Meta-Analysis
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1073 Aberrant default mode resting state connectivity in patients with remitted psychotic depression

Nicholas Neufeld[1,2,3], Benoit Mulsant[2,1], Arash Nazeri[2,1], Anne Wheeler[2,1], Alastair Flint[4,1], Barnett Meyers[5], Anthony Rothschild[6], Ellen Whyte[7], Colin Hawco[2,1], Jonathan Downar[4,1], Aristotle Voineskos[2,1]
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1074 Neurochemical changes underlying response to ECT in major depression

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1075 Alterations in rs-fMRI connectivity in monozygotic twins discordant for sub-clinical depression

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1076 Subcortical Volumes Differentiate Among Affective Disorders

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1077 Structural Brain Alterations in Major Depression: findings from the ENIGMA Major Depressive Disorder

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1078 Effective connectivity of amygdala sub regions and OFC in acute and remitted MDD patients at 7T

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1079 Differential resting-state connectivity in depressed adolescents before and after psychotherapeutic

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1080 Network analysis of cortico-cortical structural connectivity in adolescent depression

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1081 Structural connectivity and response to ketamine therapy in major depression patients: A pilot study

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1082 Anterior cingulate and amygdala response to subliminal positive stimuli in major depressive disorder

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1083 Fronto-parietal function during task and rest in young people with ADHD and Dysthymic Disorder
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1084 Aberrant Global and Regional Topologies in Major Depressive Disorder Revealed by Cortical Thickness
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1085 Disrupted functional brain connectome in patients with remitted late-onset depression
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1086 Brain activity in depressed patients with different TCM Syndromes: a task fMRI study
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1087 Increased Local Efficiency in Major-to-Minor Depression Revealed by Resting- State fMRI
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1088 The hippocampal shape abnormality and serum cortisol levels in major depressive disorder
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1089 Network centrality Predict Early Improvement after Two-week medication for Major Depressive Disorder
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1090 Increased intersubject variability in brain activation responding to movie scenes in depression
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1091 Repetitive rtfMRI Amygdala Neurofeedback Training Changes Amygdala Functional Connectivity in MDD
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1092 Brain gray matter alterations in first episode depressions: A meta-analysis of whole-brain studies
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1093 Depression alters the functional connectivity response to the emotional anticipation
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1094 Effects of Real-time fMRI Neurofeedback of the Amygdala Specific to Major Depressive Disorder
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Disorders of the Nervous System

Other Psychiatric Disorders

1095 * Aberrant functional connectivity of anterior versus posterior putamen in ADHD, (O-M2)
Marianne Oldehinkel[1,2], Christian Beckmann[1,2,3], Erik van Oort[2,4], Jan Buitelaar[1,5], Maarten Mennes[2]
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1097 Cortical thickness and cognition in a population-based sample of children with behavioral problems
Laura Blanken[1], Henning Tiemeier[2], Sabine Mous[3], Ryan Muetzel[4], Hanan El Marroun[5], Frank Verhulst[6], Tonya White[7]
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1098 Immature resting-state functional connectivity in children with ADHD
Dienke Bos[1], Chantal Vlaskamp[1], Bob Oranje[1], Janna van Belle[1], Serge A. Rombouts[2], Sarah Durston[1]
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1099 The Distinct Functional-Connectivity Features of Combined and Inattentive Subtypes of ADHD
Lizhou Chen[1], Qi Liu[2], Ming Zhou[2], Xinyu Hu[3], Ning He[4], Qiyong Gong[5], Xiaoqi Huang[6]
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1100 Effects of S-Citalopram On Emotional Face Processing In Intermittent Explosive Disorder
Henk Cremers[1], Emil Coccaro[1], Royce Lee[1], Sarah Keedy[1], Luan Phan[2]
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1101 The Trait and State Frontal EEG Asymmetry in Women With and Without Premenstrual Syndrome
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1102 Inhibitory control and visual processing as endophenotypes in ADHD: A sibling study using fMRI
Li-Ying Fan[1,2,3], Chi-Yung Shang[2], Wen-Yih Isaac Tseng[1,4,5,6], Susan Shur-Fen Gau[2,3,4,5], Tai-Li Chou[3,4,5]
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1103 Multi-modal linked ICA of a large Attention-Deficit Hyperactivity Disorder cohort
Winke Francx[1], Alberto Llera[2], Marcel Zwiers[1,2], Jaap Oosterlaan[3], Barbara Franke[1], Pieter Hoekstra[4], Catharina Hartman[5], Maarten Mennes[6], Jan Buitelaar[1,2], Christian Beckmann[1,7,2]
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1104 Subcortical volumes across the life span in ADHD: an ENIGMA Working Group
Barbara Franke[1], Janita Bralten[1], Kimm van Hulzen[1], Maarten Mennes[2], Marcel Zwiers[3], Lizanne Schweren[4], The ENIGMA ADHD Working Group[5], Derrek Hibar[6], Paul Thompson[7], Martine Hoogman[1]
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1105 Neural processing of social rejection in adolescents with non-suicidal self-injury – an fMRI-study
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1106 Inhibitory control in Borderline Personality Disorder
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1107 Abnormalities of Cortical Thickness and Folding in Adolescent-Onset Conduct Disorder
Bingsheng Huang[1], Yali Jiang[2], Xiao Guo[2], Xiaocui Zhang[2], Xiongzhao Zhu[2], Jibiao Zhang[2], Junling Gao[3], Xiang Wang[2], Weijun Situ[4], Shuqiao Yao[2]
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1108 The microstructural properties of abnormal anatomical connectivity in children with ADHD
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1109 Altered resting-state dorsolateral prefrontal cortex functional connectivity in youth with ADHD
Jae-Won Kim[1], Greg Siegle[2], Kyung Hwa Lee[2], Thomas Kraynak[2], Amanda Collier[2], Soon-Beom Hong[1], BoAh Kim[1], In-Chan Song[1], Chul-Ho Sohn[1], Neal Ryan[2]
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1110 Distinct patterns of default network derived from multi-echo resting-state fMRI in adults with ADHD
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1111 Response inhibition neural activity and impulsivity in 22q11.2 Deletion Syndrome vs. idiopathic ADHD
Caroline Montojo[1], Eliza Congdon[1], Lin Hwang[1], Maria Jalbrzikowski[2], Leila Kushan[1], Therese Vesagas[1], Rachel Jonas[1], Carrie Bearden[1]
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1112 White matter integrity in children with behavioral dysregulation: A population-based imaging study
Ryan Muetzel[1], Laura Blanken[2], Jan van der Ende[3], Frank Verhulst[4], Henning Tiemeier[3], Tonya White[5]
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1113 Brain-Volume Variation in Children with Perinatally Acquired HIV using Tensor-Based Morphometry
Talia Nir[1], Neda Jahanshad[1], Arvin Saremi[1], Wasana Prasitsuebsai[2], Akash Desai[3], Stephanie Catella[4], Sukalaya Lerdlum[5], Pannee Visrutaratna[5,6], Kanchana Pruksakaew[2], Linda Aurpibul[7], Thanyawee Puthanakit[5,8], Stephen Kerr[9,2], Paul Thompson[1], Victor Valcour[10], Jintanat Ananworanich[2]
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1114 The role of social emotions in women with borderline personality disorder
Hella Parpart[1], Petra Michl[1], Johann Mueller[1], Marco Paolini[2], Janusch Blautzik[2], Maximilian Reiser[2], Peter Falkai[1], Kristina Hennig-Fast[3,1]
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1115 Categorical and dimensional neural correlates of ADHD; a functional connectivity study
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1116 The effect of dopaminergic medication on reward prediction error and novelty processing in ADHD
Arjun Sethi[1], Mara Cercignani[2], Hugo Critchley[3], Duncan Fowler[3], Neil Harrison[4], Sanjay Jain[5], Valerie Voon[6]
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1117 Structural brain connectivity and graph theory in adult attention-deficit/hyperactivity disorder
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1118 Abnormal asymmetry in frontostriatal white matter in children with ADHD
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1119 Multi-modal functional connectivity in adults with a history of childhood ADHD
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1120 Sexual attribution bias in women with borderline personality disorder
Carmen Thoma[1], Maria Agthe[2], Janusch Blautzik[3], Marco Paolini[3], Moritz Scharm[1], Idil Demircapa[1], Richard Musil[1], Dorothea Huber[4], Maximilian Reiser[3], Peter Falkai[1], Kristina Hennig-Fast[5]
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1121 Sex-specific association between psychopathic traits and cortical thickness in youth
Yaling Yang[1], Alina Arakelian[2], Laura Baker[3], Shantanu Joshi[4]
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1122 A voxel-based morphometric MRI study in patients with borderline personality disorder
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Disorders of the Nervous System

Parkinson's Disease and Movement Disorders

1123 * Functional Connectivity of the aMCC and its Relation to Akinesia in Parkinson's Disease, (O-T1)

Lukas Hensel[1], Felix Hoffstaedter[1,2], Julian Caspers[1,3], Christian Mathys[1], Jochen Michely[1,4], Julia Heller[5,6], Claudia R Eickhoff[1,7], Kathrin Reetz[1,5,6], Martin Südmeyer[2,8], Gereon R Fink[1,4], Alfons Schnitzler[2,8], Christian Grefkes[1,4], Simon Eickhoff[1,2]
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1124 * Chronic Cortical and Subcortical Recordings Reveal Narrowband 70 Hz Activity During Dyskinesias, (O-T1)

Nicole Swann[1], Coralie De Hemptinne[1], Svjetlana Miocinovic[1], Salman Qasim[1], Sarah Wang[1], Nathan Ziman[1], Jill Ostrem[1], Marta San Luciano[1], Nicholas Galifianakis[1], Philip Starr[1]
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1125 * Altered connectivity and gray matter atrophy in the Multiple-Demand Network in Parkinson's disease (O-TH1)

Christian Mathys[1], Felix Hoffstaedter[2,3], Julian Caspers[1,2], Martin Südmeyer[3,4], Lukas Hensel[2], Claudia Eickhoff[2,5], Kathrin Reetz[6], Christian Grefkes[2,7], Bernd Turowski[1], Alfons Schnitzler[3,4], Veronika Müller[2,3], Simon Eickhoff[2,3]
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1126 Aversive stimuli exacerbate defensive behavior in motor conversion disorder

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1127 Altered striatal-attentional network interaction in Parkinson disease

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1128 Contribution of the Substantia Nigra to Motor Sequence Learning in Healthy Elderly and PD Patients

Arnaud Bore[1], Ovidiu Lungu[2], Catherine Duchesne[3], Alexandra Nadeau[3], Cornelius Classen[3], Vincent Provencher[3], Anne-Louise Lafontaine[4], Freja Gheysen[5], Julien Doyon[2]
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1129 Dynamic properties of the Huntington's disease structural connectome: A longitudinal study

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1130 Altered functional connectivity with posterior but not anterior right DLPFC in Parkinson's disease

Julian Caspers[1], Felix Hoffstaedter[2], Christian Mathys[1], Martin Südmeyer[1], Edna-Clarisse Cieslik[3], Christian Hartmann[4], Claudia Eickhoff[5], Kathrin Reetz[5], Bernd Turowski[1], Alfons Schnitzler[3], Simon Eickhoff[3]
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1131 The Association between Autonomic Impairment and Structural Deficit in Parkinson's disease
Meng-Hsiang Chen[1], Cheng-Hsien Lu[2], Pei-Chin Chen[3], Chih-Cheng Huang[4], Hsiu-Ling Chen[3], I-Hsiao Yang[5], Wei-Che Lin[3]
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1132 Fatigue in Parkinson's disease: the evidence of regional cerebral glucose metabolism abnormalities
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1133 Brain mediators of systemic oxidative stress on perceptual impairments in Parkinson's disease
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1134 PD patients show asymmetric coherence between left and right leg EMG and motor EEG during walking
Jeng-Ren Duann[1], Jung-Chih Chou[1], Hui-Chun Huang[1], Hsiu-Chen Lin[1], Bey-Ling Liu[1], Ming-Kuei Lu[1], Chon-Haw Tsai[1], Jin-Chern Chiou[2]
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1135 Mesolimbic system in Parkinson's disease: Degeneration of Substantia nigra – Accumbens connectivity
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1136 Effect of Levodopa on Resting State Functional Connectivity in Parkinson's Disease
Nela Elfmarková[1,2], Martin Gajdoš[1], Martina Mračková[1,2], Michal Mikl[1], Irena Rektorova[1,2]
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1137 Increased resistance to distraction and its neurofunctional correlates in Parkinson's disease
Ricarda Evens[1], Yuliya Stankevich[1], Mareike Fauser[2], Oliver Riedel[3], Alexander Storch[2], Ulrike Lueken[4]
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1138 Classification of symptom-side predominance in Parkinson's disease
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1139 Callosal integrity's associations with mobility and cognitive function in frontal gait disorders
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1140 Frequency specifity of causal connections in Parkinson's disease
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1141 Changes in the Nigrosome-1 Correlate with Phenotypic Expressions of Parkinson's Disease
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1142 Network-level analysis of cortical thickness in Parkinson's disease
Amanmeet Garg[1], Pradeep Reddy Raamana[1], Lei Wang[2], Martin McKeown[3], Mirza Faisal Beg[1]
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1143 Resting and task-based functional neuroimaging of adductor spasmodic dysphonia
Elisa Golfinopoulos[1], Shanqing Cai[2], Anne Blood[3], James Burns[3], J. Pieter Noordzij[4], Frank Guenther[1]
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1144 Neurocomputational modeling of impaired sensory feedback control in spasmodic dysphonia
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1145 Increased functional connectivity as neural hypercompensation in presymptomatic Huntington disease
Heiko Graf[1], Patrick Weydt[1], Coraline Metzger[2], Kathrin Malejko[1], Birgit Abler[3]
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1146 Motor symptoms correlate with decreased connectedness in sensorimotor network in Parkinson disease
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1148 Neural correlates of ataxia severity in Spinocerebellar Ataxia Type 7
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1149 Upward functional integrity of the brainstem: A potential marker for Parkinson's disease pathology
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1150 Surface-based analysis revealed cortical abnormalities in depressed Parkinson's disease patients
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1151 Abnormal resting network in progressive supranuclear palsy
Robert Jech[1], Karsten Mueller[2], Cecilia Bonnet[1], Jaroslav Tintera[3], Ondrej Bezdicek[1], Jaromir Hanuska[1], Petr Dusek[1], Olga Matouskova[4], Tereza Serranova[1], Jan Roth[1], Evzen Ruzicka[1]
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1152 A Statistical Approach in Human Brain Connectome of Parkinson Disease Using Network Based Statistics
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1153 Graph Theoretical Analysis of Structural Brain Connectivity of Parkinson's Disease Patients
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1154 Different image patterns reflecting cognitive decline rate in Parkinson's disease
Woo Jung Kim[1], Na-Young Shin[2,3], Hyun Seok Choi[4], Sanhoon Han[5,3], Yeon Soon Shin[5,3], Phil Hyu Lee[6,3], Moon Kyung Sunwoo[7], Seung-Koo Lee[8,3]
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1155 Effects of bimodal noninvasive brain stimulation on freezing of gait and neural network connectivity
Min-Su Kim[1], Chang-hyun Park[1], Won Hyuk Chang[1], Jin Hwan Cho[1], Jin Young Youn[1], Sung Tae Kim[1], Yun Kwan Kim[2], Ahee Lee[3], Yun-Hee Kim[1]
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1156 Influences of L-dopa on functional connectivity of the brain network in Parkinson disease patients
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1157 Rhythmic auditory stimulation therapy modifies cortical activation in patients with multiple scleros
Katherine Koenig[1], Mark Lowe[1], Darlene Stough[2], Lisa Gallagher[3], Dwyer Conklyn[4], Francois Bethoux[2]
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1158 Structural Network Analysis in Parkinson's Disease
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1159 Changes in cortical network connectivity in Parkinson's Disease with mild cognitive impairment
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1160 Neural Mechanism of Rapid Eye Movement Sleep Behavior Disorder in Parkinson Disease
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1161 Association between Striatocortical Functional Connectivity and SPECT Imaging in Parkinson's Disease
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1162 Decreased resting-state interhemispheric functional connectivity in Parkinson's disease
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1163 Dopaminergic and serotonergic systems are both disrupted in drug-naive de novo Parkinson's disease
Audrey Maillet[1], Elise Métereau[1], Hélène Klinger[2], Eugénie Lhommée[3,4], Emmanuelle Schmitt[3,4], Amélie Bichon[3,4], Pierre Pelissier[3,4], Catherine Caire[2], Valérie Fraix[3,4], Didier Le Bars[2,5,6], Emmanuel Broussolle[1,2,7], Paul Krack[3,4], Stéphane Thobois[1,2,7]
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1164 Resting state functional connectivity associated with speech dysfunction in Parkinson's disease
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1165 Disentangling motor planning & motor execution in unmedicated early stage Parkinson's Disease: fMRI
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1166 Early dysfunction of fronto-parietal praxis networks in Parkinson's Disease
Eva Matt[1], Thomas Foki[1], Florian Fischmeister[1], Walter Pirker[2], Dietrich Haubenberger[2], Jakob Rath[1], Johann Lehrner[2], Siegfried Trattnig[3], Eduard Auff[2], Roland Beisteiner[1]
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1167 White matter lesions contribute to future dementia in Parkinson's disease
Tracy Melzer[1,2], Daniel Myall[1], Leslie Livingston[1,2], Kyla Wood[1,3], Toni Pitcher[1,2], Richard Watts[4], Ross Keenan[1,5], Michael MacAskill[1,2], John Dalrymple-Alford[1,2,3], Tim Anderson[1,2,6]
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1168 Side Effect of Dopamine Replacement Therapy and Deep Brain Stimulation in Parkinson's Disease
Martial Mermillod[1,2], Laurie Mondillon[3], Isabelle Rieu[4], Damien Devaux[3], Patrick Chambres[3], Catherine Auxiette[3], Hélène Dalens[5], Coulangeon Louise Marie[5], Isabelle Jalenques[6], Durif Franck[4]
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1169 Sub cortical involvement in voluntary and in-voluntary movements
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1170 Reorganization of network for Wisconsin Card Sorting Task - An fRMI study with Parkinson's disease
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1171 Function of basal ganglia in bridging cognitive and motor modules to perform an action
Atsuko Nagano-Saito[1], Kristina Martinu[1], Oury Monchi[2]
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1172 Altered resting state functional connectivity patterns in Parkinson's disease
Chang-hyun Park[1], Min-Su Kim[1], Won Hyuk Chang[1], Jin Hwan Cho[1], Jin Young Youn[1], Sung Tae Kim[1], Yun Kwan Kim[2], Ahee Lee[3], Yun-Hee Kim[1]
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1173 Healthy functional organisation of the brain predicts atrophy vulnerability in Huntington's disease
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1174 Association of olfactory scores and white matter in Parkinson's disease using maximum density paths
Gautam Prasad[1], Adam Mezher[2], Conor Corbin[3], Paul Thompson[4]
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1175 Simplifying the connectome for Alzheimer's disease and Parkinson's disease classification
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1176 Dissociation between functional and structural brain changes in PD with mild cognitive impairment
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1177 Grey matter alterations in Pantothenate Kinase-Associated Neurodegeneration (PKAN)
Rea Rodriguez-Raecke[1], Rafael Fermin- Delgado[2], Pedro Roa-Sanchez[2], Herwin Speckter[3], Eddi Perez-Then[3], Jairo Oviedo[3], Peter Stoeter[4]
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1178 Impairments of Precuneus in Non-demented and Non-depressed Parkinson's Disease with Apathy
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1179 Fiber tract atrophy in idiopathic Parkinson's disease
Frank Skidmore[1], Yuliang Liu[1], Yuliang Liu[1], Jon Marstrander[1], Thomas Anthony[1], Gary Cutter[1], David Standaert[1]
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1180 Role of substantia nigra in motor learning in Parkinson's disease
Jitka Sojkova[1], Barbara Bendlin[1], Ozioma Okonkwo[1], Maritza Dowling[1], Jennifer Oh[1], Rebecca Leda[1], Alexandra Wey[1], Erika Starks[1], Christopher Nicholas[1], Sterling Johnson[1], Catherine Gallagher[1]
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1181 Smaller amygdala is associated with anxiety in Parkinson's disease: a combined Freesurfer-VBM study
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1182 Functional deterioration of olfactory cortex in early-stage Parkinson's disease
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1183 Altered Short-term Regional Homogeneity Pattern after Stereotactic Thalamotomy of Parkinsons Disease
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1184 Parkinson's disease targets intrinsic brain networks
Yashar Zeighami[1], Miguel Ulla[2,1], Mahsa Dadar[3], Yasser Iturria-Medina[1], Kevin Larcher[1], Alan C. Evans[1], D. Louis Collins[1], Alain Dagher[1]
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1185 Dopaminergic changes in Functional Connectivity during a Working Memory Task in Parkinson's Disease
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1186 Resting-State Brain Networks modulated by levodopa in Parkinson's Disease
Miao Zhong[1], Biao Huang[2], Wenjie Jiang[1], Wanqun Yang[2], Xiaojin Liu[1], Junjing Wang[1], Jiabao Lin[1], Qing Ma[1], Ruiwang Huang[1]
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1187 The relationships of cortical morphology with motor and depressive symptoms in Parkinson's disease
Shuqin Zhou[1], Xiaopeng Song[2], Long Qian[3], Hu Xiao[4], Weiguo Liu[4], Xuemei Fu[1], Li Zheng[5], Yijun Liu[6,1]
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Disorders of the Nervous System

Research Domain Criteria studies (RDoC)

1188 A multi-modal approach to deconstructing a standard clinical measure of processing speed
Nicolas Langer[1], Enitan Marcelle[2], Erica Ho[2], Cameron Craddock[2], Kenneth Schuster[2], Michael Milham[3], Simon Kelly[4]
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1189 Mood dysregulation, sex and sex hormones predict stress response circuitry deficits
Klara Mareckova[1,2], Laura Holsen[2], Roee Admon[3], Susan Whitfield-Gabrieli[4], Goldstein Jill[2]
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1190 Reduced brain volume in emotional dysregulation blurs the line between health and disorder
Predrag Petrovic[1], Carl Johan Ekman[1], Armita Golkar[1], Martin Ingvar[1], Anette Johansson[1], Johanna Klahr[1], Arne Öhman[1], Andreas Olsson[1], Göran Rydén[1], Carl Sellgren[1], Lars Tigerström[1], Mikael Landen[1]
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1191 Common neuroanatomical markers of posttraumatic stress disorder and depression in Veterans
Tong Sheng[1,2], Jordan Nechvatal[1,2], Linda Isaac[1,2], Keith Main[1,2], Salil Soman[1,3], Ansgar Furst[1,2], J Fairchild[1,2], J Ashford[1,2], Maheen Adamson[1,2]
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1192 Dimensional Analysis of Executive Dysfunction Comorbidity in ASD and ADHD children
Xiaozhen You[1,2], Megan Norr[3], Eric Murphy[2], William Gaillard[1], Lauren Kenworthy[1], Chandan Vaidya[2,1]
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Disorders of the Nervous System

Schizophrenia and Psychotic Disorders

1193* Connectome-wide association study reveals dysconnectivity in youth with psychosis-spectrum symptoms, (O-M2)
Theodore Satterthwaite[1], Simon Vandekar[2], Danielle Bassett[2], Daniel Wolf[3], Kosha Ruparel[4], Zarrar Shehzad[5], Tyler Moore[6], Cameron Craddock[7], Russell Shinohara[2], Mark Elliott[2], Monica Calkins[8], Michael Milham[9], Ruben Gur[10], Raquel Gur[2]
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1194 Two subgroups of schizophrenia patients from a Gaussian Mixture Model of cognition and EEG data
Nikolaj Bak[1], Bjørn Ebdrup[1], Bob Oranje[2,1], Birgitte Fagerlund[1], Maria Jensen[1], Signe Düring[1], Mette Nielsen[1], Birte Glenthøj[1], Lars Kai Hansen[3]
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1195 Cerebello-cortical connectivity and symptom course in individuals at ultra high-risk for psychosis
Jessica Bernard[1], Vijay Mittal[2]
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1196 Connectivity as an Endophenotypic Marker for Schizophrenia – A DTI Discordant Twin Study
Marc Bohlken[1], René Mandl[1], Rachel Brouwer[1], Martijn van den Heuvel[1], Anna Hedman[1], Wiepke Cahn[1], Marc De Hert[2], René Kahn[1], Hilleke Hulshoff Pol[1]
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1197 Meta-cognition is Associated with Cortical Thickness in Youth at Clinical High Risk of Psychosis
Lisa Buchy[1], Jacque Stowkowy[1], Frank MacMaster[1], Karissa Nyman[1], Jean Addington[1]
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1198 Volumetric aberrations of the right TPJ regions and networks across psychiatric disorders

Danilo Bzdok[1], Benjamin Korman[2], Robert Langner[3], Veronika Müller[4], Roberto Goya-Maldonado[5], Oliver Gruber[6], Kelly Diederen[7], Iris Sommer[8], Christian Sorg[9], Valentin Riedl[10], Thomas Nickl-Jockschat[11], Nils Kohn[12], André Aleman[13], Simon Eickhoff[4]
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1199 An investigation of structure and function in relation to insight in schizophrenia

Sarah Clark[1], Aral Ahmadi[1], Cota Navin Gupta[2], Juan Bustillo[3], Andrew Mayer[2], Cheryl Aine[3], Jose Canive[4], Stefan Posse[3], Vince Calhoun[2,3], Jessica Turner[1,2]
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1200 Effects of rTMS on effective connectivity of language to treat hallucinations in schizophrenia

Branislava Curcic-Blake[1], Leonie Bais[1], Ans Vercammen[2], Edith Liemburg[1], Rikuus Knegtering[3], André Aleman[4]
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1201 Hippocampal Shape Abnormalities in Neuroleptic-Free Youth at Ultrahigh Risk for Psychosis

Derek Dean[1], Joseph Orr[1], Jessica Bernard[1], Andrea Pelletier-Baldelli[1], Vijay Mittal[1]
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1202 Proactive Response Inhibition Abnormalities in Sensorimotor Cortex of Patients with Schizophrenia

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1203 Task-Related fMRI Network Analysis of Emotion Processing in a Family Study of Schizophrenia

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1204 Abnormal topological attributes in schizophrenia white matter network

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1205 Longitudinal Changes in White Matter Integrity in Youth at Risk for Psychosis

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1206 Reduced auditory evoked oscillations and underlying structural abnormality in Schizophrenia

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1207 Are there structural correlates of social functioning in patients with schizophrenia?

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1208 T1w/T2w ratio image reveals schizophrenia brain abnormality

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1209 Specific Neural Deficits of Cortical Neural Oscillations for Visual Working Memory in Schizophrenia

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1210 White Matter Differences in Schizophrenia: Meta-analytic findings from ENIGMA-Schizophrenia DTI

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1211 Cortico-thalamic grey matter density imbalance in psychosis spectrum disorders
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1212 The association between dorsolateral prefrontal N-acetylaspartate and insight in schizophrenia
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1213 Aberrant somatosensory processing in schizophrenia
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1214 Heightened coupling between basal ganglia and salience networks in schizophrenia
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1215 Abnormal face-voice integration in schizophrenia: a magnetoencephalography study
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1216 The neural correlates of impaired abstract thinking in patients with schizophrenia
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1217 Theta and Alpha Oscillations Index Competitive Interactions in Schizophrenia
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1218 Neural processing of effort-based cost-benefit valuation in schizophrenia and major depression
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1219 Functional connectivity and aberrant social processes in youth at ultra high-risk for psychosis
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1220 Cerebellum and hippocampus classify schizophrenia better than amygdala and striatum: A resting-state
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1221 Altered White Matter Topography and Age-Related Network Degradation in Chronic Schizophrenia
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1222 Altered prefrontal emotion processing as a potential biomarker in schizophrenia
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1223 Practice Induced Changes in Prefrontal Cortex Connectivity in Schizophrenia
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1224 Increased Intrinsic Cognitive Load in Schizophrenia Patients During an fMRI Working Memory Task
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1225 Differential patterns of dysconnectivity in mirror neuron and mentalizing networks in schizophrenia
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1226 Resting-state functional connectivity correlates of psychopathology in schizophrenia
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1227 Classification of 22q11.2 Deletion Syndrome by Severity of Resting State Network Dysconnectivity
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1228 Functional connectivity of lower order sensory networks in schizophrenia and bipolar disorder
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1229 Positive Symptoms and Functional Lateralization in Schizophrenia Using Network Based Approach
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1230 Intact Facial Emotion Recognition Despite Activation Abnormalities in Schizophrenia Relatives
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1231 Dysfunctional visual working memory consolidation in schizophrenia and first-degree relatives
Michael Stäblein[1], Christian Knöchel[1], Helena Storchak[1], Denisa Ghinea[1], Robert Bittner[1], David Prvulovic[1], Andreas Reif[1], Viola Oertel-Knöchel[1]
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1232 Schizophrenia dimensions: link to cerebral blood flow of the amygdala, heschl's gyrus and the ACC
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1234 Volume reduction in frontal lobe in schizophrenia patients: a VBM study
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1235 Non-uniform cortical thinning in schizophrenia: are sulci worse off?
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1236 Altered Structural Connectivity in DMN of First Episode, Treatment-naive Schizophrenia
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1237 External and internal awareness in auditory cortex and insula – An fMRI study in schizophrenia
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1238 Hippocampal dysfunction during reward processing and goal-directed behavior in schizophrenia
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1239 Widespread Decrease of Fractional Anisotropy in Never-treated Chronic Schizophrenia
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1240 Disrupted small-world networks in never treated schizophrenia patients with long illness duration
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1241 Variability of structurally constrained and unconstrained functional connectivity in schizophrenia
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1242 Axonal Fiber Connectivity in Schizophrenia: A Graph Theoretical Analysis in a Japanese Sample
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1243 Functional connectivity dissociation pattern of default subnetworks in schizophrenia
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1244 Accelerated cortical reductions in never-treated schizophrenia with illness duration over 5 years
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Disorders of the Nervous System

Sleep Disorders

1245 * Recovery of abnormal sleep slow-wave activity after dopamine treatment in Restless legs syndrome (O-T1)

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1246 White Matter Damage and Autonomic Impairment in Obstructive Sleep Apnea

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1247 Analysis of EEG Coherence Prior to Somnambulistic Episodes Arising out of Slow-wave Sleep

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1248 An Effect of CPAP Treatment on Regional Cerebral Perfusion in Patients with Obstructive Sleep Apnea

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1249 Changes of mean diffusivity and regional efficiency in gray matter of obstructive sleep apnea

Min-Hee Lee[1], Sang Hyeon Lee[1], Jin Uk Kim[1], Seung Ku Lee[2], Chol Shin[2], Bong Soo Han[3], Dong Youn Kim[1], Chang-Ho Yun[4]
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1250 Neurofeedback and sleep-dependent memory consolidation in insomnia – A double-blind EEG study

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1251 Brain metabolic and dopaminergic changes in REM sleep behaviour disorders with parkinsonial symptoms

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Disorders of the Nervous System

Stroke

1252 * Dynamic resting-state fMRI connectivity reflects behavioral measures in stroke patients, (O-T1)

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1253 Altered cognition and resting state connectivity in chronic stroke

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1254 Effective Connectivity Changes in Brain Motor Network after Stroke and Rehabilitative Treatments

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1255 Functional network connectivity in post-stroke patients

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1256 Mapping brain function at the bedside during acute stroke recovery using High-Density DOT
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1257 The Role of Thalamic Involvement in Cortical Functional Reorganization after Acute Stroke
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1258 Predicting the outcomes of subarachnoid hemorrhage using multi-scale variability of BOLD fMRI
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1259 Analysis of Functional Brain Networks Post Carotid Endarterectomy or Artery Stenting
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1260 Magnetoencephalographic resting-state following surgery of aneurysmal subarachnoid haemorrhage
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1261 The Virtual Brain: new modeling of stroke recovery and its relationship with global efficiency
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1262 Relationship of Cerebral Metabolites with Motor Performance in Chronic Stroke and Type-2 Diabetes
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1263 Arterial Spin Labeled Perfusion in Perilesional Cortex as a Predictor of Chronic Aphasia Recovery
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1264 Quantitative evaluation of corticospinal tract in hemorrhagic stroke using diffusion tractography
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1265 A fast algorithm for automated lesion masking in stroke patients
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1266 Activity in residual frontal cortex correlates with verbal ability in post-stroke aphasia
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1267 Structural correlates of residual language capacity in patients with post-stroke aphasia
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1268 Automated Lesion Delineation using Advanced Normalization and Image Intensity Histogram Matching
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1269 Brain Activity In Sensorimotor Areas Predicts Treatment Gains From Robotic Finger Rehabilitation
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1270 The Transcranial Motor Evoked Potential can Prognosticate for the Ambulation in Hemiplegic Stroke
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1271 Evidence for Brain Atrophy in Paediatric Sickle Cell Disease
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1272 White matter abnormalities relate to oxygen saturation in children with sickle cell anemia
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1273 The usefulness of TMS and DTT for evaluation of stroke recovery
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1274 Smoking Cessation after Stroke: Evidence from Diffusion Tensor Imaging
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1275 Resting-State Functional Connectivity Predicts Recovery from Visual Field Defect after Stroke
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1276 Task based reorganization of function after rehabilitation in post-stroke aphasia
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1277 Effective connectivity analysis of language networks in healthy adults and in chronic aphasia
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1278 ANODAL AND DUAL TRANSCRANIAL DIRECT CURRENT STIMULATION FOR SWALLOWING FUNCTION IN STOKE PATIENTS
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1279 Predicting post-stroke recovery using baseline MRI biomarkers of structural connectome disruption
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1280 Robotic measures of proprioception and sensory tractography in children with perinatal stroke
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1281 Change of neural connectivity of the red nucleus in patients with putaminal hemorrhage
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1282 Longitudinal Cortical Changes in Cerebral Small Vessel Disease Progression
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1283 Role of Compensatory Movements Patterns in Functional Recovery and CST after stroke
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1284 Functional Reorganization and Prediction of Motor Recovery after a Stroke using Functional Networks
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1285 MEG Reveals Normalization of Somatosensory Cortex following Constraint Therapy in Hemiplegic CP
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1286 Longitudinal fMRI study of language recovery after a left hemispheric ischemic stroke
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1287 The effect of language training on post-stroke aphasia: an fMRI study
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1288 Altered middle cerebellar peduncle volume in chronic stroke: a DTI study
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1289 Tract section-based lesion-symptom mapping in stroke patients
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1290 Multivariate pattern changes in resting state functional connectivity after stroke
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1291 Network dynamics engaged in the modulation of motor behavior in chronic stroke patients
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1292 White Matter Changes During Acute, Sub-acute and Chronic Phases in Post-Stroke Aphasia: A Case Study
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1293 Difference of recovery course of motor weakness according to state of CST in putaminal hemorrhage
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1294 Concurrent assessment of forelimb function and mesoscopic cortical networks in mouse stroke models
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1295 Characterizing white matter pathway disconnection in stroke with HARDI probabilistic tractography
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1296 White-matter connections mediating distinct behavioral components of spatial neglect
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1297 Sensorimotor Modulation by Botulinum Toxin A in Post-Stroke Arm Spasticity: Passive Hand Movement
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1298 Automatic Segmentation of Chronic Stroke Employing 3D Mean-Shift and Symmetry of the Human Brain
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1299 Lesion Load of the Arcuate Fasciculus Predicts Chronic Post-stroke Aphasia
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1300 Association between white matter hyperintensities and cognition in vascular cognitive impairment
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1302 Motor Imagery promotes brain functional recovery after stroke revealed by regional homogeneity
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1303 Tract Changes After 10 Days Of Combined Physical Therapy And Non-Invasive Brain Stimulation
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1304 Cortical Thickness Changes: In The Patients With Moyamoya Disease
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Disorders of the Nervous System

Traumatic Brain Injury

1305 Long-term effects of concussion on simple reaction time and cognitive control
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1306 Motor cortex excitability improvement in older adults with a history of mild traumatic brain injury
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1307 Diffusional kurtosis imaging correlates of head injury history among healthy military members
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1308 Tract-based Analysis of White Matter Integrity in Pediatric TBI: Mapping Individual Abnormalities
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1309 Neuroimaging as a potential diagnostic tool for disorders of consciousness
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1310 White matter development following pediatric traumatic brain injury is dependent on injury severity
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1311 Visual System Resting State Functional Connectivity in Traumatic Brain Injury
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1312 FMRI Response to Emotional Faces in Military TBI With and Without Structural Neuroimaging Findings
John Graner[1], Terrence Oakes[1], Lindsay Reinhardt[2], John Ollinger[1], Wei Liu[1], Ping Hong-Yeh[1], Justin Senseney[1], David Joy[1], Alexander Kubli[1], Elyssa Sham[1], Jamie Harper[1], Rael Lange[3], Louis French[3], Gerard Riedy[1]
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1313 Disrupted Connectivity Among Default, Dorsal Attention and Frontoparietal Control Networks in TBI
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1314 Comprehensive Connectome Scale Assessment of mTBI Using Structural and Functional Connectivity
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1315 DWI Detection of WM Abnormality and Relation with Collision Events in High School Athletes
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1316 Mean Cortical Curvature as a Biomarker of White Matter Atrophy in Mild Traumatic Brain Injury
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1317 Connectome-based evidence for a functional rerouting hypothesis in recovery from severe brain injury
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1318 Diffusion Tensor Imaging of the Brain in Pediatric Boxers: Voxel-wise Whole Brain Analyses
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1319 Whole Brain Voxel-wise Study of Iron Deposits with MRI R2* in Pediatric Boxers
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1320 Diminished Supraspinal Pain Modulatory Functions in Veteran with MTBI related Headaches
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1321 Graph-Theoretical Brain Analysis on Figurative Language Processing After Traumatic Brain Injury
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1322 Imaging of Cerebral Microhemorrhages in Military Service Members with Chronic Traumatic Brain Injury
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1323 Thalamo-Frontal Connectivity after Severe Traumatic Brain Injury
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1324 A Study Of Susceptibility Weighted MRI In Asymptomatic And Symptomatic Athletes
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1325 The neural correlates of depression in patients with Traumatic Brain Injury
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1326 Graph Theoretic Measures Reveal Potential Thalamic Biomarker for Moderate TBI in Resting State fMRI
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1327 Resting State fMRI Causal Networks Show Unique Patterns in Mild Traumatic Brain Injured Subjects
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1328 Disruption of Caudate Working Memory Activation in Chronic Blast-Related Traumatic Brain Injury
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1329 Subacute white matter changes in high school football players without concussion
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1330 Relationship between functional connectivity and sleep quality in Veterans with mTBI
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1332 A GPS for cortical function: DEEG, Imaging and Neuropychological testing
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1333 Electrocortical Patterns in Traumatic Brain Injury Using Dense Array Electroencephalography (DEEG)
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1334 Central auditory processing disorders after mild traumatic brain injury
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1335 Neurological bases of visuospatial attention in chronic patients with attention deficits after TBI
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1336 An fMRI Study on Brain Activity Differences between Firefighters with PTSD and Normal Controls
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1337 An fMRI Comparison of Two High-School Football Teams
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1338 DTI is correlated to cognitive performance in professional boxer population
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1339 Structural and Functional Connectivity of the Intraparietal Sulcus in Severe Traumatic Brain Injury
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1340 Multimodal Searchlight Analysis of Mild Blast-Induced Traumatic Brain Injury
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1341 Memory and Motor Task fMRI Changes in Pediatric Semi-Professional Boxers
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1342 Cerebrovascular Reactivity alterations in Female High School Soccer players
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1343 Acute Temporal Lobe Injury and Thalamic Volume as Predictors of Post-Traumatic Epilepsy
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1344 Neural basis of cognitive impairments in patients with diffuse axonal injury
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1345 Predicting Mild Traumatic Brain Injury With Resting-State Magnetoencephalography
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1346 Diagnosis of Mild Traumatic Brain Injury using Resting State Functional Network Connectivity
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1347 Acute Glasgow Coma Score, pupil size, and seizure rate predict cortical atrophy 6-months post-TBI
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1348 White Matter Microstructural Change and Deep Subcortical Iron Level in Traumatic Brain Injury
Ping-Hong Yeh[1], Wei Liu[2], John Ollinger[3], Cyrus Eierud[2], David Joy[2], Elyssa Sham[2], Rael Lange[4], Louis French[4], Yi Wang[5], Terrance Oakes[6], Gerard Riedy[2]
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1349 White Matter Disruption and Brain Iron Content in Comorbid Depression and Traumatic Brain Injury
Ping-Hong Yeh[1], Jeannine Mielke[2], John Morissette[2], Tara Staver[2], Jamie Harper[3], Elyssa Sham[2], Binquan Wang[4], Alexander Kubli[2], David Joy[2], Justin Senseney[2], John Ollinger[3], Terrance Oakes[5], Gerard Riedy[2]
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1350 Abnormal Structural Connectivity in Children with TBI and the Response to Cognitive Training
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Emotion and Motivation

Emotion and Motivation Other

1351 Anxiety dissolves the prediction of emotion regulation by resting functional connectivity
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1352 When good meets bad: The neural influences of positive attitude on math anxiety in young children
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1353 Significant association of testosterone and prefrontal stress response is specific for males
Birgit Derntl[1], Hannah Metzler[2], Hanna Thaler[2], Roland Boubela[3], Kogler Lydia[4], Ilse Kryspin-Exner[5], Ewald Moser[6], Ute Habel[7], Eva-Maria Seidel[8]
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1354 Aging and sex effects on the neural response to negative visual events: A meta-analysis of fMRI data
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1355 Neural correlates of negative visual stimuli and effect of task characteristics: a meta-analysis
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1356 Hunger Susceptibility is Positively Correlated with Mid-Insula Activity to Food vs Non-Food Images
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1357 Amygdala and hippocampus functional connectivity in association with sex, stress and hormones
Lydia Kogler[1,2], Veronika Müller[3,4], Eva-Maria Seidel[5,6], Roland Boubela[7,6], Klaudius Kalcher[8,6], Ewald Moser[8,6,9], Simon Eickhoff[3,4], Ruben Gur[10], Birgit Derntl[1,2,11]
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1358 Resting state brain activity associated with positive and negative emotionality:An ALE meta-analysis
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1360 Successful emotion regulation is predicted by amygdala-frontal processing and personality traits
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1361 Interaction between Valence of Empathy and Familiarity with Empathizer
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1362 The amygdala detects individual concern-relevance
Ryan Murray[1], Tobias Brosch[1], Hana Kutlikova[1], David Sander[1]
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1363 Function and structure of fronto-amygdalar circuitry in children with Williams syndrome
Tiffany Nash[1], Carolyn Mervis[2], Lisa Yankowitz[1], Ranjani Prabhakaran[1], Melanie Sottile[1], Katherine Roe[1], Crystal White[1], Philip Kohn[1], Jonathan Kippenhan[1], Daniel Eisenberg[1], Michael Gregory[1], Joseph Masdeu[1], Karen Berman[1]
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1364 Stress and personality interact to modulate the neural response to food cues
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1365 Monetary reward magnitude affects behavior and brain function during a counting Stroop task
Patricia Rosell-Negre[1], Alfonso Barros-Loscertales[1], Juan Bustamante[2], Paola Fuentes-Claramonte[1], Victor Costumero[1]
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1366 Affective salience network in the macaque anchored in ventral anterior insula
Alexandra Touroutoglou[1,2], Eliza Bliss-Moreau[3], Jiahe Zhang[4], Dante Mantini[5,6,7], Wim Vanduffel[2,6,8], Bradford C. Dickerson[1], Lisa Feldman Barrett[4,2]
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1367 Individual variability in the neuroendocrine response to acute stress
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Emotion and Motivation

Emotional Learning

1368* Imagined Extinction Reduces Real-life Threat Expression, (O-T2)
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1369 Self-generated expectations modulate feedback-driven aversive learning
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1370 Fear of Visual Stimuli: An ALE Meta-Analysis of Fear Conditioning Studies
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1371 Neural activity to a racial outgroup during reversal of conditioned fear
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1372 A novel graph theory approach detects connectome reorganization due to neonatal amygdala lesions
David Grayson[1], Kelly Shen[2], David Amaral[3]
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1373 Threat relevant social rank is shaped by observation confrontation in others
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1374 Neural correlates of lasting effects of emotion regulation
Andrea Hermann[1], Laura Kress[1], Rudolf Stark[1]
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1375 The role of different spatial frequency channels in reinforcement learning using multi-echo fMRI
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1376 Trace conditioning during acute coma and hypothermia
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1377 Brain Mediators of Social Influence and Conditioned Cue Effects on Pain
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1378 RSFC between amygdala and vmPFC following fear reminder predicts fear extinction
Ti Su[1], Pan Feng[1], Tingyong Feng[1]
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1379 Optimizing study designs for single-trial multi-voxel pattern analysis: a systematic comparison
Renée Visser[1], Michelle de Haan[1], Tinka Beemsterboer[1], Pia Haver[1], Merel Kindt[1], H.Steven Scholte[1]
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Emotion and Motivation

Emotional Perception

1380 Connectivity between brain regions encoding emotional valence and the face network
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1381 Mental scars that matter – impact from exposure to violence
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1382 Sex differences in the alexthymic modulation of emotional saliency
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1383 Not in one metric: Resting state correlates of Neuroticism explored by multiple analysis approaches
Ioana Cristea[1], Claudio Gentili[2], Cristina Mogoase[3], Giuseppina Rota[4], Emiliano Ricciardi[5], David Daniel[3], Pietro Pietrini[6]
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1384 The functional role of parietal dorsal stream in emotion body perception
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1385 The role of the ventrolateral periaqueductal gray in conditioned responses to breathlessness
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1386 FMRI Study of Script-Driven Imagery of Social Rejection and Inclusion Memories in Depression
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1387 Contextual emotional face processing in the absence of a functional basolateral amygdala
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1388 Pleiotropic Locus for Amygdala Volume and Emotion Recognition Identified Using Bivariate Linkage
Emma Knowles[1], David Reese Mckay[2], Jack Kent Jr.[3], Emma Sprooten[4], Melanie Carless[5], Joanne Curran[6], Marcio de Almeida[7], Thomas Dyer[5], Harald Göring[3], Rene Olvera[8], Ravi Duggirala[5], Peter Fox[9], Laura Almasy[7], John Blangero[5], David Glahn[10]
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1389 The impact of emotional intelligence on cerebral voice and face perception networks – an fMRI study
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1390 Visual Pathway Contributions to Affective Scene Perception
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1391 Neural Substrates of Regular and Horror Verbal Jokes: An fMRI study
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1392 Gender differences in the neural correlates of verbal jokes: An fMRI study
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1393 Analytic and holistic perception of facial emotion expressions engages separate brain networks
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1394 Emotional State Recognition using EEG Signal
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1395 Impaired Gender Judgment by Irrelevant Disgusted Expression showed Early and Mid-Latency ERP Changes
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1396 Integration of interoception and exteroception in the anterior insula during naturalistic experience
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1397 Decoding Musical and Vocal Emotions
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1398 Emotion-reading with the spatial regions or patterns of BOLD fMRI
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1399 When urged charitable donations backfire: the Boomerang effect and its relationship to Anxiety
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1400 Emotion regulation networks in depression: Comparing up- and down-regulation
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1401 Independent components underlying music-evoked emotions
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1402 Activation of frontoparietal attentional networks by gaze cueing task: Brain gender disparities
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1403 Identifying valence and arousal attributes of audiovisual stimuli from fMRI data
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1404 Perceived Stress Modulate Middle Frontal Gyrus Responses to Negative and Positive Arousal Stimuli
Bruna Silva[1], Joana Balardin[1], Patricia Tobo[2], Shirley Lacerda[1], Liana Sanches-Rocha[3], Carla Barrichello[2], Plinio Oliveira[1], Edson Amaro Junior[4], Elisa Kozasa[5]
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1405 Neural response to positive and negative emotional facial expressions- evidence from ER-fMRI study
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1406 Cannabis use in adolescence is characterized by increased amygdala reactivity to threat signals
Philip Spechler[1], Catherine Orr[1], Stephen Higgins[2], Robert Althoff[1], Bader Chaarani[1], Kees-Jan Kan[1], Scott Mackey[1], Mitchell Snowe[1], Hugh Garavan[1], IMAGEN Consortium[3]
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1407 An ERP Study of the Neural Response to Facial Expressions as Positive and Negative Social Feedback
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1408 Modulation of functional networks by emotion regulation during and after emotional events
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1409 Amygdala functional connectivity in cortisol responders and non-responders following social stress
Ilya Veer[1], Katharina Demin[1], Phöbe Schmierer[1], Anne-Sophie Dahm[1], Jonas Leppig[1], Anna Görgen[1], Mascha Roth[1], Henrik Walter[1], Susanne Erk[1]
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1410 An fMRI investigation into the perception of same race and other race affective body expressions
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1411 Temporal pole and orbitofrontal activity by seeing emotion affected pictures in violent adolescents
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1412 Nonconscious processing of bodily emotion expressions in the dorsal stream
Minye Zhan[1], Ruud Hortensius[2], Beatrice de Gelder[1]
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1413 When you smile, you become happy: Evidence from resting state task-based fMRI
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1414 The insula and dorsal medial prefrontal cortex encode perceptual ambiguity
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Emotion and Motivation

Reward and Punishment

1415* Cognitive Neurostimulation: Learning to Volitionally Sustain Ventral Tegmental Area Activation, (O-T2)
R Alison Adcock[1], Nan-kuei Chen[1], Kathryn Dickerson[1], Jeff MacInnes[1]
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1416* Parsing Reward: Spatiotemporal Analysis Reveals Distinct Striatal Responses to Reward, (O-T2)
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1417 Food-cue inhibitory training reduces reward reactivity and eating urges in everyday life
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1418 Developmental Differences in Reward Processing: An ALE Quantitative Meta-Analysis of fMRI Studies
Christina Chick[1]
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1419 The physiology of resilience: differential fear learning responses associated with grit
George Christopoulos[1], Marilyn Uy[2]
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1420 BAS-drive trait modulates dorsomedial striatum activity during reward response-outcome associations
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1421 Abnormal neural processing of social feedback in borderline personality disorder
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1422 Functional neuroimaging of risky decision making in adolescents with Neurofibromatosis type 1 (NF1)
Rachel Jonas[1], Caroline Montojo[1], Eliza Congdon[1], Laura Pacheco[1], Tena Rosser[2], Alcino Silva[1], Carrie Bearden[1]
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1423 Cortisol administration alters reward processing in the human brain
Valerie Kinner[1], Oliver Wolf[1], Christian Merz[1]
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1424 Apathy and motivation: is brain activation during reward anticipation related to subclinical apathy?
Nicky Klaasen[1], Claire Kos[1], Jan Bernard Marsman[1], Esther Opmeer[1], André Aleman[1,2]
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1425 History-dependent reward modulation of BOLD signals in human visual cortex
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1426 Being Positive, not Goal-Directed: Dopamine and Reinforcement Learning in the Ventral Striatum
Nils Kroemer[1,2,3], Ying Lee[3], Shakoor Pooseh[3], Daniel Schad[4], Lydia Hellrung[3], Ben Eppinger[3], Michael Smolka[3]
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1427 An fMRI investigation of risky reward decision in sensation seeking
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1428 Effects of reward conditioning on subsequent learning: Generalization and individual differences
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1429 Neural mechanisms underlying diffusion of responsibility
Seongmin Park[1], Mariateresa Sestito[1,2], Jérémy Roque[1], Fabrizio Fasano[2], Jean-Claude Dreher[1]
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1430 Impacts Make the Brain Go Round: JIF Modulates Striatal Reward Signal in the Prospect of Publication
Frieder Paulus[1], Lena Rademacher[2], Laura Müller-Pinzler[2], Theo Schäfer[3], Soeren Krach[1]
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1431 The force of neuromodulation: dopaminergic midbrain and the effect of reward on Pavlovian vigour
Francesco Rigoli[1], Benjamin Chew[1], Peter Dayan[2], Raymond Dolan[1]
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1432 Separable Mechanisms Underlying Social Incentive in Flanker Task Performance
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1433 Feedback improves sequence performance and decreases global connectivity after learning
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1434 A developmentally appropriate version of the MID task can elicit striatal activity
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1435 The Effect of Punishment on Norm Compliance in a Loss Context
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Emotion and Motivation

Sexual Behavior

1436 Two dissociable neural networks encoding sexual preference and aversion
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1437 Sensory visual processing of erotic stimuli in pedophilic patients and healthy controls
Martin Walter[1], Vanessa Marr[2], Inka Ristow[2], Norman Zacharias[3], Henrik Walter[4], Klaus Beier[5], Tillmann Krueger[6], Boris Schiffer[7], Jorge Ponseti[8], Liliana Demenescu[9]
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Higher Cognitive Functions

Decision Making

1438 Differences in intertemporal choice are predicted by the neural encoding of numerical magnitude
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1439 Multiple Feature Integration and Urgency in Categorization Decisions
Kurt Braunlich[1], Carol Seger[1]
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1440 The neural basis of subjective reward devaluation by cognitive and physical effort
Trevor Chong[1], Matthew Apps[1], Kathrin Giehl[1], Annie Blake[1], Laura Grima[1], Masud Husain[1]
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1441 Changes in Resting-State Functional Connectivity Following Clinical Decision-Making
Filomeno Cortese[1], Pam Hruska[1], Olave Krigolson[2], Kent Hecker[1]
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1442 Lateral prefrontal model-based signatures are reduced in individuals with high trait impulsivity
Lorenz Deserno[1,2,3], Tilmann Wilbertz[1], Andrea Reiter[1], Annette Horstmann[1], Jane Neumann[1], Arno Villringer[1], Hans-Jochen Heinze[1,2,4], Florian Schlagenhauf[1,3]
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1443 Decision-Making Deficit and its Medial PFC among First Degree Relatives of Suicide Completers
Yang Ding[1], Alexandra Hoehne[2], Stephane Richard-Devantoy[2], Gustavo Turecki[3], Fabrice Jollant[3], Martin Lepage[4]
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1444 The role of the inferior frontal gyrus in decisions on vocal emotions
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1445 The Effect of Social Exclusion on Risk is Mediated by Insular Cortex
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1446 Three strikes and give up: neural circuitry involved in decision making following repeated failure
Tingyong Feng[1], Weihua Zhao[1], Ti Su[1]
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1447 Studying the connectivity between the Habenula and Substantia Nigra/VTA during resting state
Sebastien Hetu[1], Yi Luo[2], Kim D'Ardenne[3], Ignacio Saez[4], Read Montague[5]
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1448 The Effect of Oxytocin on Third-Party Altruistic Decisions in an Unfair Situation: An fMRI Study
Yang Hu[1], Georg Voos[2], Dirk Scheele[3,4], Bastian David[1], Benjamin Becker[3,4], Rene Hurlemann[3,4], Bernd Weber[1,2]
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1449 Temporal evolution of hierarchical prediction errors during sensory associative learning
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1450 A computational trial-by-trial EEG analysis of prediction error responses during reward learning
Sandra Iglesias[1], Gabor Stefanics[1], Sara Tomiello[1], Vladimir Litvak[2], Christoph Mathys[2], Klaas Enno Stephan[3,2]
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1451 Dopamine fluctuations in human striatum combine error signals for actual and counterfactual outcomes
Kenneth Kishida[1], Ignacio Saez[2], Terry Lohrenz[1], Mark Witcher[3], Adrian Laxton[3], Stephen Tatter[3], Jason White[4], Thomas Ellis[5], Paul Phillips[6], Read Montague[1,7]
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1452 The link between mesolimbic structural connectivity and frontolimbic function during risky decisions
Milky Kohno[1], Angelica Morales[1], Edythe London[1]
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1453 Neuroeconomic predictors of health risk behaviors in adolescents
Nina Lauharatanahirun[1,2], Sheryl Ball[3], Jason Aimone[4,5], Pearl Chiu[1,2], Jungmeen Kim-Spoon[6], Brooks King-Casas[1,2]
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1454 Inter-individual normalization of value representation in the human brain
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1455 A 3 T MR spectroscopy pilot study on associations between different forms of impulsivity and GABA
Nils Muhlert[1], Naomi Warne[1], C. Evans[1], Andrew Lawrence[2]
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1456 Neural substrates of mental cost prediction in cognitive effort-based decision making
Asako Nagase[1], Kenji Morita[2], Keiichi Onoda[3], Jerome Foo[4], Tomoki Haji[5], Shuhei Yamaguchi[3], Katsuyuki Sakai[6]
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1457 Dynamics of Random Stimuli account for Trial-to-trial Variability in Perceptual Decision Making
Hame Park[1,2], Jan-Matthis Lueckmann[2,3,4], Katharina von Kriegstein[2,5], Sebastian Bitzer[2], Stefan Kiebel[1,2,6]
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1458 Neglecting what might have happened - reduced model-based control in alcohol-dependent patients
Andrea Reiter[1], Lorenz Deserno[1], Thomas Kallert[2], Andreas Heinz[3], Hans-Jochen Heinze[4], Florian Schlagenhauf[1]
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1459 Distinct neuranatomical correlates of delay discounting in ADHD and typically developing children
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1460 Cortical oscillations underlying risk and reward decision-making
Ignacio Saez[1], Edward Chang[2], Jack Lin[3], Josef Parvizi[4], Robert Knight[1], Ming Hsu[1]
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1461 Neural processing of freely chosen motor actions
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1462 Trading Goals and Habits: The Role of Dorsolateral PFC Structure Supporting Working Memory
Daniel Schad[1], Torsten Wüstenberg[2], Miriam Sebold[3], Stephan Nebe[4], Nils Kroemer[5], Maria Garbusow[6], Michael Smolka[4], Andreas Heinz[7], Michael Rapp[8], Quentin Huys[9]
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1463 Dynamics of pre-SMA involvement in internally-generated saccade choices
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1464 Information-Signalling in the Dopaminergic Midbrain
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1465 Pavlovian-to-Instrumental Transfer covaries negatively with model-based decision-making
Miriam Sebold[1], Daniel Schad[2], Stephan Nebe[3], Maria Garbusow[4], Nils Kroemer[5], Florian Schlagenhauf[6], Michael Rapp[7], Michael Smolka[3], Quentin Huys[8], Andreas Heinz[9]
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1466 Decoding errors from patterns of oscillation and event-related potential before response execution
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1467 Manual control vs. automation monitoring: Inflight decision making in airline pilots
Ronald Sladky[1], Irene Stepniczka[2], Martin Tik[1], André Hoffmann[1], Jan-Philipp Buch[3], Claus Lamm[4], Dominik Niedermeier[3], Joris Field[5], Christian Windischberger[1]
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1468 Caudate, dlPFC, and right frontal pole are more active when risky subjects consider risky sex
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1469 Empathy, perspective taking and attentional shifts differentially predict altruistic giving
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1470 Behavioral and self-reported impulsivity differentially modulate striatal responses to food choices
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1471 The Neural Correlates of Healthy and Unhealthy Food Viewing and Food Choice in Children and Adults
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1472 Novelty seeking is related to posterior insula activation in risk prediction processing
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1473 Dissociated neural substrates underlying impulsive choice and impulsive action
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1475 The gender difference in the decision-making ability of adolescents: an fMRI study
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1476 Maladaptive top-down control networks underpin heightened loss aversion in trait anxiety
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1477 How risky are you? Survey your right frontal pole
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Higher Cognitive Functions

Higher Cognitive Functions Other

1478* Dual-stream speech processing signified by directed connectivity markers, (O-T3)
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1479 Reconfiguration of resting-state brain network architecture related to creativity task performance
Yuxuan Cai[1], Aiying Liang[2], Delong Zhang[3,4], zengjian wang[1], Jinghua Pan[3], Bingqing Jiao[3], Zhenni Gao[3], Mengxia Gao[3], Junchao Li[3], Ming Liu[3], Ruiwang Huang[3]
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1480 ERSP is dissociated between mental representation of 'yes' and 'no' intentions
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1481 Functional connectivity and characterization of subregions within left intraparietal sulcus
Edna-Clarisse Cieslik[1], Veronika Müller[1], Christian Grefkes[2], Angela Laird[3], Peter Fox[4], Simon Eickhoff[1]
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1482 Sex difference of the brain network structure as revealed by normalized αcentrality
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1483 Frontal Indicators of Drug Abuse Vulnerability: Impulsivity, Personality, and Neuroinhibition
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1484 Does recursive structure processing represent an internal mode of cognition?
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1485 Can categorization abilities be predicted by brain morphometry in healthy population?
béatrice garcin[1], Richard Lévy[2], Marika Urbanski[2], Michel Thiebaut de Schotten[3], Emmanuelle Volle[4]
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1486 Core-Periphery Hierarchy of Cortical Time Scales
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1487 Functional Connectivity Asymmetries in School-Age Children: Sex and Cognitive Performance Effects
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1488 Relationship between DTI and Neurocognitive Changes after Radiation Therapy for High Grade Glioma
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1489 The relationship between brain gray matter volume and the discrepancy of empathizing and systemizing
Akiko Kobayashi[1], Susumu Yokota[1], Hikaru Takeuchi[2], Hiroshi Hashizume[2], Kohei Asano[3], Michiko Asano[4], Yuko Sassa[2], Ryuta Kawashima[1], Yasuyuki Taki[2]
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1490 The causal role of the anterior RTPJ in attention and social interaction – evidence from a TMS study
Sarah Constance Krall[1,2], Lukas Volz[3], Eileen Oberwelland[2,1], Christian Grefkes[3,1], Gereon Fink[3,1], Kerstin Konrad[2,1]
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1491 Preclinical application of cognitive activities of ultra-high pressurized marine alga, Chlorella sp
Hyeon Lee[1], Woon Choi[2]
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1492 Adaptive directed transfer function reveals the dynamic information processing of P300: an EEG study
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1493 Prefrontal involvement in instruction-related processes in fear conditioning
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1494 Identifying neural representations of physics concepts using Machine Learning and Factor Analysis
Robert Mason[1], Marcel Just[1]
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1495 Coactivation-based parcellation of the posterior medial frontal cortex
Veronika Müller[1], Edna-Clarisse Cieslik[1], Nicola Palomero-Gallagher[2], Angela Laird[3], Peter Fox[4], Simon Eickhoff[1]
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1496 Investigating the Neural Correlates of the Subjective Flow Experience During Game Play: an EEG Study
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1497 Analyzing the association between functional connectivity of the brain and intellectual performance
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1498 128 Channel Dense-Array EEG (DEEG) Patterns in Patients Reporting Abduction by Space Aliens
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1499 Confident misunderstanding: Examining the neural basis of the metacognition of emotion recognition
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1500 Brain Mapping in Aircraft Pilots in-flight: Monitoring and Anticipation in challenging Situations
Irene Stepniczka[1,2], Ronald Sladky[2], Martin Tik[2], Claus Lamm[3,1], André Hoffmann[2], Dominik Niedermeier[4], Joris Field[5], Christian Windischberger[2]
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1501 Neural Dynamics of the Anterior and Posterior Cingulate Cortex in the Resting State: An MEG Study
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1502 Higher-order temporal prediction in Prefrontal Cortex: a model-based fMRI study in expert musicians
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1504 Predicting the knowing-reckless boundary in the human brain
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1505 Cognition and brain size: configuration of relative cortical surface area and thickness matters
Eero Vuoksimaa[1], Matthew Panizzon[2], Chi-Hua Chen[2], Mark Fiecas[2], Christine Fennema-Notestine[2], Lisa Eyler[2], Donald Hagler[2], Carol Franz[2], Michael Lyons[3], Anders Dale[2], William Kremen[2]
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Higher Cognitive Functions

Imagery

1506 Overlapping Activation Patterns Associated with Silent Mouthing and Inner Speech
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1507 FMRI decoding of auditory versus tactile imagery of affective voices and bodies
Aline de Borst[1], Beatrice de Gelder[1]
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1508 Prediction of individual driving performance from offline cognitive task-related EEG measures
Sunao Iwaki[1], Toshihisa Sato[1], Yuji Takeda[1], Motoyuki Akamatsu[1]
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1509 Cortical Activity after Motor Imagery Training in Both Hands Amputated Patient
Katarzyna Kisiel-Sajewicz[1], Anna Jaskólska[1], Zhiguo Jiang[2,3], Jarosław Marusiak[1], Łukasz Szumowski[1], Guang Yue[2,3,4], Artur Jaskólski[1]
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1510 Resting-state functional connectivity is predictive of fMRI correlates of motor imagery ability
Catarina Saiote[1], Giampaolo Brichetto[2], Andrea Tacchino[2], Giulia Bommarito[3], Luca Roccatagliata[3], Christian Cordano[3], Mario Battaglia[4], Giovanni Mancardi[3], Matilde Inglese[5]
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1511 Neural Basis of Word Imageability Effect: An fMRI Study
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Higher Cognitive Functions

Music

1512 Default Mode Network during quiet resting state FMRI vs. listening to Baroque music
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1513 Neuroplasticity or predisposition: a longitudinal study of auditory cortex morphology in musicians
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1514 Musical Syntax in Production and Perception: an fMRI study
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1515 Tonal language straddles EEG connectivity patterns of musicians and English non-musicians
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1516 Resting-State Functional Connectivity and Pitch Identification Ability in Non-Musicians
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1517 Using brain signal variability to examine how music and speech shape auditory processing
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1518 How do psychedelics enhance the subjective effects of music? An fMRI study with LSD
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1519 Intracortical myelination in auditory cortex of musicians with absolute pitch mapped using 7-T MRI
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1520 Melody process changes connectivity between the bilateral inferior frontal gyri
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1521 Musical expertise-related signatures in network characteristics during rest
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1522 A comparison of MEG brain responses to melodic, rhythmic, and simple deviations in musicians
Claudia Lappe[1], Markus Lappe[1], Christo Pantev[1]
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1523 Brain Areas Involved in Processing Art: Is Music Special?
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1524 Congenital amusia in teenagers after three months of guitar lessons
Genevieve Mignault Goulet[1], Benjamin Rich Zendel[2], Isabelle Peretz[1]
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1525 Neural Basis of Mozart Effect for Short-term Memory
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1526 Generating structures: Music versus language
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1527 A longitudinal study of auditory and network neuroplasticity in professional musicians
Julia Reinhardt[1], Jan Benner[1], Christoph Stippich[1], Peter Schneider[2,3], Maria Blatow[1]
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1528 A VBM study of the brains of music-majored students and non-music-majored students
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1529 Neural and cognitive markers of pitch perception and pitch awareness
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1530 Functional connectivity in the brains of music majored students and non-music majored students
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1531 Gender Difference in Cortical Thickness Contributes to Pitch Discrimination: A Female Advantage
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1532 Music rhythm modulates auditory and somatosensory cortices
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1533 Semantic-related Spontaneous Activity Is Correlated with the Perception of Melodic Intervals
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Higher Cognitive Functions

Space, Time and Number Coding

1534* Human markers of grid cell coding of non-spatial cognition, (O-M3)
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1535 Time matters - Temporal dynamics of number magnitude processing and arithmetic fact retrieval
Julia Bahnmueller[1,2], Johannes Bloechle[1,2], Stefan Huber[1], Tanja Dackermann[1,2], Stephanie Roesch[1], Korbinian Moeller[1,2], Elise Klein[1,3]
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1536 Planning where to go - a function of posterior parietal cortex
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1537 Numerical magnitude representations in adults with and without developmental dyscalculia
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1538 Comparison of BOLD Responses in Individuals with Differential Preference in Spatial Reference Frames
Erik Chang[1], Denise Wu[1]
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1539 Dissociation between numerosity and length processing: a TMS-adaptation study
Valerie Dormal[1], marinella Cappelletti[2], Michael Andres[1], Mauro Pesenti[1], Vincent Walsh[2]
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1540 Anatomical brain connectivity and approximate number representations in Developmental Dyscalculia
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1541 Mental Travels in Time and in Space: Overlapping and Dissociable Functional Networks
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1542 Assessing the cerebral correlates of number processing with Fast Periodic Visual Stimulation
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1543 Considering structural connectivity in the triple code model of numerical cognition
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1544 Estimating the lapse of time: a joint role for the hippocampus and cerebellum in time sense
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1545 RESTING-STATE CONNECTIVITY AT 2ND GRADE PREDICTS MATH COMPETENCE AT 3RD GRADE
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1546 Decoding the contents of perceived and imagined navigation through virtual reality environments
Nicco Reggente[1], Joey Essoe[1], Ivana Jevtic[1], Jesse Rissman[1]
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1547 Dissociations between symbolic and non- symbolic magnitude processing and math ability
Miriam Rosenberg-Lee[1], Emma Adair[1], Vinod Menon[1]
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1548 Fetuses discriminate changes in magnitude – missing tone and duration mismatch responses
Franziska Schleger[1,2,3], Karin Landerl[4,5], Jana Muenssinger[1], Isabelle Kiefer-Schmidt[6,1], Hubert Preissl[1,7,2,8]
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1549 Neural correlates of spatial decision-making in humans during cognitive map generation
Monika Zeiller[1], Maite Crespo Garcia[1], Stefan Rampp[2], Gernot Kreiselmeyer[2], Hajo Hamer[2], Sarang Dalal[1]
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Imaging Methods

Anatomical MRI

1550 Direct micro-MRI of brain histological sections at 11.7T using a new dedicated coil
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1551 Reduced local gyrification index in very low birth weight (VLBW) adolescents and young adults
Knut Jørgen Bjuland[1], Gro Løhaugen[2], Marit Indredavik[1,3], Marit Martinussen[1], Ann-Mari Brubakk[1], Asta K. Håberg[1], Jon Skranes[1], Lars Morten Rimol[1]
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1552 Brain plasticity seen in musicians of wind instruments
Uk-Su Choi[1], Yul-Wan Sung[2], Jun-Young Chung[1], Seiji Ogawa[2]
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1553 Segmentation of hippocampal inner structure using 7T in-vivo MRI: a robust anatomical protocol
Marie CHUPIN[1], Linda Marrakchi-Kacem[2], Johanne Germain[2], Claire Boutet[1], Emilie GERARDIN[1], Claire Cury[2], Alexandre Vignaud[3], Lucie Hertz-Pannier[4], Stéphane Lehéricy[5], Stéphane Epelbaum[6], Pierre-Francois Van de Moortele[7], Dominique Hasboun[1], Olivier COLLIOT[1]
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1554 Differences in HPAAxis Activity and Brain Structure in FEP Patients with and without Trauma Exposure
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1555 Estimation of Receiver Coil Sensitivities for Quantification of Proton Density
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1556 Quality Assurance in Structural MRI
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1557 Volumetric Brain Abnormalities in Vietnam Veterans with PTSD
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1558 Association between small vessel disease and gray matter volume in anatomical brain networks
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1559 A Structurally Anthropomorphic Brain Phantom
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1560 Intensity non-uniformity correction algorithms for T1-weighted MR images: A comparative study
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1561 Defining algorithm parameters for intensity inhomogeneity correction of structural MR images in SPM
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1562 Macromolecular Tissue Volume of Ventral Temporal Cortex Constrains Selectivity and Develops with Age
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1563 Measurement of Sylvian Fissure Morphology and Occipital Bending in Humans and Chimpanzees
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1564 Fast quantitative T1-mapping at ultra-high field using inversion-recovery echo planar imaging
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1565 Cigarette smoking and thinning of the brain's cortex
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1566 Individual subject network with Cortical thickness from Human Brain MRI
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1567 The relationship between rumination and the specificity of autobiographical memory: A VBM study
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1568 Structural gray matter changes associated with prescription opioid analgesic use
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1569 Smaller Amygdala Volume Associated with Psychopathology Symptomology in Adolescence
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1570 Associations between Corpus Callosum Morphometry and Regional Cortical Thickness in 834 Older Adults

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1571 Impact of varying acquisition parameters on cortical thickness/volume derived from MEMPRAGE scans

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1572 Imaging of hippocampal inner structure at 7T: robust in-vivo acquisition protocol

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1573 Amyloid-β Plaque Burden Predicts Rates of Cortical Atrophy in Temporal Lobes 12 and 24 Months Later

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1574 Prodromal Huntington's disease neuropsychiatric variable clusters predict brain volumes

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1575 Decreased cortical thickness in major depression and bipolar depression disorders

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1576 Association between cognitive performance and cortical thickness in bipolar disorder
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1577 High-resolution 3D EPI at 7 and 9.4T and its application to quantitative susceptibility mapping
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1578 Relationship of Brain Cortical Thickness with Visceral and Liver Fat in Teenagers
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1579 Complete Human Cerebellar Cortex Reconstruction and Flattening Resolving Individual Folia
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1580 Structural Covariance Networks of Language and Communication in Autism Spectrum Disorders
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1581 The effects of TV watching and video gaming on cortical thickness of preschool & school-age children
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1582 Structural brain differences in dysregulated youth
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1583 An MRI study on chronic harsh parenting and anxiety symptoms
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1584 Age-related change of Optic Radiation: Quantitative volumetric analysis with Tissue enhanced SWIp
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1585 T2 contrast provides a link between ex vivo and in vivo MR imaging of the hippocampus
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1586 ENIGMA Schizophrenia Working Group Brain Volume Comparison of 2,028 Cases versus 2,540 Controls

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1587 Ultra high resolution imaging of the internal architecture of the hippocampus in vivo at 7T

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1588 A heat kernel based cortical thickness estimation algorithm

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1589 Characterization of the Magnetization Transfer Ratio in the Healthy Cervical Spinal Cord

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1590 Test-retest reliability & between-version agreement of automatically-extracted hippocampal subfields

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1591 Determining the optimal flip angles for R1 maps using the variable flip angle (VFA) method at 7T

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1592 Fast T_1 Mapping Using Slice-Shuffled Simultaneous Multi-Slice Inversion Recovery EPI
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1593 Impaired Brain Structure Explains Childhood Obesity
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1594 Individual difference in cognitive performance and brain structure in typically developing children
Susumu Yokota[1], Hikaru Takeuchi[1], Teruo Hashimoto[1], Hiroshi Hashizume[1], Kohei Asano[2], Asano Michiko[3], Yuko Sassa[1], Yasuyuki Taki[1], Ryuta Kawashima[1]
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1595 Abnormal Topological Structure of Cortical Volume Correlation Networks in Parkinson's disease
Li Zheng[1], Long Qian[1], Xuemei Fu[1], Shuqin Zhou[1], Yijun Liu[1]
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1596 Inter-hemispheric connectivity changes with corpus callosum morphology in multiple sclerosis
Giancarlo Zito[1], Eileen Luders[2], Leo Tomasevic[3], Domenico Lupoi[4], Maria Maddalena Filippi[5], franca tecchio[1]
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Imaging Methods

Bold fMRI

1597* Single-Echo vs Multi-Echo Acquisition for Simultaneous Multiband fMRI at 7T in the Basal Ganglia, (O-W5)
Saskia Bollmann[1], Jeff Bednark[2], Benedikt A Poser[3], Ross Cunnington[2], Markus Barth[1]
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1598* Improved Stability in 3D Multi-Shot EPI fMRI by Navigator Echo Based Physiological Noise Reduction, (O-W5)
Oliver Josephs[1,2], Nick Todd[1], Martina Callaghan[1], Marty Sereno[2], Nikolaus Weiskopf[1]
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1599* Robust estimation of dynamic functional connectivity using a novel functional coupling analysis, (O-W1)
Mac Shine[1], Oluwasanmi Koyejo[1], Moran Gilat[2], Peter Bell[2], Russell Poldrack[1]
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1600 Language as a Cognitive Modulation of Pain: An fMRI Study
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1601 Optimal event-related fMRI design for MVPA: effect of trial-to-trial variability
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1602 ECG-derived Respiratory signal estimation as a tool for physiological noise correction in fMRI
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1603 Correspondence between bold fMRI and MEG beta oscillations in a somatosensory task
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1604 Adoption of Mean-Shift Clustering in fMRI Analysis with Temporal Characteristics of Data
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1605 Temporal profile of brain activation during emotion regulation in bipolar disorder and schizophrenia
Hui Ai[1], Liwen ZHANG[1], Esther Opmeer[1], Jan Bernard Marsman[1], Lisette van der Meer[1,2,3], Henricus Ruhé[4,5], André Aleman[1,6], Marie-José van Tol[1]
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1606 Increased activation to acute psychosocial stress in patients with psychogenic nonepileptic seizures
Jane Allendorfer[1], Kathleen Hernando[1], Lawrence Ver Hoef[1], Neil Billeaud[1], Jennifer Dewolfe[1], Sandip Pati[1], Ashley Thomas[1], Siddharth Kharkar[1], Jerzy Szaflarski[2]
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1607 Multi-band EPI for cognitive neuroimaging
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1608 Surface-based multi-scale network analysis of visuo-motor brain activity: a human 3T fMRI study
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1609 Robust frequency specific coupling between EEG and BOLD in response to diverse visual stimuli
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1610 Effects of moderate consumption of red wine in cognitive function in individuals without dementia
Lucas Campane[1], Marcelo Nishiyama[2], Mariana Nucci-da-Silva[1], Francisco Laurindo[2], Renata Fialdini[2], Desidério Favarato[2], Juliana Rocha[2], Carlos Negrão[2], Ivani Trombetta[2], Wagner Gattaz[3], Marina Von Zuben[3], Protásio Da Luz[2], Edson Amaro Junior[1]
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1611 Intrinsic functional mapping in reconstructed 4D magnetic susceptibility space using 7T data
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1612 Intrinsic brain abnormalities in children with PTSD: A resting-state fMRI study
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1613 Parcellation schemes and global signal removal affect brain network analyses in Alzheimer's disease
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1614 Sub-second Whole Brain FMRI using a Hybrid Radial-Cartesian Acquisition and Low-Rank Reconstruction
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1615 Functional Brain Architecture Does Not Differ Between Transsexuals and Cissexuals
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1616 The influence of menstrual cycle and chemosensory signals on stress reactions in females
Ka Chun Dixon Chung[1], Felix Peisen[1], Bruce Turetsky[2], Jessica Freiherr[3], Birgit Derntl[4]
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1617 Stroke and the neural correlates of driving: an fMRI simulation study
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1618 Alternations of the neuronal activity in spontaneous intracranial hypotension: rs-fMRI study
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1619 The Effects of Stimulant Medication on Functional Network Development in ADHD
Damion Demeter[1], Eric Earl[1], Paul Cary[1], Elizabeth Hawkey[1], Julia Painter[1], Joel Nigg[2], Damien Fair[2]
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1620 A combined task-free and task-based fMRI study of multi-talker and single-talker speech trainings
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1621 Using visual flicker to modulate the response of subcortical nuclei
Kevin DeSimone[1], Keith Schneider[2]
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1622 FMRI-EEG Reveals Expertise-Dependent Neural Circuits in the Post-Task Resting State
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1623 Cortical Processing in Thermal Tasters: Evidence for Cross-modal Integration
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1624 Impact of Thermal Taster Status on Cortical Response to Flavour and Temperature Stimuli
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1625 Functional connectivity variability is reduced but not abolished by task performance
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1626 The performance of global mean signal regression can be improved by voxelwise temporal alignment
Sinem Erdogan[1], Yunjie Tong[1], Lia Hocke[1], Kimberly Lindsey[1], Blaise Frederick[1]
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1627 Between-subject consistency in object category and working memory representation: exploiting the HCP
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1628 Interactions of physiological noise and ICA denoising in multi and single echo fMRI
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1629 Correlations of simultaneously acquired SSVEPs with BOLD fMRI response
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1630 Transcutaneous vagus nerve stimulation modulates default mode network in major depressive disorder
jiliang fang[1], Xiaoyan Chen[2], Yangyang Fan[1], Yang Hong[1], Jian Kong[2], Jun Liu[1], Honghong Wang[1], Guolei Zhang[1], Bing Zhu[3], Peijing Rong[3]
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1631 Variability of resting-state cortical functional connectivity in hypoxic-ischemic infants
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1632 Mental rotation increases efficiency of brain networks: an fMRI study
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1633 Precentral Gyrus Associated Two task-state Functional Connectivity in High Creative Individuals
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1634 A robust method to reconstruct gradient-echo multi-shot EPI with triple reference scans
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1635 EScalc: A toolkit for effect size calculation for fMRI data
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1636 Methodological Dependencies of Age-related Changes in Hemodynamic Response
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1637 Coupling of large-scale brain networks and dopamine D1 receptor availability
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1638 Neural correlates underlying visuomotor adaptation in a dynamic point-to-point task: An fMRI study
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1639 An fMRI investigation of response inhibition in low-level alcohol consuming young adults
Taylor Hatchard[1], Ian Cameron[2], Carley Fall[1], Ola Mioduszewski[1], Andra Smith[1]
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1640 Neural Correlates of Pet Ownership, Attraction, and Attachment in Perception of Companion Animals
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1641 Subject-specific Parcellations Detect Reduced Local Functional Coherence during Neuro Development
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1642 Correlation and Spatial Coherence of Functional Homogeneity, Cortical Curvature and Thickness
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1643 Investigating Cigarette Smoking Effects on Reward Function of Human Brain by BOLD fMRI
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1644 Getting The Joke: Insight During Humor Comprehension
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1645 The Role of Theory of Mind Ability in Humor Comprehension: An fMRI study
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1646 The neural signature of money illusion in the gain and the loss domains
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1647 Histamine H3 Receptor is correlated with neural activity of executive function
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1648 Age Modulation of Functional Connectivity in a Pediatric Population Using Multi-echo EPI
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1649 Matched-filter acquisition of high-resolution single-shot spirals
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1650 Vascular fMRI Autocalibration: validation and comparison with other modalities
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1651 Significance and Correction of Respiratory Off-Resonance Effects in fMRI – A Phantom Study
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1652 Neural correlates of performing TTCT (Torrance Tests of Creative Thinking): an fMRI study
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1653 Neural Correlates of In-group Authority Preference in Returned Mormon Missionaries
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1654 Multi-band multi-echo EPI pulse sequence for task fMRI at 3T
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1655 Neural correlates of self-initiated behavior in a sub-clinical population with high and low apathy
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1656 Stronger Intrinsic Functional Activity of the Brainstem in Better Adult Readers
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1657 Fine-grained self-regulation of PPC activity across different visual feedback displays
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1658 Effect of despiking on fMRI results in groups showing differing head motion behaviour
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1659 Analysis of High-Resolution rs-fMRI Using Fast Incremental Low-Rank Matrix Approximation
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1660 Investigation of the task load-dependent physiological response using simultaneous measuring method
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1661 Start-of-scan effects in resting state fMRI
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1662 Fructose Metabolism and Neural Correlates of Food Reactivity in Obese Children
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1663 Effects of Cognitive Training on Resting State Functional Connectivity
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1664 Developmental changes in the neural influence of interaction between meaning and visual form
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1665 GABAergic and Glutamatergic Regulation of Fear Recovery
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1666 Detection of delta-band oscillations in visual cortex using fast fMRI and simultaneous EEG-fMRI
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1667 Prediction of connectivity among ventral visual pathway regions from whole-brain functional network
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1668 Resting State Brain Entropy Alterations in Chronic Cigarette Smokers
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1669 SSFP-fMRI in Optical System: A Preliminary Study
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1670 Topologically Reorganized Connectivity Architecture of Default-Mode, Executive-Control and Salience
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1671 Systems biology the can investigate the underlying mechanisms of the hemodynamic response
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1672 Optimizing SMS-BOLD image reconstruction for resting state analysis and reconstruction time
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1673 FMRI Brain Response during Sentence-Reading Comprehension in Children with Benign Epilepsy
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1674 An investigation of low-dose aspirin effects on BOLD fMRI at 7 Tesla
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1675 Effects of mobile phone sounds in brain activity using fMRI
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1676 Influence of reboxetine and amisulpride on local and global resting state activity
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1677 Modeling Multi-voxel BOLD Signal in Peripheral V1
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1678 Marijuana's impact on working memory: fMRI results in young adults
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1679 Failure of deactivation in the medial prefrontal cortex in adults with ADHD
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1680 Single-subject Reliability of Functional MRI Maps for Preoperative Planning
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1681 Functional Magnetic Resonance Imaging for Presurgical Planning in Brain Tumor Surgery
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1682 Transfer of an adaptive cortical plasticity from the finger to the face within SI: a 7T fMRI study
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1683 Longitudinal functional connectivity changes in MS patients
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1684 Functional MRI following MI-BCI and tDCS rehabilitation in stroke patients
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1685 Retrieving binary (yes/no) answers using whole-brain activity pattern classification
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1686 FBIRN-X: an Updated fBIRN Quality Assurance Protocol for Slice Accelerated fMRI
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1687 Neural reconstruction of physical salience maps and global feature representations of natural scenes
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1688 A novel approach for resting-state fMRI dynamic connectivity analysis and is application to epilepsy
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1689 NEURAL CORRELATES OF CUED VS. INVOLUNTARY EYECLOSURES
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1690 Low-rank plus sparse (L+S) decomposition for separation of subsampled physiological noise in fMRI
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1691 Functional Connectivity Predicts BOLD Response to External Stimuli Under Thiobutabarbital Anesthesia
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1692 Evaluation of large scale DCM methods for resting state fMRI
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1693 Resting State Functional Connectivity and Network Interactions in Mild Traumatic Brain Injury
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1694 The Effects of Pramipexole On Visual Attention And Working Memory In Healthy Subjects: An fMRI Study
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1695 Neural correlates of behavioral responses to pain in nerve growth factor beta mutation carriers
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1696 Comparing different models of the BOLD response to breath holding tasks
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1697 Event related designs: how to get the most of your GLM
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1698 Low-rank plus Sparse based image reconstruction for 3D spiral fMRI
Andrii Petrov[1], V Andrew Stenger[1]
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1699 Quantitative T2* BOLD fMRI to measure artefact-free cerebral blood flow autoregulation
Marco Piccirelli[1,2], Bas Van Niftrik[3,2], Athina Pangalu[1], Oliver Bozinov[3], Luca Regli[3], Antonios Valavanis[1], Jorn Fierstra[3]
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1700 Characterization of the BOLD response across the brain to different breath-holding tasks
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1701 Relationship between resting-state and task-evoked fMRI signals across the whole brain
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1702 Feasibility of Resting-state fMRI in the orbitofrontal cortex with less distortion using PEAK-EPI
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1703 Voxel-specific sensitivity to task, stimulus & information content in face-selective regions
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1704 Comparing the prognostic importance of aggregated region-of-interest measures in survival analyses
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1705 Is intraindividual BOLD signal variability independent from mean BOLD signal?
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1706 Mapping the BOLD signal correlates of heart rate variability in resting-state fMRI
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1707 Amygdala Functional Connectivity at Rest in Healthy and Preterm Neonates
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1708 Visual saliency modulates outcome evaluation in the human brain: an EEG and fMRI study
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1709 FMRI of language tasks: a normative base in Portuguese
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1710 Predicting Dogs' Training Ease and Behavior using their fMRI-based Neural Responses
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1711 A Realistic Model of Dynamic Changes in Resting-state Connectivity in Somatosensory Cortex
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1712 T_2 prepared single-shot RUFIS: A novel fMRI paradigm for silent and distortion free fMRI
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1713 Does faster brain react faster? Resting-state BOLD oscillation frequency predict reaction time
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1714 Metabolism of glucose contributes at most 30% of the hemodynamic response in fMRI
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1715 Standardised presurgical functional magnetic resonance imaging: A long-term feasibility study
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1716 Overlapping Cue- and Target-Related Activity in the Frontoparietal Network
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1717 Robustness of microscopic functional structures estimated by dynamic magnetic susceptibility change
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1718 Characterizing Human Retinotopic Mapping Using Conformal Geometry: Metric Evaluation and Analysis
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1719 Effects of Sleep Restriction on Resting State Functional Connectivity in Adolescents
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1720 Mapping the smoking addiction at rest using effective connectivity analysis
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1721 Mapping human V4: Correcting venous artefact reveals hemifield organisation
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1722 Ultra-high field fMRI insights on insight: Neural correlates of the "Aha!"-moment
Martin Tik[1], Ronald Sladky[1], Caroline Di Bernardi Luft[2], André Hoffmann[1], Allan Hummer[1], Michael Banissy[2], Joydeep Bhattacharya[2], Christian Windischberger[1]
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1723 An achiasmic human model to quantify the relationship between the fMRI BOLD signal & neural response
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1724 The Relationship between Theory of Mind Abilities and Humor Comprehension
Yueh-Lin Tsai[1], Yong-Ru Hsiao[1], Yu Chen Lin[1], Liang Yu Shen[1], Li Tsao[1], Yu-Chen Chan[2], Hsueh-Chih Chen[3], Jon-Fan Hu[1]
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1725 Spontaneous fluctuation of EEG mu rhythm reflects functional thalamocortical resonance
Shohei Tsuchimoto[1], Takashi Ono[2], Shoko Kasuga[3], Hiroki Ebata[4], Meigen Liu[5], Junichi Ushiba[3]
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1726 Contribution of the Spinal Cord and its Interaction with the Brain during Motor Sequence Learning
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1727 Signal Modeling to Characterize BOLD fMRI Responses in Medulloblastoma Survivors
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1728 Extracting word timing information from a natural reading experiment with multiband accelerated fMRI
An Vu[1], Jeff Phillips[2], Kendrick Kay[3], Matthew Phillips[4], Matthew Johnson[5], Svetlana Shinkareva[6], Rachel Millin[4], Murray Grossman[2], Rajan Bhattacharyya[4], Essa Yacoub[1]
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1729 Frequency-related Characteristics in Functional Hubs of Human Brain Networks
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1730 Spinal Cord and Brainstem Activity During Tactile Stimulation Across Multiple Dermatomes
Kenneth Weber[1], Yufen Chen[1], Xue Wang[1], Todd Parrish[1]
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1731 Lateralization of Cervical Spinal Cord Activity During a Simple Isometric Upper Extremity Motor Task
Kenneth Weber[1], Yufen Chen[1], Xue Wang[1], Thorsten Kahnt[1], Todd Parrish[1]
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1732 Longitudinal changes in resting-state fMRI from age 5 to 6 years covary with language development
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1734 Neural response towards lies and truth with beneficial and harmful outcomes
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1735 Significant Association between CAMKK2 and the DLPFC –Striatum Functional Interaction
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1736 Discriminate Criminal and eyewitness from a crime-scene : Finding action voluntariness of memory
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1737 Common regions of cognitive executive function among Healthy Relatives and Healthy Controls
Zhifang Zhang[1], Xiongying Chen[1], Ping Yu[1], Huang Gu[1], Jun Li[1]
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1738 Characteristic of Intrinsic Brain Abnormalities in Violent Offenders with Schizophrenia
Ming Zhou[1], Xinyu Hu[1], Yi Liao[1], Lizhou Chen[1], Junmei Hu[2], Qiyong Gong[1], Xiaoqi Huang[1]
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1739 Embedded Sparse Learning of fMRI Data via Group-wise Dictionary Optimization
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Imaging Methods

Diffusion MRI

1740* Improved tract identification of post-mortem human brain with high-resolution DTI at 7T, (O-M5)
Sean Foxley[1], Saad Jbabdi[1], Moises Hernandez Fernandez[1], Stuart Clare[1], Connor Scott[2], Olaf Ansorge[2], Karla Miller[1]
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1741* Reciprocal alterations of white matter microstructure in 16p11.2 deletion vs duplication carriers, (O-W4)
Yi-Shin Chang[1], Julia Owen[1], Tony Thieu[1], Nicholas Pojman[1], Polina Bukshpun[1], Mari Wakahiro[1], Elysa Marco[1], Jeffrey Berman[2], John Spiro[3], Wendy Chung[4], Randy Buckner[5], Timothy Roberts[2], Srikantan Nagarajan[1], Elliott Sherr[1], Pratik Mukherjee[1]
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1742 White-Matter Alignment Across Subjects By Tractography Mapping
Paolo Avesani[1], Thien Bao Nguyen[1], Nusrat Sharmin[1], Nivedita Agarwal[2], Mark Bromberg[3], Lubdha Shah[4], Emanuele Olivetti[1]
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1743 Whole brain radial DSI in 7 min using Multiple Stimulated Echoes and Multislice Excitation
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1744 Free-water corrected DTI reveals evidence of axonal degeneration in major depressive disorder
Maurizio Bergamino[1], Madison Farmer[1], Ofer Pasternak[2], Martha Shenton[2], J Hamilton[1]
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1745 Assessing Tracking Reliability in Diffusion Imaging in Macro-Scale Functionally Parcellated Networks
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1746 White matter changes of neurite density and orientation dispersion during human brain maturation
Yi-Shin Chang[1], Julia Owen[2], Nicholas Pojman[1], Tony Thieu[1], Polina Bukshpun[1], Mari Wakahiro[2], Jeffrey Berman[3], Timothy Roberts[4], Srikantan Nagarajan[1], Elliott Sherr[1], Pratik Mukherjee[2]
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1747 White Matter Integrity of Language Pathways Correlate with the Performance of Language Functions
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1748 Quantification of age-related hippocampal microstructure changes and recollection memory decline
Daniel Cox[1,2,3], Hamied Haroon[1,2], Geoffrey Parker[1,2], Daniela Montaldi[3], Laura Parkes[1,2]
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1749 SNR and Angular Error for 7T Multi-shell Hybrid Diffusion Imaging (HYDI) in the Mouse Connectome
Madelaine Daianu[1], Russell Jacobs[2], Berislav Zlokovic[3], Axel Montagne[3], Paul Thompson[4]
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1750 MegaTrack: A fast and effective strategy for group comparison of large-scale tractography datasets
Flavio Dell'Acqua[1], Luis Lacerda[1], Rachel Barret[1], Lucio D'Anna[1], Marco Catani[1]
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1751 Dimension Reduction using EPIC Reveals Abnormal Brain Structural Connectivity in PTSD
Emily Dennis[1], Gautam Prasad[1], Clifford Jack[2], Michael Weiner[3], Paul Thompson[1]
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1752 Maximising potential of axon diameter mapping using low-frequency OGSE: Insight from simulation
Ivana Drobnjak[1], Gary Zhang[1], Andrada Ianus[1], Enrico Kaden[1], Daniel Alexander[1]
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1753 Combined PGSE and OGSE improve sensitivity to the smallest axon diameters in monkey corpus callosum
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1754 Diffusion tensor imaging of whole post-mortem spinal cord at 7T
Sean Foxley[1], Jeroen Mollink[2], Olaf Ansorge[2], Connor Scott[2], Saad Jbabdi[1], Richard Yates[2], Gabriele De Luca[2], Karla Miller[1]
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1755 Eddy current minimization by echo time optimization for DTI with high b-values
Liesbeth Geerts[1], Rouven Lippe[1], Marco Nijenhuis[1]
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1756 The effects of preprocessing on statistical DTI fibre quantification in cryptogenic focal epilepsy
Joanna Goc[1], Nadia Khalilieh[1], Elisabeth Hartl[1], Soheyl Noachtar[1], Christian Vollmar[1]
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1757 Salience and Response Inhibition Networks in Adolescents with Conduct Disorder
Karen Gonzalez[1], Michael Craig[2], Marco Catani[3], Sagari Sarkar[4]
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1758 Cervical spondylotic myelopathy induces structural changes of spinal pathways remote from stenosis
Patrick Grabher[1], Siawoosh Mohammadi[2,3], Aaron Trachsler[1], Susanne Friedl[1], Reto Sutter[4], Nikolaus Weiskopf[3], Alan Thompson[5], Armin Curt[1], Patrick Freund[1,3,5]
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1759 Disrupted rich club organization in Alzheimer's disease and subcortical vascular dementia
Cheol Han[1], Hee-Jong Kim[1], Sang-Won Seo[2], Joon-Kyung Seong[1]
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1760 Diffusion Tensor Imaging Detects Neurodegeneration In A Japanese Glaucoma Population
Sandra Hanekamp[1], Christine (Joyce) Boucard[2], Masahiro Ida[3], Masaki Yoshida[2], Branislava Curcic-Blake[1], Frans Cornelissen[1]
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1761 Go/no-go Performance is Related to White Matter Microstructure in a Broad Range of Regions
Kendra Hinton[1], Benjamin Lahey[2], Victoria Villalta-Gil[1], Brian Boyd[1], Benjamin Yvernault[1], Neil Woodward[1], Bennett Landman[1], David Zald[1]
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1762 Structural and functional connectivity may differentiate two subtypes of alexithymia with depression
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1763 Neural connectivity of inferior cerebellar peduncle in the human brain: a DTI study
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1764 Characterization of Spinal Cord Injury Using DTI indices: A case report
Zhiguo Jiang[1,2], Bing Yao[3,4], Steven Kirshblum[5,4], Gail Forrest[1,4,2], Guang Yue[1,4,2]
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1765 Automated Tractography-generated White Matter Fiber Labeling
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1766 Foix-Chavaney-Marie Syndrome with Unilateral Opercular Hemorrhage in Known Cerebral Palsy
Kyung-Lim Joa[1], Hyun-Yoon Ko[2], Chang-Hyung Lee[2], Yong-Il Shin[2], Soo-Yeon Kim[2]
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1767 Relationship between White Matter Integrity and Decision-Making in Adolescence and Adulthood
Masato Kasagi[1], Kazuyuki Fujihara[1], Tomokazu Motegi[1], Minami Tagawa[1], Yusuke Suzuki[1], Yumiko Takahashi[1], Yuichi Takei[1], Noriko Sakurai[1], Miho Yamaguchi[2], Koichi Ujita[3], Yoshito Tsushima[3], Kosuke Narita[1], Masato Fukuda[1]
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1768 Visualization and quantification of corticothalamic somatotopies in humans
Emily Kilroy[1], Wesley Burge[2], Fang-Cheng Yeh[3], Timothy Verstynen[4]
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1769 Monte Carlo simulations disambiguate the biophysical mechanisms of diffusion hindrance along tracts
Michiel Kleinnijenhuis[1], Jeroen Mollink[1], Paul Kinchesh[2], Wilfred Lam[1], Alexandre Khrapitchev[2], Nicola Sibson[2], Vitaly Galinsky[3], Lawrence Frank[3], Sean Smart[2], Saad Jbabdi[1], Karla Miller[1]
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1770 Characterization of white matter degeneration via multivariate diffusion imaging analysis frame
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1771 Hypothalamic microstructure changes after testosterone treatment in female-to-male transsexuals
Georg Kranz[1], Andreas Hahn[1], Ulrike Kaufmann[2], Martin Kueblboeck[3], Allan Hummer[3], Sebastian Ganger[1], Rene Seiger[1], Christian Windischberger[3], Siegfried Kasper[1], Rupert Lanzenberger[1]
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1772 Injury of the corticobulbar tract in patients with dysarthria following cerebral infarct: DTT study
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1773 White Matter Development Influenced in Adolescents with Vertically-transmitted HIV Infection
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1774 Efficacy of Generalized Q-Sampling Imaging on Deterministic Tractography in Phantom and Neural Data
Sarah Lichenstein[1], James Bishop[2], Fang-Cheng Yeh[3], Timothy Verstynen[3]
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1775 Adolescent Stress Induced White Matter Changes Revealed by Diffusion MRI in DISC1 Transgenic Mice
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1776 A novel spherical deconvolution approach for resolving fiber crossing in LARDI
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1777 Ghost Artifact Reduction for EPI at 7T
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1778 Analysis of Gray Matter anisotropy using spherical deconvolution of 7T Diffusion-Weighted MR images
Ralf Luetzkendorf[1], Robin Heidemann[2], Thorsten Feiweier[2], Joerg Stadler[3], Andre Brechmann[4], Joern Kaufmann[5], Sebastian Baecke[1], Michael Luchtmann[6], Johannes Bernarding[1]
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1779 Genome-wide psychosis-risk gene ZNF804A modulates white matter structure in health and psychosis
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1780 BDNF genotype impacts the integrity of white matter structures within recognition memory circuits
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1781 Altered Structural White Matter Networks are Associated with Processing Speed in HIV+ Individuals
Talia Nir[1], Neda Jahanshad[1], Christopher Ching[2], Xue Hua[1], Jaroslaw Harezlak[3], Giovanni Schifitto[4], Assawin Gongvatana[5], Jianhui Zhong[4], Tong Zhu[6], Ron Cohen[7], Bradford Navia[8], Paul Thompson[1]
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1782 Improved N/2 ghost correction method in single shot diffusion weighted echo planar imaging at 7T
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1783 Periventricular White Matter is a Nexus for Network Connectivity in the Human Brain
Julia Owen[1], Yi-Shin Chang[1], Pratik Mukherjee[1]
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1784 Mapping white matter fibers to the cortical surface: local and global connectivity over the cortex
Maria Carmela Padula[1], Elisa Scariati Jaussi[1], Kadir Mutlu[1], Maude Schneider[1], Stephan Eliez[1,2], Marie Schaer[1,3]
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1785 White matter and cerebellar tracts involvement in Alzheimer disease and Mild Cognitive Impairment
Fulvia Palesi[1,2], Gloria Castellazzi[3,2], Elena Sinforiani[4], Paolo Vitali[5,6], Claudia Wheeler-Kingshott[7], Egidio D'Angelo[6,2]
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1786 Effects of K-SVD Denoising on Anisotropy Metrics Computed from DW-MRI
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1787 Multiband and ZOOMit DTI for the reconstruction of nervous tracks from the spine to the cortex
Marco Piccirelli[1], Thomas Beck[2], Val Runge[1], Antonios Valavanis[1], Spyros Kollias[1]
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1788 High resolution in vivo connectivity mapping of the subthalamic nucleus with ultra-high field MRI
Birgit Plantinga[1,2], Alard Roebroeck[3], Kamil Uludağ[3], Dimo Ivanov[3], Maartje Melse[2], Max Mentink[4], Mark Kuijf[5], Bart ter Haar Romenij[1], Yasin Temel[2,6]
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1789 Chronic Ketamine Exposure Causes White Matter Impairments in Adolescent Cynomolgus Monkeys
Li Qi[1,2], Lin Shi[3,4], Hongluan Yu[5], Xiao Wei[6], Grainne McAlonan[7], Pak Sham[8,2,9], Defeng Wang[6]
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1790 Neurite orientation dispersion and density imaging in patients with spinocerebellar ataxia type 6
Kanako Sato[1], Koji Kamagata[2], Ryuji Sakakibara[3], Hitoshi Terada[3], Shigeki Aoki[4]
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1791 Grey matter mean diffusivity predicted by CSF ApoE, ApoA-I and tau levels
Mélissa Savard[1], Yasser Iturria-Medina[2], Cécile Madjar[1], Ilana Leppert[2], Anne Labonté[1], Pedro Rosa-Neto[1], Alan Evans[2], Judes Poirier[1], John Breitner[1]
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1792 Diffusion Tensor Imaging of the Pediatric Spinal Cord
Sona Saxena[1], Devon Middleton[1], Scott Faro[1], Pallav Shah[1], Laura Krisa[2], MaryJane Mulcahey[2], Rebecca Sinko[2], John Gaughan[1], Jürgen Finsterbusch[3], Feroze Mohamed[1]
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1793 Morse Code learning is associated with structural changes in the left inferior longitudinal fascicul
Lara Schlaffke[1], Naima Rüther[2], Stefanie Heba[1], Christian Bellebaum[3], Martin Tegenthoff[1], Tobias Schmidt-Wilcke[1]
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1794 The anatomical location of the corticobulbar tract at the corona radiata: DTT study
Jeong Pyo Seo[1], Sung Ho Jang[1]
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1795 Real valued diffusion weighted imaging using decorrelated kernel based phase correction
Tim Sprenger[1,2], Jonathan I. Sperl[2], Brice Fernandez[3], Axel Haase[4], Marion I. Menzel[2]
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1796 Mode and Fractional Anisotropy (MOFA) shape analysis of DTI Data
Jeff Stevenson[1], Todd Richards[1], Jasper van den Bosch[1], Patricia Kuhl[1]
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1797 Brain Microstructural Changes in Chronic Obstructive Pulmonary Disease: lobar volumetry, voxel-based
Woo-Suk Tae[1], Sam-Soo Kim[2], Woo-Jim Kim[1], Seung-Hwan Lee[1]
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1798 The relation between left temporoparietal white matter and reading: A Spherical Deconvolution study
Jolijn Vanderauwera[1], Maaike Vandermosten[1], Flavio Dell'Acqua[2], Jan Wouters[1], Pol Ghesquière[1]
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1799 Fornix Subregions and Hippocampal Formations in Humans and Rhesus Macaques
Matt Walker[1], Ron Levy[2], David Qixiang Chen[3], Dave Hayes[4], Brendan Behan[5], Karen Davis[6], Mojgan Hodaie[7]
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1800 Abnormal brain white matter skeleton in patients with non-communicative state
Huan Wang[1], Qiuyou Xie[2], Ling Weng[1], Qing Ma[2], Qin Xu[1], Feng Zhou[2], Changhong Li[1], shufang chu[2], Ling Zhao[1], Ronghao Yu[2], Miao Zhong[1], Ruiwang Huang[1]
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1801 Ultra-high Field Diffusion Tensor Imaging of Human Hypothalamus
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1802 Virtual Reality Visualizations of Brain Connectomics
Allen Ye[1], Olusola Ajilore[1], Alessandro Febretti[1], Andrew Johnson[1], Johnson GadElkarim[1], Shaolin Yang[1], Richard Magin[1], Angus Forbes[1], Anand Kumar[1], Alex Leow[1]
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1803 Scale-dependent Information Transfer Efficiency in Ventral Affective Versus Dorsal Executive Systems
Allen Ye[1], Liang Zhan[2], Johnson GadElkarim[1], Sean Conrin[1], Aifeng Zhang[1], Shaolin Yang[1], Anand Kumar[1], Jamie Feusner[3], Olusola Ajilore[1], Alex Leow[1]
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1804 Diffusion tensor histogram parameters predict cognitive impairment in cerebral small vessel disease
Eva Zeestraten[1], Philip Benjamin[1], Andrew Lawrence[2], Christian Lambert[1], Robin Morris[3], Thomas Barrick[1], Hugh Markus[2]
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1805 Genetic analysis of diffusion MRI derived brain network topology in 548 twins
Liang Zhan[1], Neda Jahanshad[2], Joshua Faskowitz[3], dajiang zhu[4], Gautam Prasad[5], Nick Martin[6], Greig de Zubicaray[7], Katie McMahon[7], Margaret Wright[8], Paul Thompson[9]
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1806 Boosting the power to detect HIV effects on brain connectivity using High-Order SVD
Liang Zhan[1], Yashu Liu[2], Neda Jahanshad[3], Talia Nir[4], Victor Valcour[5], Jieping Ye[6], Paul Thompson[7]
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1807 The onset age of L2 reorganize the hubs of brain structural networks in bilinguals
Ling Zhao[1], Liu Tu[2], Junjing Wang[1], Bo Jiang[3], Lan Wei[2], Ling Weng[1], Xiaoyuan Ma[2], Huan Wang[1], Meiqi Niu[1], Qin Xu[1], Changhong Li[1], Zhi Lu[4], Ruiwang Huang[1]
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1808 An HFP-ADC Method for Differentiating the Tumors
Peng ZHou[1,2], Zhiye Chen[3], Lin Ma[3], Huiguang He[1,2]
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Imaging Methods

EEG

1809* Tracking dynamics of functional brain networks using dense EEG, (O-T3)
Mahmoud Hassan[1], Fabrice Wendling[2]
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1810 Evoked EEG and Pupillary Measures Predictive of Choice Confidence in Complex Task Environments
Sergul Aydore[1], Victor Shih[1], Christian Kothe[2], Scott Makeig[2], Paul Sajda[1]
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1811 An ERP Measure of AoA and Orthographic Transparency Effects on Visual Word Recognition in Persian
Mehdi Bakhtiar[1], I-Fan Su[1], Brendan Weekes[1], Hyun Kyung Lee[1]
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1812 Differentiating "asleep" and "awake" states electrographically during intracranial EEG monitoring
helen barkan[1]
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1813 EEG correlates to syncope during tilt-table testing
helen barkan[1], james neider[2], natalie sanders[3]
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1814 Handling EEG data in large-scale analysis:A containerized approach for real-world brain imaging data
nima bigdely-shamlo[1], Kay Robbins[2]
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1815 Lights, Camera, Inter-Subject Correlation's and Action! EEG ISC magnitudes depend on movie content
David Bridwell[1], Cullen Roth[2], Cota Navin Gupta[1], Vince Calhoun[3]
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1816 ERP Topography of the effects of Music Therapy for children with severe neurological disorders
Maria Bringas[1,2], Mireille Besson[3], Carlos Maragoto[4], Pedro Rojas-Lopez[5], Marilyn Zaldivar[6], Lídice Galán-García[5], Pedro A. Valdes-Sosa[5,7]
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1817 Decoding of concentric/eccentric contraction using single-trial motor-related electroencephalograms
Kwang Su Cha[1], Jeong Woo Choi[1], Joohee Park[2], Hye-Seon Jeon[2], Kyung Hwan Kim[1]
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1818 The electrophysiology of the brain at rest
Anna Custo[1], Dimitri Van De Ville[2], Miralena Tomescu[3], Christoph Michel[4]
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1819 Modulation of Electrophysiological Responses to a Roving Sequence by Awareness in Waking and Sleep
Daniela Dentico[1], Madoka Takahara[2], Melanie Boly[1], Giulio Tononi[1]
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1820 Validation of a dry multichannel Electroencephalography cap in a multi volunteer study
Patrique Fiedler[1], Carlos Fonseca[2], Stefan Griebel[3], Paulo Pedrosa[2], Filipe Vaz[4], Frank Zanow[5], Lena Zentner[3], Jens Haueisen[6]
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1822 Graph analysis of EEG eyes-closed resting state in dyslexics and typically reading children
Gorka Fraga Gonzalez[1,2], Melle van der Molen[3], Gojko Zaric[4], Milene Bonte[4], Jurgen Tijms[1,5,2], Leo Blomert[4], Cornelis Stam[6], Maurits van der Molen[1,2,7]
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1823 Mapping of auditory evoked responses using high-resolution micro-electrocorticography
Alexis Gkogkidis[1,2,3], Mortimer Gierthmuehlen[4], Xi Wang[1,2], Celina Kuehn[2], Joern Rickert[3,5], Tonio Ball[1,2,3]
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1824 Modulating Brain Signal variability with changes in task predictability
Jessie Hart[1], Stephanie Willat[2], Andrea Protzner[2]
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1825 A Multi-Step Model with Spatial and Temporal Constrains for EEG Source Localization
Jidong Hou[1], Phan Luu[1], Ching-Chang Kuo[1], Kyle Morgan[1], Jasmine Song[1], Don Tucker[1]
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1826 A new measure for monitoring intraoperative somatosensory evoked potentials
Seung-Hyun Jin[1], Chun Kee Chung[2]
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1827 Anticipation Process is Faster for Facial Stimulus than for Word and Symbolic Stimuli
Yasunori Kotani[1], Yoshimi Ohgami[2], Jun-ichiro Arai[3], Shigeru Kiryu[4], Yusuke Inoue[5]
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1828 The impact of using a high-density montage and a realistic head model for EEG signal re-referencing
Quanying Liu[1,2], Joshua Balsters[1], Onno Van der Groen[1], Marc Baechinger[1], Nicole Wenderoth[1,3], Dante Mantini[1,2]
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1829 The Impact of Cognitive Training and Brain Stimulation on Neural Correlates of Fluid Intelligence
Karen Mansfield[1], Anna-Katharine Brem[1,2], Jessamy Almquist[3], Roi Cohen Kadosh[1], Michael Dillard[3], Deniz Erdogmus[4], Garrett Kimball[5], James McKanna[4], Eben Myers[5], Umut Orhan[3], Alvaro Pascual-Leone[2], Misha Pavel[4], Franziska Plessow[2], Emiliano Santarnecchi[2], Nick Yeung[1], Santosh Mathan[3]
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1830 Evaluation of Real-time Removal of Cardiobalistic Artifacts from EEG Data Acquired during fMRI
Ahmad Mayeli[1,2], Vadim Zotev[1], Hazem Refai[2], Jerzy Bodurka[1,3]
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1831 ICA-Based Automatic Artifacts Detection and Removal from EEG Data Recorded Simultaneously with fMRI
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1832 Prospective motion correction of EEG-fMRI data: What does the fMRI correction cause to the EEG data?
Danilo Maziero[1], Carlos Salmon[1], David Carmichael[2]
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1833 An EEG microstate ERP analysis of working memory in narcolepsy
Natasha Morales Drissi[1], Suzanne Witt[2], Attila Szakacs[3], Tove Hallböök[4], Martin Ulander[5], Thomas Karlsson[6], Anne-Marie Landtblom[1], Maria Engström[7]
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1834 EEG-microstates correlate to resting state networks in patients with narcolepsy
Natasha Morales Drissi[1], Suzanne Witt[2], Attila Szakacs[3], Tove Hallböök[4], Anne-Marie Landtblom[5], Maria Engström[6]
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1835 An ultrasonic tactile display as a useful tool to explore active and passive touch: an EEG study
Athanasia Moungou[1], Eric Vezzoli[2], David Gueorguiev[1], Betty Lemaire-Semail[2], André Mouraux[1]
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1836 Spatial Components of Stimulus-Preceding Negativity prior to Unilateral Stimulus Presentation
Yoshimi Ohgami[1], Yasunori Kotani[2], Jun-ichiro Arai[3], Shigeru Kiryu[4], Yusuke Inoue[5]
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1837 Electrophysiological investigation of language processing in prematurely born children
Natacha Paquette[1,2], Phetsamone Vannasing[2], Julie Tremblay[2], Franco Lepore[1,2], Maryse Lassonde[1,2], Anne Gallagher[1,2]
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1838 The impact of source-localized EEG phase neurofeedback on brain activity
Boris Rauchmann[1], Daniel Keeser[1,2], Kirsch Valerie[3], Brian Stamm[1], Paul Reidler[1], Robert Thatcher[4], Susanne Karch[2], Oliver Pogarell[2], Birgit Ertl-Wagner[1]
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1839 Fearful facial crowds influence subsequent face processing via enhanced amygdala-FFG inhibition
Barbara Reese[1]
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1840 Neurofeedback tunes scale-free brain dynamics in the human EEG
Tomas Ros[1], Rosemarie Kluetsch[2], Jean Théberge[3], Paul Frewen[4], Gian Candrian[5], Andreas Mueller[5], Patrik Vuilleumier[1], Ruth Lanius[4]
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1841 Associations between Maternal Depression, Children's Frontal Functional Connectivity
Ni Ni Soe[1], Joann S. Poh[1,2], Yue Li[1], Sam suet Chian[2], Michaela bruetnager[2], Yap Seng Chong[2,3], Kenneth Kwek[4], Seang-mei Saw[5], Peter D. Gluckman[2,6], Michael J. Meaney[2,7], Birit FP Broekman[2], Anne Rifkin-Graboi[2], Anqi Qiu[1,2,8]
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1842 3D Motor Imagery Stimulations and their Impact on Motor Cortex Activation
Teresa Sollfrank[1], Daniel Hart[2], Rachel Goodsell[3], Jonathan Foster[3], Tele Tan[2]
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1843 Using Directed Transfer Function to infer on prefrontal influences in emotional control
Ligeza Tomasz[1], Miroslaw Wyczesany[1]
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1844 EEG phase-amplitude coupling correlates of Buddhist meditation-related trait anxiety reduction
Arthur C. Tsai[1], Chii-Shyang Kuo[1], Vincent Chien[1], Michelle Liou[1], Philip E. Cheng[1]
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1845 An EEG study of real-life auditory working memory in high trait anxiety subjects
Yi-Li Tseng[1,2], Vincent Chien[2], Zhi-Shun Yang[1], Michelle Liou[2]
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1846 Impaired large-scale synchrony networks deteriorate functional recovery in stroke patients
Yutaka Uno[1], Teiji Kawano[2], Noriaki Hattori[2,1], Megumi Hatakenaka[2], Ichiro Miyai[2], Keiichi Kitajo[1]
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1847 Fast Electrical Source Imaging without the subject´s MRI: Bayesian Modal Averaging across heads
Pedro Antonio Valdes-Hernandez[1], Nelson Trujillo-Barreto[2], Pedro A. Valdes-Sosa[3]
[1]Cuban Neuroscience Center, Havana, Cuba, [2]University of Manchester, Manchester, United Kingdom, [3]Cuban Neuroscience Center, Ciudad Habana, Ciudad Habana

1848 Sensory-motor networks' topology in multiple sclerosis fatigue
Fabrizio Vecchio[1], Francesca Miraglia[1], Camillo Porcaro[2], Carlo Cottone[2], Andrea Cancelli[2], Paolo Maria Rossini[3], Franca Tecchio[2]
[1]Brain Connectivity Laboratory, IRCCS San Raffaele Pisana, Rome, Italy, [2]LET'S-ISTC-CNR, Rome, Italy, [3]Dept. of Neuroscience, Catholic University, Rome, Italy

1849 Auditory processing in autism spectrum disorders: MMN deficits in infantile autism and PDD NOS
Chantal Vlaskamp[1], Bob Oranje[1], Gitte Falcher Madsen[2], Jens Richardt Jepsen[3], Sarah Durston[1], Cathriona Cantio[4], Birte Glenthøj[5], Niels Bilenberg[4]
[1]UMC Utrecht, Utrecht, Netherlands, [2]Department of Child and Adolescent Mental Health Odens, Odense, Denmark, [3]Center for Neuropsychiatric Schizophrenia Research (CNSR), Copenhagen, Denmark, [4]Department of Child and Adolescent Mental Health, Odense, Denmark, [5]Center for Neuropsychiatric Schizophrenia Research & Center for Clinical Intervention and Neuropsych, Glostrup, Denmark

1850 Relating brain signal variability in pre- and post-task resting-state EEG to Scrabble© expertise
Hongye Wang[1], Penny Pexman[1,2], Filomeno Cortese[2,3], Andrea Protzner[1,2]
[1]Dept. of Psychology, University of Calgary, Calgary, Canada, [2]Hotchkiss Brain Institute, University of Calgary, Calgary, Canada, [3]Seaman Family MR Centre, Foothills Medical Centre, University of Calgary, Calgary, Canada

1851 Utilizing the theta–gamma synchronization to estimate visuospatial memory ability
Chia-Yen Yang[1], Li-Yang Lee[1]
[1]Department of Biomedical Engineering, Ming-Chuan University, Taoyuan, Taiwan

1852 Nonlinear Connectivity of the Afferent Pathway in Sensorimotor Control
Yuan Yang[1], Teodoro Solis-Escalante[1], Jun Yao[2], Frans van der Helm[1], Alfred Schouten[1]
[1]Department of Biomechanical Engineering, Delft University of Technology, Delft, The Netherlands, [2]Department of Physical Therapy and Human Movement Sciences, Northwestern Univesity, Chicago, IL

1853 Fearful face processing in human engages directional coupling from amygdala to hippocampus
Jie Zheng[1], Jeffrey Riley[2], Gultekin Gulsen[1], Avgusta Shestyuk[3], Kristopher Anderson[3], Robert Knight[3], Jack Lin[2]
[1]Department of Biomedical Engineering, University of California, Irvine, CA, [2]Department of Neurology, University of California-Irvine, Irvine, CA, [3]Helen Wills Neuroscience Institute, University of California, Berkeley, Berkeley, CA

1854 Comparison of Trial-to-Trial Variability via Multi-Modal Studies using EEG and fNIRS
Li Zhu[1], Laleh Najafizadeh[2]
[1]Rutgers University, Piscataway, NJ, [2]Center for Neuroscience and Regenerative Medicine/Henry M. Jackson Foundation/NIH, N/A

Imaging Methods

Imaging Methods Other

1855* Direct detecting optogenetically evoked oscillating neural current in rats using SLOE sequence, (O-M4)
Yuhui Chai[1], Guoqiang Bi[2], Hao Lei[3], Liping Wang[4], Fuqiang Xu[3], Xin Zhou[3], Bensheng Qiu[2], Jia-Hong Gao[1]
[1]MRI Research Center and Beijing City Key Lab for Medical Physics and Engineering, Peking University, Beijing, China, [2]USTC, Hefei, China, [3]WIPM, CAS, Wuhan, China, [4]SIAT, CAS, Shenzhen, China

1856* High resolution MRI neuroanatomy in whole human brains post mortem with a specialized 9.4T RF-coil, (O-M5)
Alard Roebroeck[1], Shubharthi Sengupta[1], Matteo Bastiani[1], Scott Schillak[2], Brandon Tramm[2], Matt Waks[2], Arno Lataster[3], Andreas Herrler[3], Desmond Tse[4,5], Benedikt Poser[1]
[1]Dept. of Cognitive Neuroscience, Faculty of Psychology & Neuroscience, Maastricht University, Maastricht, Netherlands, [2]Life Services, LLC, Minneapolis, MN, USA, Minneapolis, MN, [3]Dept. of Anatomy & Embryology, Faculty of Health, Medicine & Life Science, Maastricht University, Maastricht, Netherlands, [4]Dept. of Neuropsychology and Psychopharmacology, Faculty of Psychology & Neuroscience, Maastricht U, Maastricht, Netherlands, [5]Dept. of Radiology, Maastricht University Medical Centre, Maastricht, Netherlands

1857* ASL Contrast Optimization in Multiphase STAR Labeling using Variable Flip Angle, (O-W5)
Andre Paschoal[1], Renata Leoni[2], Antonio dos Santos[2], Bernd Foerster[3], Fernando Paiva[1]
[1]University of Sao Paulo, Sao Carlos, SP, Brazil, [2]University of Sao Paulo, Ribeirao Preto, SP, Brazil, [3]Philips Medical Systems, Sao Paulo, Brazil

1858 When to perform channel combination in 7 Tesla quantitative susceptibility mapping?
Steffen Bollmann[1], Fabian Zimmer[1], Kieran O'Brien[1], Viktor Vegh[1], Markus Barth[1]
[1]Centre for Advanced Imaging, Brisbane, Australia

1859 Leveraging T2* properties of functional MRI to image iron; you can do it too!
Stan Colcombe[1], Michael Milham[2], Anna MacKay-Brandt[3], Cameron Craddock[4], Philip Reiss[5], Rong Jiao[6]
[1]Nathan Kline Insitute, Orangeburg, NY-New York, [2]Nathan Kline Institute for Psychiatric Research, Orangeburg, New York, NY, [3]Nathan Kline Insitute, Orangeburg, NY, [4]Child Mind Institute, New York, NY, [5]New York University, New York, NY, [6]NYU Medical School, New York, NY

1860 A Fast Reconstruction for Simultaneous Multi-Slice Radial Magnetic Resonance Imaging
Weiran Deng[1], V Andrew Stenger[2]
[1]Univ of Hawaii John A Burns School of Medicine, Honolulu, HI, [2]University of Hawaii, Honolulu, HI

1861 Reproducible cortical responses to film viewing measured by High-Density Diffuse Optical Tomography
Andrew Fishell[1], Adam Eggebrecht[1], Steven Petersen[2], Joseph Culver[3]
[1]Washington University School of Medicine, St. Louis, United States, [2]Washington University, St. Louis, United States, [3]Washington University in St. Louis, St. Louis, United States

1862 Effects on real-time fMRI neurofeedback from increased spatial resolution using ultra-high field MRI
Lydia Hellrung[1,2], Johan van der Meer[3], Myung-Ho In[4], Viola Borchardt[3], Florian Götting[3], Torsten Schlumm[5], Michael Smolka[1], Martin Walter[3]
[1]Technische Universität Dresden, Dresden, Germany, [2]Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, [3]Leibniz Institute for Neurobiology, Magdeburg, Germany, [4]Otto-von-Guericke University, Magdeburg, Germany, [5]Max Planck Institute for Human Cognitive and Brain Sciences Leipzig, Leipzig, Germany

1863 Comparison of myelin water imaging methods: ViSTa, DTI and MTR
HAN JANG[1], Jongho Lee[1]
[1]SEOUL NATIONAL UNIVERSITY, SEOUL, Korea, Republic of

1864 How does T2*-phase-contrast improve brain microbleeds discrimination in clinical setting?
Takoua Kaaouana[1,2], Ali Bouyahia[1,2], Ludovic de Rochefort[3], Bruno Law-ye[4], nadya pyatigorskaya[4], Nathalie Thiery[5], Anne Bertrand[4,1], Carole Dufouil[5], christine delmaire[6], Didier Dormont[1,4], Marie CHUPIN[1]
[1]ARAMIS Lab, Inserm U1127, CNRS UMR 7225, UPMC, ICM, Inria, Paris, France, [2]CATI, Centre d'Acquisitions et de Traitement d'Images, Paris, France, [3]Univ. Paris-Sud, CNRS IR4M UMR8081, Orsay, France, [4]Department of Functional and Diagnostic Neuroradiology, Pitié Salpêtrière University Hospital, Paris, France, [5]U897, INSERM, Bordeaux, France, [6]Department of Neuroradiology, CHRU Roger Salengro, Lille, France

1865 Flexible 23-Channel RF Coil Array for fMRI Studies of the Occipital Lobe at 3T
Roberta Kriegl[1,2], Lucia Navarro de Lara[1,2], Michael Pichler[1,2], Jürgen Sieg[1,2], Ewald Moser[1,2], Christian Windischberger[1,2], Elmar Laistler[1,2]
[1]Center for Medical Physics and Biomedical Engineering, Medical University of Vienna, Vienna, Austria, [2]MR Centre of Excellence, Medical University of Vienna, Vienna, Austria

1866 MB-EPI PCASL and T1 Imaging for Ultra-High Resolution Whole-Brain Cerebral Blood Flow Quantification
Xiufeng Li[1], Dingxin Wang[2,1], Kamil Ugurbil[1], Gregory Metzger[1]
[1]University of Minnesota, Minneapolis, MN, [2]Siemens Healthcare, Minneapolis, MN

1867 Inhibitory process on the difference type of stimuli on the stop-signal task in children with ADHD
Yasushi Nakano[1], Shinji Okazaki[1]
[1]University of Tsukuba, Tsukuba, Ibaraki

1868 Source modelling of ElectroCorticoGraphy data: stability analysis and spatial filtering
annalisa pascarella[1], Chiara Todaro[2], Maureen Clerc[3], Thomas Serre[4], Michele Piana[5,6]
[1]IAC-CNR, Rome, Italy, [2]Department of Neuroscience and Imaging, G. d'Annunzio University of Chieti, Pescara, Italy, [3]Inria, Sophia Antipolis, France, [4]Brown University, Providence, RI, [5]Universita di Genova, Genova, Italy, [6]CNR - SPIN, Genova, Italy

1869 Identifying Brain SPECT changes in Default Mode Network areas: Clinical and Prognostic Significance
Dan Pavel[1], Steven Best[2]
[1]The Neuroscience Center, Deerfield IL, 60010, United States, [2]The Neuroscience, Deerfield, IL

1870 Reproducibility of Brain Quantitative Susceptibility Mapping Techniques in Healthy Subjects
Mathieu Santin[1,2], Mélanie Didier[1,2], Romain Valabregue[1,2], Daniel Garcia-Lorenzo[1,2], Paulo Loureiro de Sousa[3], Eric Bardinet[1,2], Stéphane Lehéricy[1,2]
[1]Centre de NeuroImagerie de Recherche - CENIR, Paris, France, [2]Institut du Cerveau et de la Moelle épinière - ICM, Inserm U 1127, CNRS UMR 7225, Sorbonne Universités, UPMC Univ Paris 06 UMR S 1127, Paris, France, [3]Université de Strasbourg, CNRS, ICube (UMR 7357), FMTS, Strasbourg, France

1871 A Robust Nyquist Ghost Suppression for High-resolution Echo Planar Imaging of Small Animal Brains
Hiroshi Toyoda[1], Naoya Yuzuriha[2], Sosuke Yoshinaga[2], Hiroaki Terasawa[2]
[1]National Institute of Information and Communications Technology, Suita, Japan, [2]Kumamoto University, Kumamoto, Japan

1872 Field-gradient mapping and signal loss in echo-planar imaging: a regional analysis
Yu-Sheng Tseng[1], Teng-Yi Huang[1], Fu-Nien Wang[2], Shang-Yueh Tsai[3], Yi-Jui Liu[4]
[1]Department of Electrical Engineering, National Taiwan University of Science and Technology, Taipei, Taiwan, [2]Department of Biomedical Engineering and Environmental Sciences, National Tsing Hua University, Hsinchu, Taiwan, [3]The Graduate Institute of Applied Physics, National Chengchi University, Taipei, Taiwan, [4]Feng Chia University, Taichung, Taiwan

1873 Influence of Motion Artifacts in Voxel-Based Morphometry and Surface-Based Morphometry Analyses
Keita Watanabe[1], Shingo Kakeda[2], Natsuki Igata[1], Rieko Watanabe[1], Toru Sato[1], Osamu Abe[3], Yukunori Korogi[2]
[1]University of Occupational and Environmental Health, Japan, Fukuoka, Japan, [2]University of Occupational and Environmental Health, Fukuoka, Japan, [3]Nihon University School of Medicine, Tokyo, 0

Imaging Methods

Imaging of CLARITY

1874* MRI evaluation of the CLARITY method for lipid removal from brain tissue, (O-T4)
Christoph Leuze[1], Raju Tomer[1], Emily Ferenczi[1], Qiyuan Tian[1], Michael Zeineh[1], Karl Deisseroth[1], Jennifer McNab[1]
[1]Stanford University, Stanford, United States

Imaging Methods

MEG

1875* The Dynamic Recruitment of Resting State Sub-networks, (O-M1)
George O'Neill[1], Markus Bauer[2], Mark Woolrich[3], Peter Morris[1], Gareth Barnes[4], Matthew Brookes[1]
[1]University of Nottingham, Nottingham, United Kingdom, [2]Univerisy of Nottingham, Nottingham, United Kingdom, [3]University of Oxford, Oxford, United Kingdom, [4]UCL, London, United Kingdom

1876 Resting state beta peak frequency correlates with regional endogenous GABA concentration
Thomas Baumgarten[1], Georg Oeltzschner[1,2], Nienke Hoogenboom[1], Alfons Schnitzler[1], Joachim Lange[1]
[1]Institute of Clinical Neuroscience and Medical Psychology, Medical Faculty,Heinrich-Heine-University, Düsseldorf, Germany, [2]University Düsseldorf, Medical Faculty, Department of Diagnostic and Interventional Radiology, Düsseldorf, Germany

1877 Simulations on a whole-head atomic magnetometer based MEG system
Elena Boto[1], Peter Kruger[2], Mark Fromhold[2], Richard Bowtell[1], Matthew Brookes[1]
[1]Sir Peter Mansfield Imaging Centre, School of Physics and Astronomy, University of Nottingham, Nottingham, United Kingdom, [2]Cold Atoms and Quantum Optics Group, School of Physics and Astronomy, University of Nottingham, Nottingham, United Kingdom

1878 MEG mapping with corticokinematic coherence in the presence of artifacts
Mathieu Bourguignon[1], Stephen Whitmarsh[2], Harri Piitulainen[1], Riitta Hari[1], Veikko Jousmäki[1], Daniel Lundqvist[2]
[1]Brain Research Unit, Department of Neuroscience and Biomedical Engineering, Aalto University, Espoo, Finland, [2]NatMEG, Department of Clinical Neuroscience, Karolinska Institutet, Stockholm, Sweden

1879 A dynamic core network model in the brain at rest
Francesco de Pasquale[1], Stefania Della Penna[2], Olaf Sporns[3], Gian Luca Romani[4], Maurizio Corbetta[5]
[1]ITAB,University of Chieti, Chieti, Italy, [2]Department of Neuroscience and Imaging, "G. d'Annunzio" University Chieti-Pescara, Chieti, Italy, [3]Indiana University, Bloomington, United States, [4]Department of Neuroscience and Imaging – G. D'Annunzio University of Chieti, Chieti, Chieti, [5]Dept. Neurology, Radiology, and Anatomy and Neurobiology, Washington University School of Medicine, St. Louis, MO

1880 Idiopathic Generalized Epilepsy Shows Widespread Increased Network Connectivity
Adham Elshahabi[1], Silke Klamer[2], Ashish kaul Sahib[3], Holger Lerche[1], Christoph Braun[4], Niels Focke[5]
[1]University of Tübingen, Tübingen, Germany, [2]University Hospital Tübingen, Tübingen, Germany, [3]University of tübingen, Tübingen, Germany, [4]MEG Center, University of Tübingen, Tuebingen, Germany, [5]Deapartment of Neurology, University hospital Tübingen, Tübingen, Germany

1881 Spatial mismatch responses in the pain system
Francesca Fardo[1], Micah Allen[1], Martin Dietz[2], Ryszard Auksztulewicz[1], Andreas Roepstorff[2]
[1]University College London, London, United Kingdom, [2]Aarhus University, Aarhus, Denmark

1882 Patterns of Functional Connectivity Reveal Conscious Perception: an MEG Study
Chiara Fioravanti[1], Diljit Singh Kajal[2,3], Christoph Braun[1,4], Niels Birbaumer[2], Sergio Ruiz[5,2], Ranganatha Sitaram[6,2]
[1]University of Tübingen, Tuebingen, Germany, [2]University of Tübingen, Tübingen, Germany, [3]IMPRS, GTC, Tübingen, Germany, [4]University of Trento, Tranto, Italy, [5]Pontificia Universidad Catolica de Chile, Santiago, Chile, [6]tment of Biomedical Engineering, University of Florida, Florida, United States

1883 Auditory habituation to syllables in fetuses and neonates: a fetal magnetoencephalography study
Julia Hartkopf[1], Isabelle Kiefer-Schmidt[2], Karl-Oliver Kagan[2], Magdalene Weiss[2], Hubert Preissl[2], Jana Muenssinger[1]
[1]University of Tuebingen, Tübingen, Germany, [2]University of Tuebingen, Tuebingen, Germany

1884 Temporal neurodynamics of face repetition effects in young children and adults measured with MEG
Wei He[1,2], Jon Brock[1,2], Blake Johnson[1,2]
[1]Department of Cognitive Science, Macquarie University, Sydney, Australia, [2]ARC Centre of Excellence in Cognition and Its Disorders, Sydney, Australia

1885 Modulation of movement-related beta oscillatory dynamics with cue timing
Elizabeth Heinrichs-Graham[1], Tony W Wilson[2]
[1]University of Nebraska Medical Center, Omaha, United States, [2]University of Nebraska Medical Center, N/A

1886 Movement complexity modulates cortical oscillatory dynamics in the motor circuit
Elizabeth Heinrichs-Graham[1], Tony W Wilson[2]
[1]University of Nebraska Medical Center, Omaha, United States, [2]University of Nebraska Medical Center, N/A

1887 New MEG Source Imaging Method Accurately Localizes the Boca's Area in Pre-surgical Mapping Cases
Charles Huang[1], Mingxiong Huang[1], Zhengwei Ji[1], Ashley Robb[2], Annemarie Angeles[2], Mithun Diwakar[1], Tao Song[1], Roland Lee[1]
[1]University of California at San Diego, San Diego, CA, [2]VA San Diego Healthcare System, San Diego, CA

1888 MEG Study of Post-traumatic Stress Disorder and its Potentiation due to Mild Traumatic Brain Injury
Mingxiong Huang[1], Kate Yurgil[2], Ashley Robb[2], Annemarie Angeles[2], Mithun Diwakar[1], Victoria Risbrough[1], Sharon Nichols[1], Robert McLay[3], Rebecca Theilmann[1], Tao Song[1], Charles Huang[1], Roland Lee[1], Dewleen Baker[2]
[1]University of California at San Diego, San Diego, CA, [2]VA San Diego Healthcare System, San Diego, CA, [3]Naval Medical Center San Diego, San Diego, CA

1889 Imaging a smile: A novel approach to measuring brain activity accompanying facial expressions
Cecilia Jobst[1], Natasha Alves[1], Marc Swan[2], Siba Haykal[2], Ronald Zuker[2], Pascal van Lieshout[3], Gregory Borschel[2], Douglas Cheyne[1,3]
[1]Program in Neurosciences and Mental Health, The Hospital for Sick Children, Toronto, Canada, [2]The Division of Plastic and Reconstructive Surgery, The Hospital for Sick Children, Toronto, Canada, [3]University of Toronto, Toronto, Canada

1890 Neurofeedback Modulates both Functional Connectivity within the Motor System and Motor Performance
Diljit Singh Kajal[1,2], Christoph Braun[3,4], Juergen Mellinger[1], Sergio Ruiz[5,3], Matthew Sacchet[6], Eberhard Fetz[7], Niels Birbaumer[1], Ranganatha Sitaram[8,3]
[1]University of Tuebingen, Tübingen, Germany, [2]IMPRS, GTC Tuebingen, Tuebingen, Germany, [3]University of Tuebingen, Tuebingen, Germany, [4]University of Trento, Trento, Italy, [5]Pontificia Universidad Catolica de Chile, Santiago, Chile, [6]Stanford University, Stanford, United States, [7]University of Washington, Seattle, United States, [8]University of Florida, Florida, United States

1891 MEG connectivity during meditation reveals differential DMN interactions in Theravada Buddhist Monks
Laura Marzetti[1], Claudia Di Lanzo[1], Filippo Zappasodi[1], Federico Chella[2], Antonino Raffone[3], Vittorio Pizzella[2]
[1]Dept. of Neuroscience and Imaging, Gabriele d'Annunzio University, Chieti, Italy, [2]Department of Neuroscience and Imaging, G. d'Annunzio University of Chieti-Pescara, Chieti, Italy, [3]Department of Psychology, University "Sapienza", Rome, Italy

1892 Measurements of Human Visual Evoked Fields using a Compact Atomic Magnetometer Module
Hiroaki Natsukawa[1], Keigo Kamada[1], Tetsuya Yamamoto[1], Tetsuo Kobayashi[1]
[1]Graduate School of Engineering, Kyoto University, Kyoto, Japan

1893 Multivariate pattern analysis of MEG and EEG reveals the emergence of human object representations
Dimitrios Pantazis[1], Radoslaw Cichy[2], Yu-Teng Chang[1], Yasaman Bagherzadeh[3]
[1]McGovern Institute for Brain Research, Massachusetts Institute of Technology, Cambridge, MA, [2]Massachusetts Institute of Technology, Cambridge, MA, [3]Institute for Cognitive Science Studies, Tehran, Iran, Islamic Replblic of

1894 Aging Modulates Alpha/Beta Oscillatory Dynamics During a Visual Working Memory Task
Amy Proskovec[1,2], Elizabeth Heinrichs-Graham[1,2], Tony W Wilson[2,1]
[1]University of Nebraska - Omaha, Omaha, United States, [2]University of Nebraska Medical Center, Omaha, United States

1895 Abnormal visuomotor processing in schizophrenia
Sian Robson[1], Matthew Brookes[1], Emma Hall[1], Lena Palaniyappan[1], Jyothika Kumar[1], Michael Skelton[1], Nikolaos Christodoulou[1], Ayaz Qureshi[2], Fiesal Jan[3], Mohammad Katshu[1], Elizabeth Liddle[1], Peter Liddle[1], Peter Morris[4]
[1]University of Nottingham, Nottingham, United Kingdom, [2]Smithdown Health Park, Liverpool, United Kingdom, [3]Leicestershire Partnership NHS Trust, Leicester, United Kingdom, [4]University of Nottingham, Oxford, United Kingdom

1896 MEG Alpha and Gamma-Band Activity Reflect the Late Maturation of Distractor-Inhibition
Frederic Roux[1], Michael Wibral[2], Wolf Singer[3], Peter Uhlhaas[4]
[1]BCBL. Basque Center on Cognition, Brain and Language., Donostia San Sebastian, Guipuzkoa, [2]MEG Unit, Brain Imaging Center, Goethe University, Frankfurt, Germany, Frankfurt, Germany, [3]Max Planck Institute for Brain Research, Frankfurt am Main, Germany, [4]Institute of Neuroscience and Psychology, University of Glasgow, Glasgow, United Kingdom

1897 Relationship between GABA concentration and gamma-band activity: A resting-state MEG study
Minami Tagawa[1], Yuichi Takei[1], Kazuyuki Fujihara[1], Masato Kasagi[1], Yumiko Takahashi[1], Tomokazu Motegi[1], Yusuke Suzuki[1], Noriko Sakurai[1], Miho Yamaguchi[2], Jamie Near[3], Koichi Ujita[4], Yoshito Tsushima[5], Naruhito Hironaga[6], Syozo Tobimatsu[6], Kosuke Narita[1], Masato Fukuda[1]
[1]Department of Psychiatry and Neuroscience, Gunma University Graduate School of Medicine, Maebashi, Japan, [2]Gunma University Faculy of Medicine, Maebashi, Japan, [3]Douglas Mental Health University Institute and Department of Psychiatry, McGill University, Montreal, QC, Canada, [4]Gunma University Hospital, Maebashi, Japan, [5]Department of Diagnostic Radiology and Nuclear Medicine Gunma University Graduate School of Medicine, Maebashi, Japan, [6]Kyushu University, Graduate School of Medicine, Department of Clinical Neurophysiology, Fukuoka, Japan

1898 Magnetoencephalographic study of electrogustatory stimuli
Yoshitaka Takanashi[1], Tetsuaki kawase[1,2], Akitake Kanno[3], Izumi Yahata[1], Yuuri Okumura[1], Nobukazu Nakasato[4], Ryuta Kawashima[3], Yukio Katori[1]
[1]Department of Otolaryngology-Head and Neck Surgery, Tohoku University Graduate School of Medicine, Sendai-city, Japan, [2]Laboratory of Rehabilitative Auditory Science, Tohoku University of Biomedical Engineering, Sendai-city, Japan, [3]Institute of Development, Aging and Cancer, Tohoku University (IDAC), Sendai-city, Japan, [4]Department of Epileptology, Tohoku University Graduate School of Medicine, Sendai-city, Japan

1899 The relationship between neurotransmitters and neural oscillation during working memory task
Yuichi Takei[1], Kazuyuki Fujihara[1], Minami Tagawa[1], Masato Kasagi[1], Yumiko Takahashi[1], Tomokazu Motegi[1], Yusuke Suzuki[1], Noriko Sakurai[1], Miho Yamaguchi[2], Jamie Near[3], Koichi Ujita[4], Yoshito Tsushima[4], Naruhito Hironaga[5], Syozo Tobimatsu[5], Kosuke Narita[1], Masato Fukuda[1]
[1]Department of Psychiatry and Neuroscience, Gunma University Graduate School of Medicine, Maebashi, Gunma, Japan, [2]Gunma University Faculy of Medicine, Maebashi, Gunma, Japan, [3]Douglas Mental Health University Institute and Department of Psychiatry, McGill University, Montreal, QC, Canada, [4]Department of Diagnostic Radiology and Nuclear Medicine Gunma University Graduate School of Medicine, Maebashi, Gunma, Japan, [5]Kyushu University, Graduate School of Medicine, Department of Clinical Neurophysiology, Fukuoka, Japan

1900 Sex-related Differences in Auditory Processing in Adolescents with Fetal Alcohol Spectrum Disorder
Claudia Tesche[1], Piyadasa Kodituwakku[1], Christopher Garcia[1], Jon Houck[1]
[1]University of New Mexico, Albuquerque, NM

1901 Leader- vs. follower-dependent neural signatures of hand kinematics during dual MEG
Guangyu Zhou[1], Mathieu Bourguignon[1], Riitta Hari[1]
[1]Brain Research Unit, Department of Neuroscience and Biomedical Engineering, School of Science, Aalto University, Espoo, Finland

Imaging Methods

MR Spectroscopy

1902 Longitudinal magnetic resonance spectroscopy and cognitive impairment in Parkinson's disease
Mustafa Almuqbel[1], Tracy Melzer[1], Daniel Myall[2], Michael MacAskill[1], Leslie Livingston[1], Kyla Wood[3], Toni Pitcher[1], Ross Keenan[1], John Dalrymple-Alford[4], Tim Anderson[1]
[1]New Zealand Brain Research Institute/ University of Otago, Christchurch, New Zealand, [2]New Zealand Brain Research Institute, Christchurch, New Zealand, [3]New Zealand Brain Research Institute/ University of Canterbury, Christchurch, New Zealand, [4]New Zealand Brain Research Institute/University of Canterbury, Christchurch, New Zealand

1903 How Variable is Manual MRS Volume Positioning within Subjects?
Christoph Arthofer[1], SoYoung Kim[1], Amelia Draper[1], Mary Stephenson[1], Stephen Jackson[1], Alain Pitiot[1], Paul Morgan[2]
[1]University of Nottingham, Nottingham, United Kingdom, [2]Nottingham University Hospitals, Nottingham, United Kingdom

1904 Automatic position of MR spectroscopy voxels
Yu-Jhou Gong[1], Yi-Ru Lin[2], Shang-Yueh Tsai[3]
[1]National Taiwan University of Science and Technology, Taipei, Taiwan, [2]National Taiwan University of Science and Techonology, Taipei, Taiwan, [3]Graduate Institute of Applied Physics, National Chengchi University, Taipei, Taiwan

1905 Realistic Simulation of 1H-MRS data
Ravi Kalyanam[1], David Boutte[2], Kent Hutchison[3], Vince Calhoun[4]
[1]The Mind Research Network, Albuquerque, NM, [2]The Mind Research Network, Albuquerque, United States, [3]Departments of Psychology and Neuroscience, University of Colorado, Boulder, Boulder, CO, [4]Mind Research Network & University of New Mexico, Albuquerque, NM

1906 Eliminate Lipid Artifacts in ^{1}H Spectroscopic Imaging by Post Processing
Shin-Yu Lin[1], Yi-Ru Lin[1], Fa-Hsuan Lin[2], Shang-Yueh Tsai[3,4]
[1]National Taiwan University of Science and Techonology, Taipei, Taiwan, [2]Institue of Biomedical Engineering, National Taiwan University, Taipei, Taiwan, Taipei, Taiwan, [3]Graduate Institute of Applied Physics, National Chengchi University, Taipei, Taiwan, [4]Reasearch Center for Mind, Brain and Learning, National Chengchi University, Taipei, Taiwan

1907 Are spectroscopic measures of glutamate and gaba correlated to each other?
Stefano Marenco[1], Christian Meyer[1], Dwight Dickinson[1], Susan Kuo[1], Jan Willem van der Veen[2], Alan Barnett[3], Jun Shen[2], Daniel Weinberger[4], Karen Berman[1]
[1]NIMH/CTNB, Bethesda, MD, [2]NIMH Spectroscopy Core, Bethesda, MD, [3]NICHD, NIH, Bethesda, MD, [4]Lieber Institute for Brain Development, Baltimore, MD

1908 Relationship of GABA levels to ACC BOLD Activation during Interference Monitoring
Stefano Marenco[1], Ryan Kelly[1], Yunxia Tong[1], Morgan Bartholomew[1], Christian Meyer[1], Jan Willem van der Veen[2], Venkata Mattay[3], Daniel Weinberger[3], Joseph Callicott[1], Karen Berman[1]
[1]NIMH/CTNB, Bethesda, MD, [2]NIMH/ Spectroscopy Core, Bethesda, MD, [3]Lieber Institute for Brain Development, Baltimore, MD

1909 GABA in hepatic encephalopathy - links to blood ammonia, CFF, brain osmolytes and cerebral water
Georg Oeltzschner[1,2], Nienke Hoogenboom[1], Thomas Baumgarten[1], Markus Butz[1], Frithjof Wickrath[2], Gerald Antoch[2], Hans-Jörg Wittsack[2], Alfons Schnitzler[1]
[1]Institute of Clinical Neuroscience and Medical Psychology, Medical Faculty, HHU Düsseldorf, D-40225 Düsseldorf, Germany, [2]University Dusseldorf, Medical Faculty, Department of Diagnostic and Interventional Radiology, D-40225 Dusseldorf, Germany

1910 TE-averaged LASER and Semi-LASER Spectroscopy of Human Brain
Shaolin Yang[1], Anand Kumar[1]
[1]University of Illinois at Chicago, Chicago, IL

Imaging Methods

Multi-Modal Imaging

1911 * A Spontaneous Neurophysiological Event Underlying Spontaneous fMRI Signal Changes, (O-T5)
Xiao Liu[1], Toru Yanagawa[2], David Leopold[3], Marieke Schölvinck[4], Catie Chang[5], Hiroaki Ishida[6], Naotaka Fujii[7], Jeff Duyn[8]
[1]National Institutes of Health, Bethesda, United States, [2]Laboratory for Adaptive Intelligence, Brain Science Institute, RIKEN, Wako, Saitama, [3]National Institutes of Health, Bethesda, MD, [4]Ernst Strüngmann Institute (ESI) for Neuroscience in Cooperation with Max Planck Society, Frankfurt am Main, Germany, [5]National Institutes of Health, Bethesda, MD, United States, [6]Tokyo Metropolitan Institute of Medical Science, Tokyo, Japan, [7]Laboratory for Adaptive Intelligence, Brain Science Institute, RIKEN, Wako, Japan, [8]National Institute of Neurological Disorders and Stroke, NIH, Bethesda, United States

1912 Using combined fMRI-DTI-TMS-ERP to identify and regulate reward valuation during nicotine craving
Travis Baker[1], Alan Tucholka[2], Stephane Potvin[1], Paul Lesperance[1], Didier Jutras-Aswad[1], Kevin Larcher[3], Patricia Conrod[4]
[1]University of Montreal, Montreal, Quebec, [2]BarcelonaBeta Brain Research Center, Pasqual Maragall Foundation, Barcelona, Spain, [3]Montréal Neurological Institute, Montréal, Quebec, [4]University of Montreal, Montréal, Quebec

1913 Multivariate Fusion of EEG oscillations and fMRI using multimodal Source Power Co-modulation (mSPoC)
Sven Dähne[1,2], Dominique Goltz[3], Christopher Gundlach[3], Jan Mehnert[3], Arno Villringer[3], Stefan Haufe[1,4], Klaus-Robert Müller[1,5]
[1]Berlin Institute of Technology, Berlin, Germany, [2]Bernstein Center for Computational Neuroscience, Berlin, Germany, [3]Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, [4]Columbia University, New York, NY, [5]Korea University, Seoul, Republic of Korea

1915 Very early brain injury leads to altered dopamine function and whole brain connectivity in adulthood
Seán Froudist-Walsh[1], Slava Karolis[1], Michael Bloomfield[2], Jasmin Kroll[1], Philip Brittain[1], Oliver Howes[2], Chiara Nosarti[1]
[1]Institute of Psychiatry, Psychology and Neuroscience, King's College London, London, United Kingdom, [2]MRC Clinical Sciences Centre, Imperial College London, London, United Kingdom

1916 LabNeuro – a Modular Neuroscience Platform for the Acquisition of Multi-Modal Biometric Data Sources
Sascha Frydman[1], Michael Breakspear[2]
[1]Queensland Institute of Medical Research, Brisbane, Queensland, [2]Queensland Institute of Medical Research, Brisbane, Australia

1917 The effects of electrode and gel on SNR of MRI and safety issues in EEG-fMRI recording
Dongrui Gao[1], Mingzhe Li[2], Jianfu Li[1], Zhixuan Liu[1], Dezhong Yao[1], Tiejun Liu[1]
[1]Key Laboratory for NeuroInformation of MOE, School of Life Science and Technology, UESTC, Chengdu, China, [2]College of Chemistry and Molecular Sciences, Wuhan University, Wuhan, China

1918 Dopamine-Glutamate Interactions in Fronto-Striatal Circuits in the Healthy Brain
Tobias Gleich[1], Lorenz Deserno[1,2], Robert C. Lorenz[1], Rebecca Böhme[1], Anne Pankow[1], Ralph Buchert[3], Simone Kühn[1,4], Andreas Heinz[1], Florian Schlagenhauf[2,1], Jürgen Gallinat[1]
[1]Department of Psychiatry and Psychotherapy, CCM, Charité - Universitätsmedizin, Berlin, Germany, [2]Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, [3]Charité Universitätsmedizin, Department of Nuclear Medicine, Berlin, Germany, [4]Max Planck Institute for Human Development, Center for Lifespan Psychology, Berlin, Germany

1919 In-vivo MRI signatures of hippocampal subfield pathology in drug-resistant Temporal Lobe Epilepsy
Maged Goubran[1], Boris Bernhardt[2], Sandrine de Ribaupierre[3], Robert Hammond[4], David Steven[5], Seyed Mirsattari[5], Jorge Burneo[3], Andrea Bernasconi[2], Neda Bernasconi[2], Ali Khan[1], Terry Peters[1]
[1]Robarts Research Institute, London, Canada, [2]Neuroimaging of Epilepsy Laboratory and Brain Imaging Centre, MNI, McGill University, Montreal, Canada, [3]Department of Clinical Neurological Sciences, Western Univeristy, London, Canada, [4]Department of Pathology, Western Univeristy, London, Canada, [5]Department of Clinical Neurological Sciences, London, Canada

1920 Continuous testosterone administration affects language-specific brain structures and function
Andreas Hahn[1], Georg Kranz[1], Ronald Sladky[2], Ulrike Kaufmann[3], Sebastian Ganger[1], Allan Hummer[2], Rene Seiger[1], Marie Spies[1], Thomas Vanicek[1], Dietmar Winkler[1], Siegfried Kasper[1], Christian Windischberger[2], Dick Swaab[4], Rupert Lanzenberger[1]
[1]Department of Psychiatry and Psychotherapy, Medical University of Vienna, Vienna, Austria, [2]Center for Medical Physics and Biomedical Engineering, Medical University of Vienna, Vienna, Austria, [3]Department of Obstetrics and Gynecology, Medical University of Vienna, Vienna, Austria, [4]Netherlands Institute for Neuroscience, Institute of the Royal Netherlands Academy of Arts and Scien, Amsterdam, Netherlands

1921 Title Avalanche detection with ultrafast MREG – (I) FFT physiological filtering and image production
Janne Kanenen[1], Zalan Rajna[2], Timo Tuovinen[1], Vesa Korhonen[1], Vesa Kiviniemi[1]
[1]Department of Diagnostic Radiology, MRC, Oulu University Hospital, Oulu, Finland, [2]Department of Electrical Engineering, Oulu, Finland

1922 The relationship between brain glucose metabolism and BOLD signal during resting state
Eunkyung Kim[1,2,3], Hyejin Kang[1,4], Hyekyoung Lee[1,2], Jarang Hahm[1,2,3], Youngmin Huh[1,2,3], Yu Kyeong Kim[1,5], Dong Soo Lee[1,2,3,6]
[1]Department of Nuclear Medicine, Seoul National University College of Medicine, Seoul, Korea, Republic of, [2]Institute of Radiation Medicine, Medical Research Center, Seoul National University, Seoul, Korea, Republic of, [3]Interdisciplinary Program in Cognitive Science, Seoul National University, Seoul, Korea, Republic of, [4]Data Science for Knowledge Creation Research Center, Seoul National University, Seoul, Korea, Republic of, [5]Department of Nuclear Medicine, Seoul National University Boramae Medical center, Seoul, Korea, Republic of, [6]Department of Molecular Medicine and Biopharmaceutical Sciences, Graduate School of Convergence Science and Technology, and College of Medicine or College of Pharmacy, Seoul National University, Seoul, Korea, Republic of

1923 Correlation between NIRS and EEG changes during human blood brain barrier disruption
Vesa Korhonen[1], Tuija Hiltunen[2], Timo Tuovinen[1], Teemu Myllylä[3], Vesa Kiviniemi[1]
[1]Department of Diagnostic Radiology, MRC & Oulu University Hospital, Oulu, Finland, [2]Department of Clinical Neurophysiology, MRC & Oulu University Hospital, Oulu, Finland, [3]Optoelectronics and measurement techniques laboratory, University of Oulu, Oulu, Finland

1924 The relationships between cortical thickness asymmetry and inter-hemispheric connectivity
Dong-Kyun Lee[1], Jun-Sung Park[2], Jungho Cha[1], Hunki Kwon[1], Uicheul Yoon[3], Sang Won Seo[4], Duk L. Na[4], Jong-Min Lee[1]
[1]Department of Biomedical Engineering, Hanyang University, Seoul, Korea, Republic of, [2]Medical System Lab DMC R&D Center SAMSUNG ELECTRONICS, Suwon, Korea, Republic of, [3]Department of Biomedical Engineering, Catholic University of Daegu, Gyeongsan-si, Korea, Republic of, [4]Department of Neurology, Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, Korea, Republic of

1925 Ballistocardiogram Artifact Removal in EEG-fMRI without ECG Recording: ICA-based Optimal Basis Set
Qingfei Luo[1], Xiaoshan Huang[2], Chung-Ki Wong[1], Vadim Zotev[1], Jerzy Bodurka[1,3]
[1]Laureate Institute for Brain Research, Tulsa, OK, [2]Tsinghua University, Beijing, China, [3]University of Oklahoma, Norman, OK

1926 Statistical Estimation of T1 Relaxation Time Using Conventional Magnetic Resonance Imaging
Amanda Mejia[1], Elizabeth Sweeney[2], Blake Dewey[3], Govind Nair[4], Pascal Sati[5], Colin Shea[6], Daniel Reich[7], Russell Shinohara[8]
[1]Johns Hopkins School of Public Health, Baltimore, MD, [2]Department of Biostatistics, Johns Hopkins University, Baltimore, MD, [3]National Institute of Neurological Disease and Stroke, Bethesda, United States, [4]National Institute of Neurological Disorders and Stroke, Bethesda, MD, [5]Neuroinmunology Branch, NINDS, NIH, Bethesda, MD, [6]National Institutes of Health, Bethesda, United States, [7]National Institutes of Health, Bethesda, MD, [8]University of Pennsylvania, Philadelphia, United States

1927 An EEG-fMRI Integration Analysis of the Transition from Sensory Input to Motor Output
Thinh Nguyen[1], Thomas Potter[1], Christof Karmonik[2], Robert Grossman[2], Yingchun Zhang[1]
[1]University of Houston, Houston, TX, [2]The Methodist Hospital Neurological Institute, Houston, TX

1928 Applying simultaneous PET/MR to Explore Relationships Between Task-evoked BOLD and Dopamine Release
Kevin Oksanen[1], Debbie Yee[1], Jonathan Koller[2], Kevin Black[2], Todd Braver[1]
[1]Washington University in Saint Louis, St. Louis, MO, [2]Washington University School of Medicine, St. Louis, MO

1929 Probing the neural basis of visual working memory : A validation study using fMRI and fNIRS
Sobanawartiny Wijeakumar[1], Theodore Huppert[2], Aaron Buss[3], Vincent Magnotta[1], John Spencer[1]
[1]University of Iowa, Iowa City, IA, [2]University of Pittsburgh, Pittsburgh, PA, [3]University of Tennesse, Knoxville, TN

1930 Multimodal structural connectivity patterns of cerebral cortex using regional SCCA
Jin-Ju Yang[1], Chan-Mi Kim[2], Hunki Kwon[1], Hee Jin Kim[3], Sang Won Seo[3], Duk L. Na[3], Jong-Min Lee[1]
[1]Department of Biomedical Engineering, Hanyang University, Seoul, Korea, Republic of, [2]Department of Neurology, Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea, Republic of, [3]Department of Neurology, Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, Korea, Republic of

1931 Tracking Resting State Connectivity Dynamics in Veterans with PTSD: New Insights from EEG-fMRI
Han Yuan[1,2], Raquel Phillips[1], Vadim Zotev[1], Masaya Misaki[1], Chung-Ki Wong[1], Brent Wurfel[1], Matthew Meyer[1,3], Frank Krueger[4,1], Matthew Feldner[5], Jerzy Bodurka[1,2]
[1]Laureate Institute for Brain Research, Tulsa, OK, [2]University of Oklahoma, Norman, OK, [3]Laureate Psychiatric Clinic and Hospital, Tulsa, OK, [4]George Mason University, Fairfax, VA, [5]University of Arkansas, Fayetteville, AR

1932 Eight-channel Nirs and eEG (NEG) simultaneous detection system
Xin Zhang[1], Nianming Zuo[2], Tianzi Jiang[1]
[1]Institute of Automation, Chinese Academy of Sciences, Beijing, China, [2]Institute of Automation, Chinese Academy Of Sciences, Beijing, China

1933 Modification of Standard MR-compatible EEG Cap for Improved EEG Neurofeedback with Simultaneous fMRI
Vadim Zotev[1], Ahmad Mayeli[1,2], Jerzy Bodurka[1,3]
[1]Laureate Institute for Brain Research, Tulsa, OK, [2]Electrical and Computer Engineering, University of Oklahoma, Tulsa, OK, [3]College of Engineering, University of Oklahoma, Tulsa, OK

Imaging Methods

NIRS

1934 Prefrontal cortex hemodynamics and age: a pilot study using fNIRS in children

Afrouz Anderson[1], Yasaman Ardeshirpour[2], Victor Chernomordik[2], Amir Gandjbakhche[2], Elizabeth Smith[2], Audrey Thurm[3], Fatima Chowdhry[4]
[1]NIH/NICHD, Bethesda, MD, [2]NICHD/NIH, Bethesda, United States, [3]NIH/NIMH, Bethesda, United States, [4]NICHD/NIH, Bethesda, MD

1935 SCP- and NIRS-neurofeedback as a treatment method in adult attention-deficit/hyperactivity disorder

Beatrix Barth[1,2], Ann-Christine Ehlis[1], Kerstin Mayer[3], Florian Häußinger[1,2], Andreas Fallgatter[1], Ute Strehl[3]
[1]University Department of Psychiatry and Psychotherapy, University Hospital Tübingen, Tübingen, Germany, [2]Graduate School of Neural & Behavioural Sciences: University of Tübingen, Tübingen, Germany, [3]Institute of Medical Psychology and Behavioral Neurobiology, University Hospital Tübingen, Tübingen, Germany

1936 Bilateral cortical activation and category fluency: A multichannel near-infrared spectroscopy study

Sabrina Brigadoi[1], Darragh Downey[2], Claire Blakeley[2], Clare Elwell[1], Ian Anderson[2]
[1]Biomedical Optics Research Laboratory, University College London, London, United Kingdom, [2]Neuroscience & Psychiatry Unit, Manchester University, Manchester, United Kingdom

1937 Measuring the neural correlates of neurocognitive testing with simultaneous NIRS and fMRI

Nathan Churchill[1], Megan Hird[2], Kristin Vesely[2], General Leung[3], Anthony Sheen[1], Simon Graham[4], Vladislav Toronov[5], Tom Schweizer[6]
[1]St. Michael's Hospital, Toronto, Ontario, [2]University of Toronto, Toronto, Ontario, [3]University of Toronto; St. Michael's Hospital, Toronto, Ontario, [4]Sunnybrook Research Institute, Sunnybrook Health Sciences Centre, Toronto, Canada, [5]Ryerson University, Toronto, Ontario, [6]Keenan Research Centre, Li Ka Shing Knowledge Institute, St. Michael's, Toronto, Canada

1938 Filtering cutaneous-systemic signals from cerebral fNIRS signals based on perfusion maps

Florian Haeussinger[1], Hiroki Sato[2], Ann-Christine Ehlis[3], Andreas Fallgatter[4]
[1]Department of Psychiatry and Psychotherapy at the University Hospital, Tuebingen, Germany, [2]University of Tuebingen, Tuebingen, Germany, [3]University of Tuebingen, Dept. of Psychiatry and Psychotherapy, Tuebingen, Germany, [4]University of Tuebingen, Department of Psychiatry and Psychotherapy, Tübingen, Germany

1939 Effect of indoor air environment on prefrontal cortical activity: a vector-based fNIRS study

Takayoshi Hayakawa[1], Tsutomu Uchida[1], Kayoko Yoshino[2], Noriyuki Oka[2], Toshinori Kato[2]
[1]CORONA Corporation, Niigata, Japan, [2]KatoBrain Co., Ltd., Tokyo, Japan

1940 Comparison of cerebral blood flow and oxygenation in frontal cortex during exercise

Mikio Hiura[1], Katsumi Takahashi[2], Muneyuki Skakata[3], Kenji Ishii[3], Keiichi Oda[3,4], Jun Toyohara[3], Akitaka Muta[5], Tadashi Nariai[6], Kiichi Ishiwata[3]
[1]Hosei University, Tokyo, Japan, [2]Faculty of creative engeneering, Kanagawa instiute of technology, Atsugi, Japan, [3]Research Team for Neuroimaging, Tokyo Metropolitan Institute of Gerontology, Tokyo, Japan, [4]Department of Radiological Technology, Hokkaido University of Science, Sapporo, Japan, [5]Department of neurosurgery, Tokyo Medical and Dental University, Tokyo, Japan, [6]Department of Neurosurgery, Tokyo Medical and Dental University, Tokyo, Japan

1941 Color detection in human visual cortex: An fNIRS study

Xiaolong Liu[1], Keum-Shik Hong[2], Hendrik Santosa[3], Hoang Dung Nguyen[3]
[1]Pusan National University, School of Mechanical Engineering, Busan, Korea, Republic of, [2]Pusan National University, Department of Cogno-Mechatronics Engineering and School of Mechanical Eng, Busan, Korea, Republic of, [3]Pusan National University, Department of Cogno-Mechatronics Engineering, Busan, Korea, Republic of

1942 Optimal measurements of haemodynamic response latency in NIRS using the jackknife approach

Manon Maheux[1], Etienne Bisaillon-Sicotte[1], Shirin Tabrizi[2], Jorge Armony[2], Jean-Marc Lina[3], Pierre Jolicoeur[1]
[1]Université de Montréal, Montreal, Quebec, [2]McGill University, Montreal, Quebec, [3]École de Technologie Supérieure, Montreal, Quebec

1943 Four-class classification of fNIRS signals for decoding answers to multiple-choice questions

Noman Naseer[1], Keum-Shik Hong[2], Yong-Il Shin[3], Muhammad Jawad Khan[4], Muhammad Raheel Bhutta[1]
[1]Pusan National University, Department of Cogno-Mechatronics Engineering, Busan, Korea, Republic of, [2]Pusan National University, Department of Cogno-Mechatronics Engineering and School of Mechanical Eng, Busan, Korea, Republic of, [3]Pusan National University Yangsan Hospital, Yangsan, Korea, Republic of, [4]Pusan National University, School of Mechanical Engineering, Busan, Korea, Republic of

1944 Fiber-optical hemodynamic recording in deep brain areas in rats

Wen-Ju Pan[1], Shella Keilholz[1]
[1]Emory University/Georgia Institute of Technology, Atlanta, United States

1945 Motion Correction Algorithm Assessment and Recommendations for Infant fNIRS Studies
Katherine Perdue[1,2], Alissa Westerlund[1], Julia Cataldo[3], Charles Nelson[1,2]
[1]Boston Children's Hospital, Boston, MA, [2]Harvard Medical School, Boston, MA, [3]Harvard University, Cambridge, MA

1946 Resting State Connectivity of the whole head with Near-Infrared Spectroscopy and graph theory
Renato Rodrigues[1], Rickson Mesquita[1]
[1]University of Campinas, Campinas (SP), Brazil

1947 Online Independent Component Analysis for Reducing the Noise in fNIRS Signals
Hendrik Santosa[1], Hoang Dung Nguyen[1], Jinung An[2], Keum-Shik Hong[3]
[1]Pusan National University, Department of Cogno-Mechatronics Engineering, Busan, Korea, Republic of, [2]DGIST, Daegu, Korea, Republic of, [3]Pusan National University, Department of Cogno-Mechatronics Engineering and School of Mechanical Eng, Busan, Korea, Republic of

1948 Evaluation of Quality of Communication based Multi-person NIRS Measurement
Makoto Takahashi[1], Naoki Miura[2], Ryuta Kawashima[3]
[1]Graduate School of Engineering, Tohoku University, Sendai, Miyagi, [2]Tohoku Institute of Technology, Sendai, Japan, [3]Tohoku University, Sendai, Japan

1949 Permutation analysis of functional near infrared spectroscopy data in focal epilepsy
Nicolas von Ellenrieder[1,2], Giovanni Pellegrino[1], Alexis Machado[1], Satsuki Watanabe[2], Jean-Marc Lina[3], Jeffrey Hall[2], Eliane kobayashi[2], Christophe Grova[1,2,4]
[1]Multimodal Functional Imaging Lab, Biomedical Engineering Dpt, McGill University, Montreal, Canada, [2]Montreal Neurological Institute, McGill University, Montreal, Canada, [3]École de Technologie Supérieure, Montreal, Canada, [4]Physics Dpt and PERFORM Center, Concordia University, Montreal, Canada

1950 Fast and reliable method for localization of 10/20 system using a 3D magnetic space digitizer
Xiang Xiao[1], Chaozhe Zhu[1], Weijie Liu[1], Xiaoting Yu[1], Hao Zhu[1], Lian Duan[1]
[1]State Key Laboratory of Cognitive Neuroscience and Learning, Beijing Normal University, Beijing, China

1951 FC-NIRS: A Functional Connectivity Analysis Tool for near-infrared spectroscopy data
Jingping Xu[1,2], Zhen Li[1,2], Wang Xindi[1,2], Yong He[1,2], Haijing Niu[1,2]
[1]National Key Laboratory of Cognitive Neuroscience and Learning, Beijing Normal University, Beijing, China, [2]IDG/McGovern Institute for Brain Research, Beijing Normal University, Beijing, China

1952 Resting-state complex brain functional network and executive functions in the prefrontal cortex
Jia Zhao[1], Xin Jiang[2], Guifei Zhou[1], Guowei Chen[3], Xiaopan Ding[3], Lixia Tian[1], Genyue Fu[3], Jiangang Liu[4], Kang Lee[5]
[1]Beijing Jiaotong University, Beijing, China, [2]University College London, London, United Kingdom, [3]Zhejiang Normal University, Jinhua, China, [4]Beijing Jiaotong University, University of Toronto, Beijing, China, [5]University of Toronto, Zhejiang Normal University, Toronto, Canada

Imaging Methods

Non-BOLD fMRI

1953 Tonotopy in human auditory cortex using Arterial Spin Labeling
Anna Gardumi[1], Dimo Ivanov[1], Giancarlo Valente[1], Federico De Martino[1], Elia Formisano[1], Kamil Uludağ[1]
[1]Maastricht University, Maastricht, The Netherlands

1954 Comparison of BOLD and SEEP fMRI resting state functional connectivity networks
Kaundinya Gopinath[1], Venkatagiri Krishnamurthy[1], Romeo Cabanban[1]
[1]Emory University, Atlanta, GA

1955 Direct detection of oscillating magnetic fields with MRI toward functional connectivity measurements
Tetsuo Kobayashi[1], Masahito Ueno[1], Yosuke Ito[1]
[1]Graduate School of Engineering, Kyoto University, Kyoto, Japan

1956 Spin-locked Oscillatory Excitation (SLOE): A Potential Method for Detecting Neural Currents by MRI
Jingwei Sheng[1], Yuhui Chai[1], Bing Wu[2], Weinan Tang[1], Jia-Hong Gao[1]
[1]Center for MRI Research, Peking University, Beijing, China, [2]GE Healthcare China, Beijing, China

Imaging Methods

Optical coherence tomography (OCT)

1957* Ex vivo human brain by optical coherence tomography: from cortical layers to the individual neurons, (O-M5)
Caroline Magnain[1], Jean Augustinack[1], Ender Konukoglu[1], Louis Vinke[1], Bruce Fischl[1], David Boas[1]
[1]Massachusetts General Hospital / Harvard Medical School, Boston, MA

Imaging Methods

PET

1958 Imaging the dopaminergic pathway of Parkinson disease using three PET radiopharmaceuticals
ARTURO AVENDAÑO-ESTRADA[1], Ignacio Madrazo[2], Oleg Kopyov[3], H. Carrasco-Vargas[4], Manlio Gama-Moreno[5], Carlos Sánchez-Luna[5], Miguel Ávila Rodríguez[5]
[1]Facultad de Medicina, Universidad Nacional Autónoma de México, México, México, [2]Hospital Ángeles del Pedregal,, Centro Médico Nacional IMSS, Mexico, [3]Celavie Biosciences LLC, México, Mexico, [4]Hospital Central Militar, México, Mexico, [5]Facultad de Medicina, Universidad Nacional Autónoma de México, México, Mexico

1959 Characterization of Meningiomas by Kinetic Analysis of Alpha[C-11]-methyl-L-tryptophan PET
Edit Bosnyak[1], David Kamson[1], Otto Muzik[1], Sandeep Mittal[1], Csaba Juhasz[1]
[1]Wayne State University, Detroit, MI

1960 Correlation of Cerebral Tryptophan Metabolism with Brain Tumor-Associated Depression: A PET Study
Edit Bosnyak[1], David Kamson[1], Michael Behen[1], Geoffrey Barger[1], Sandeep Mittal[1], Csaba Juhasz[1]
[1]Wayne State University, Detroit, MI

1961 Common interindividual variation in human pre- and post-synaptic dopamine systems studied with PET
Daniel Eisenberg[1], Angela Ianni[1], Catherine Hegarty[1], Philip Kohn[1], Michael Gregory[1], Jasmin Czarapata[1], Joseph Masdeu[1], Karen Berman[1]
[1]CTNB, NIMH, Bethesda, MD

1962 Age-related changes of brain glucose metabolism and morphology in the default mode network
Shigeru Ito[1,2], Akihiro Kakimoto[1,3], Hiroyuki Okada[1,2], Sadahiko Nishizawa[2], Satoshi Minoshima[4], Yasuomi Ouchi[3]
[1]Hamamatsu Photonics K.K., Hamamatsu, Japan, [2]Hamamatsu Medical Photonics Foundation, Hamamatsu, Japan, [3]Hamamatsu University School of Medicine, Hamamatsu, Japan, [4]University of Utah School of Medicine, Logan, UT

1963 In vivo distribution of $\alpha4\beta2$ and $\alpha7$ receptors in the human brain
Yasuomi Ouchi[1], Tatsuhiro Terada[1], Kyoko Nakaizumi[1], Etsuji Yoshikawa[2], Akihiro Kakimoto[2], Takashi Isobe[2], Iori Suzuki[2], Yasuhiro Magata[1]
[1]Hamamatsu University School of Medicine, Hamamatsu, Japan, [2]Hamamatsu Photonics KK, Hamamatsu, Japan

1964 Genetic Modulation of Dopamine System and the Response to Methylphenidate: An [18F]FDOPA-PET study
Ina Schabram[1], Siamak Mohammadkhani Shali[1], Claudia Dietrich[1], Oliver Winz[1], Karsten Henkel[1], Thomas Eggermann[2], Karl Zerres[2], Gerhard Gründer[1], Felix Mottaghy[3], Ingo Vernaleken[1]
[1]RWTH Aachen University, Aachen, Germany, [2]University Hospital Aachen, Aachen, Germany, [3]RWTH Aachen University, aachen, Germany

1965 The MAOA-VNTR Polymorphism, Dopamine Release and Aggression: An [18F]DMFP PET Study
Thorben Schlüter[1], Felix Mottaghy[2], Ingo Vernaleken[3]
[1]Department of Psychiatry, Psychotherapy, and Psychosomatics, RWTH Aachen University, Aachen, Germany, [2]Department of Nuclear Medicine, RWTH Aachen University, Aachen, Germany, [3]Department of Psychiatry, Psychotherapy, and Psychosomatics, Medical School, RWTH Aachen University, Aachen, Germany

Imaging Methods

Polarized light imaging (PLI)

1966* Large-scale Fiber Orientation Models Derived From 3D Polarized Light Imaging, (O-T4)
Markus Axer[1], David Gräßel[1], Nicole Schubert[1], Marcel Huysegoms[1], Daniel Schmitz[1], Martin Schober[1], Philipp Schlömer[1], Hendrik Wiese[1], Bernd Weber[2], Martina Minnerop[1,3], Karl Zilles[1,4,5], Katrin Amunts[1,6]
[1]Research Centre Jülich (INM-1), Jülich, Germany, [2]Department of NeuroCognition Imaging, Life & Brain Center, University of Bonn, Bonn, Germany, [3]Department of Neurology, University Hospital Bonn, Bonn, Germany, [4]Department of Psychiatry, Psychotherapy, and Psychosomatics, RWTH Aachen University, Aachen, Germany, [5]JARA Jülich-Aachen Research Alliance, Translational Brain Medicine, Aachen, Germany, [6]C. and O. Vogt Institute for Brain Research, Heinrich-Heine University Düsseldorf, Düsseldorf, Germany

Language

Language Acquisition

1967 Early vocabulary growth rate is associated with individual differences in children's white matter
Salomi Asaridou[1], Özlem Demir[2], Susan Goldin-Meadow[2], Steven Small[1]
[1]University of California Irvine, Irvine, CA, [2]University of Chicago, Chicago, IL

1968 Infant directed speech and statistical learning in 3-month-old infants: An MEG study
Alexis Bosseler[1,2], Patricia Kuhl[3]
[1]University of Washington Instituted for Learning and Brain Sciences, Seattle, WA, [2]University of Helsinki Cognitive Brain Research Unit, Helsinki, Finland, [3]University of Washington Institute for Learning and Brain Sciences, Seattle, WA

1969 The Impact of Age of Acquisition and Proficiency on Bilingual Brain Networks: An ALE meta-analysis
Maria Castillo[1], Jie Yang[2]
[1]University of California, Irvine, Irvine, United States, [2]Macquarie University, Macquarie Park, Australia

1970 Functional Brain Changes Associated with Learning a Novel Phonological Contrast
Ja Young Choi[1], Jennifer Minas[2], Amy Finn[2], John Gabrieli[2], Tyler Perrachione[1]
[1]Boston University, Boston, MA, [2]Massachusetts Institute of Technology, Cambridge, MA

1971 Neural correlates of implicit and explicit linguistic knowledge of native and non-native speakers
Hyeonjeong Jeong[1], Rod Ellis[2], Wataru Suzuki[3], Keyvan Kashkouli Nejad[1], Benjamin Thyreau[1], Daniele Magistro[1], Satoru Yokoyama[4], Ryuta Kawashima[1]
[1]Tohoku University, Sendai, Japan, [2]University of Auckland, Auckland, New Zealand, [3]Miyagi University of Education, Sendai, Japan, [4]Chiba Institute of Science, Chiba, Japan

1972 Behavioral Correlations with Diffusion Tensor Imaging in Bilingual Subjects
Patricia Kuhl[1], Jeff Stevenson[1], Jason Yeatman[1], Jasper van den Bosch[1], Dilara Can[1], Denise Padden[1], Todd Richards[1]
[1]University of Washington, Seattle, WA

1973 Reduced choline levels are associated with better language ability in preschool children
Catherine Lebel[1], Ashleigh Frayne[1], Frank MacMaster[1], Deborah Dewey[1]
[1]University of Calgary, Calgary, Alberta

1974 The different age of second language acquisition influences the brain network of bilinguals
Xiaojin Liu[1], Liu Tu[2], Junjing Wang[1], Bo Jiang[3], Miao Zhong[1], Ximin Pan[3], Wenjie Jiang[1], Meng Li[4], Yanhong Huang[2], Xiaoli Di[2], Zhi Lu[5], Ruiwang Huang[1]
[1]Center for the Study of Applied Psychology, Key Laboratory of Mental Health and Cognitive Science of Guangdong Province, School of Psychology, South China Normal University, Guangzhou 510631, P. R. China, [2]College of Foreign Studies, Jinan University, Guangzhou 510631, P. R. China, [3]Department of Radiology, Huangpu Clinical Medical Center, Sun Yat-Sen University First Affiliated Hospital, Guangzhou 510700, P. R. China, [4]Department of Medical Imaging, Guangdong No. 2 Provincial People's Hospital, Guangzhou 510317, P. R. China, [5]Guangdong Collaborative Innovation Center for Language Research and Services, Guangdong University of Foreign Studies, Guangzhou 510420, P. R. China

1975 Measuring Changes in Brain and Behavior Following Second Language Training
Chantel Prat[1], Brianna Yamasaki[1], Andrea Stocco[1]
[1]University of Washington, Seattle, WA

1976 Are bilingual infants more flexible language learners than monolinguals? An EEG-fNIRS study
Sonja Rossi[1,2,3], Manfred Gugler[1], Franziska Stephan[2], Julia Mock[2], Maria Richter[2,3], Micol Vignotto[2,3], Hellmuth Obrig[2,4]
[1]Medical University of Innsbruck, Innsbruck, Austria, [2]Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, [3]Medical Faculty, University of Leipzig, Leipzig, Germany, [4]Clinic for Cognitive Neurology, University Hospital Leipzig, Leipzig, Germany

1977 10-Year Language Development Predicts Anatomical Properties of the Arcuate Fasciculus in Children
Mengmeng Su[1], Michel de Schotten[2,3], Jingjing Zhao[4], Shuang Song[1], Franck Ramus[4], Hua Shu[1]
[1]State Key Laboratory of Cognitive Neuroscience and Learning, Beijing Normal University, Beijing, China, [2]Natbrainlab, Institute of Psychiatry, King's College London, London, United Kingdom, [3]Centre de Recherche de l'Institut du Cerveau et de la Moelle épinière, Groupe Hospitalier Pitié-Salpêtrière, Paris, France, [4]Laboratoire de Sciences Cognitives et Psycholinguistique (ENS, CNRS, EHESS), Ecole Normale Supérieur, Paris, France

1978 Preschoolers' Brains Rely on Semantic Cues Prior to the Mastery of Syntax in Sentence Comprehension
Chiao-Yi Wu[1], Kodjo Vissiennon[1], Angela Friederici[1], Jens Brauer[1]
[1]Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany

1979 Brain lateralization shifts with tonal language learning
Jing Yang[1], Ping Li[2]
[1]Guangdong University of Foreign Studies, Guangzhou, China, [2]Penn State University, State College, United States

Language

Language Comprehension and Semantics

1980* Activation to Manipulable Nouns in Naturalistic Reading, (O-T3)
Rutvik Desai[1], Wonil Choi[2], John Henderson[3], Vicky Lai[1]
[1]University of South Carolina, Columbia, SC, [2]University of South Carolina, Columbia, United States, [3]University of California, Davis, Davis, CA

1981* The Role of Syntax in Semantic Processing: a Study of Active and Passive Sentences (O-T3)
Nicole Rafidi[1], Erika Laing[2], Tom Mitchell[3]
[1]Carnegie Mellon University, Pittsburgh, PA, [2]UPMC; Carnegie Mellon; Univ of Pittsburgh, Pittsburgh, PA, [3]Machine Learning Department, School of Computer Science, Carnegie Mellon University, Pittsburgh, PA

1982 Multivariate insights on the neural representation of language
Jeffrey Chiang[1], Martin Monti[1]
[1]UCLA, Los Angeles, CA

1983 EEG analysis of a semantic category judgement task
Chris Day[1], Marcelo Montemurro[1], Gorana Pobric[1], Stephen Welbourne[1]
[1]University of Manchester, Manchester, United Kingdom

1984 Atrophy of the fusiform gyrus causes semantic deficits of semantic dementia
Junhua Ding[1], Keliang Chen[2], Yan Chen[1], Qing Yang[2], Yingru Lv[3], Weijun Tang[3], Qihao Guo[2], Yanchao Bi[1,4], Zaizhu Han[1]
[1]State Key Laboratory of Cognitive Neuroscience and Learning, Beijing Normal University, Beijing, China, [2]Department of Neurology, Huashan Hospital, Shanghai Medical Colledge, Fudan University, Shanghai, China, [3]Department of Radiology, Huashan Hospital, Shanghai Medical Colledge, Fudan University, Shanghai, China, [4]IDG/McGovern Institute for Brain Research, Beijing Normal University, Beijing, China

1985 When Context Meets Sentence at the Prosodic Boundary: ERP Evidence
Murielle Fabre[1], Shaorong Yan[2], Yingyi Luo[3], Xiaolin Zhou[4]
[1]National Institut of Oriental Languages and Cultures (INALCO), Paris, France, [2]University of Iowa, Iowa City, United States, [3]Hiroshima University, Higashi-Hiroshima, Japan, [4]Peking University, Beijing, China

1986 Item-based decoding with white matter lesion patterns reveals categorical organization
Yuxing Fang[1], Xiaosha Wang[1], Zaixu Cui[1], Zaizhu Han[1], Yanchao Bi[1]
[1]State Key Laboratory of Cognitive Neuroscience and Learning, Beijing Normal University, Beijing, China

1987 Rapid Accessing to the Semantic Category Information of Visual Words
Feng Gu[1], Ying Wang[1], Li-Zhuang Yang[1], Xiaochu Zhang[1]
[1]University of Science and Technology of China, Hefei, China

1988 An extension of the "Forrest Gump" dataset with 7T task fMRI and new annotations of the movie
Michael Hanke[1,2], Pierre Ibe[1], Falko Kaule[3,1], Richard Dinga[1], J Swaroop Guntupalli[4], Christian Haeusler[1], Florian Baumgartner[1], Joerg Stadler[5]
[1]Institute of Psychology II, Otto-von-Guericke-University, Magdeburg, Germany, [2]Center for Behavioral Brain Sciences, Magdeburg, Germany, [3]Visual Processing Laboratory, Otto-von-Universität Guericke-University, Magdeburg, Germany, [4]Institute of Psychological and Brain Sciences, Dartmouth College, Hanover, United States, [5]Leibniz Institute for Neurobiology, Magdeburg, Germany

1989 Evoked and oscillatory EEG/MEG brain responses in semantic word processing
Olaf Hauk[1], Rezvan Farahibozorg[2], Elisa Cooper[2], Gemma Evans[3], Yuanyuan Chen[3], Karalyn Patterson[2], Anna Woollams[4]
[1]Medical Research Council UK, Cambridge, United Kingdom, [2]MRC Cognition and Brain Sciences Unit, Cambridge, United Kingdom, [3]University of Manchester, Manchester, United Kingdom, [4]University of Manchester, School of Psychological Sciences, Manchester, United Kingdom

1990 Neural correlates of language control in interlingual homographs during bilingual semantic access
Ming-che Hsieh[1,2], Hyeonjeong Jeong[2], Motoaki Sugiura[2], Yukako Sasaki[2], Hsun-cheng Lee[2], Kelssy Hitomi Santos Kawata[2], Satoru Yokoyama[3], Ryuta Kawashima[2]
[1]National Chengchi University, Taipei, Taiwan, [2]Tohoku University, Sendai, Japan, [3]Chiba Institute of Science, Chiba, Japan

1991 The Primacy of Grammar in Sentence Processing: A Case in the Kaqchikel Mayan Language
Masatoshi Koizumi[1], Jungho Kim[1], Noriaki Yusa[2], Manami Sato[3]
[1]Tohoku University, Sendai, Japan, [2]Miyagi Gakuin Women's University, Sendai, Japan, [3]Okinawa International University, Ginowan, Japan

1992 Neural compensation supporting successful speech comprehension in normal aging
Yune Sang Lee[1], Chad Rogers[2], Nam Eun Min[1], Arthur Wingfield[3], Murray Grossman[1], Jonathan Peelle[2]
[1]Department of Neurology, University of Pennsylvania, Philadelphia, PA, [2]Department of Otolaryngology, Washington University in St. Louis, St Louis, MO, [3]Volen National Center for Complex Systems, Brandeis University, Waltham, MA

1993 Differential brain activations in Chinese and Japanese auditory semantic processing
Alvin Lim[1], Hengshuang Liu[1], Makoto Miyakoshi[2], Kayako Matsuo[3], Toshiharu Nakai[4], S.H. Annabel Chen[1]
[1]Nanyang Technological University, Singapore, Singapore, [2]Swartz Center for Computational Neuroscience, University of California, San Diego, La Jolla, CA, [3]Hamamatsu University School of Medicine, Shizuoka-ken, Japan, [4]National Center for Geriatrics and Gerontology, Aichi, Japan

1994 An ERP Study of Cross-Grammatical Class Priming and Word Order Effects
Sharlene Newman[1], Isaiah Innis[1]
[1]Indiana University, Bloomington, IN

1995 Language-related function in the right inferior frontal gyrus: Comparison Wada Test with fMRI
Rieko Okada[1,2], Naoki Nakano[1], Toshiho Ohtsuki[3], Amami Kato[1]
[1]Kinki University Faculty of Medicine, Osaka-sayama, Japan, [2]Tamagawa University Brain Science Institute, Tokyo, Japan, [3]Kinki University Hospital, Osaka-sayama, Japan

1996 Trained Exception Pseudowords Do Not Recruit The Semantic System Like Exception Words Do
Jean-Sebastien Provost[1], Gabrielle Ciquier[1], Stephen Wilson[2], Simona Maria Brambati[3]
[1]Research Centre of Montreal Geriatric Institute/ Univiersity of Montreal, Montreal, Quebec, [2]University of Arizona, Tucson, AZ, [3]CRIUGM, N/A

1997 The N400 as semantic prediction error: Further evidence for predictive coding in language processing
Milena Rabovsky[1], Ken McRae[2]
[1]Humboldt-Universitaet, Berlin, Germany, [2]University of Western Ontario, London, Canada

1998 Grammatical classes in the brain: MVPA reveals the cortical signature of verbs, adjectives and nouns
DOMENICA ROMAGNO[1], Alessandra Rampinini[2], Giacomo Handjaras[3], Andrea Leo[4], Alfonso Caramazza[5], Pietro Pietrini[4], Emiliano Ricciardi[6]
[1]Department of Philology, Literature and Linguistics, University of Pisa, PISA, ITALY, [2]Clinical Psychology Branch and Laboratory of Clinical Biochemistry and Molecular Biology, University, PISA, PI, [3]Laboratory of Clinical Biochemistry and Molecular Biology, University of Pisa, Pisa, Italy, [4]University of Pisa, Pisa, Italy, [5]Harvard University, Boston, MA, [6]Laboratory of Clinical Biochemistry and Molecular Biology, University of Pisa, Pisa, PI

1999 Is this book a blue book? Functional contribution of syntax and semantics to basic two-word phrases
Marianne Schell[1], Emiliano Zaccarella[1,2], Angela Friederici[1]
[1]Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, [2]School of Mind and Brain, Berlin, Germany

2000 The time-course of information processing within the language system
Terri Scott[1], Peter Brunner[2], Gerwin Schalk[2], Nancy Kanwisher[3], Evelina Fedorenko[4]
[1]Boston University, Boston, MA, [2]Wadsworth Center, New York, United States, [3]Massachusetts Institute of Technology, Cambridge, MA, [4]Massachusetts General Hospital, Charlestown, MA

2001 Neural correlates of successful and unsuccessful syntactic processing
Stephen Wilson[1], Andrew DeMarco[1], Maya Henry[2], Benno Gesierich[3], Miranda Babiak[3], Bruce Miller[3], Maria Gorno-Tempini[3]
[1]University of Arizona, Tucson, AZ, [2]University of Texas, Austin, TX, [3]University of California, San Francisco, CA

2002 Multivariate analysis of modality-independent fMRI activity during sentence comprehension
Richard Wise[1], Larissa Cuenoud[1], Fatemeh Geranmayeh[1]
[1]Imperial College London, London, United Kingdom

2003 The intrinsic functional network of semantic processing: modules and hubs
Yangwen Xu[1,2], Qixiang Lin[1,2], Zaizhu Han[1,2], Yong He[1,2], Yanchao Bi[1,2]
[1]State Key Laboratory of Cognitive Neuroscience and Learning, Beijing Normal University, Beijing, China, [2]IDG/McGovern Institute for Brain Research, Beijing Normal University, Beijing, China

2004 Effective connectivity for intelligible speech by multivariate Granger causality analysis
Yayan Yin[1], Jia-Hong Gao[1], Jianqiao Ge[1]
[1]MRI Research Center and Beijing City Key Lab for Medical Physics and Engineering, Peking University, Beijing, China

2005 The neural representation of explain-it-away in the pragmatic inference
Shin-ae Yoon[1], Hae-Jeong Park[2,3,4]
[1]Department of Cognitive Science, Yonsei University, Seoul, Korea, Republic of, [2]Department of Radiology, Severance Hospital, Yonsei University College of Medicine, Seoul, Korea, Republic of, [3]Department of Nuclear Medicine, Severance Hospital, Yonsei University College of Medicine, Seoul, Korea, Republic of, [4]Department of Psychiatry, Severance Hospital, Yonsei University College of Medicine, Seoul, Korea, Republic of

Language

Language Other

2006 Cross-language interference in trilinguals: the strong effect of the weakest language
Eneko Antón[1], Aina Casaponsa[1], Jon Andoni Duñabeitia[1]
[1]BCBL. Basque Center on Cognition, Brain and Language, Donostia, Spain

2007 White Matter Involvement in Classic Aphasia Syndromes
Nina Dronkers[1], And Turken[2], Juliana Baldo[2], Brian Curran[2], Robert Knight[3]
[1]VA Northern California Health Care System/ UC Davis, Martinez, CA, [2]VA Northern California Health Care System, Martinez, CA, [3]Helen Wills Neuroscience Institute, Berkeley, CA

2008 Verbal fluency post stroke – a multiple disconnection syndrome?
Stephanie Forkel[1], Maren Johannboeke[2], Flavio Dell'Acqua[3], Marco Catani[4]
[1]University College London, London, United Kingdom, [2]Ludwig-Maximilian-University Munich, Munich, Germany, [3]King's College London, London, United Kingdom, [4]Institute of Psychiatry, London, United Kingdom

2009 Electrocorticographic Investigation of Object-Word Linkage
Robert Hurley[1], Josef Parvizi[2], Vinitha Rangarajan[2], Heidi Jiang[1], Marsel Mesulam[1], Arjuna Chatrathi[1]
[1]Northwestern University, Chicago, IL, [2]Stanford University, Stanford, CA

2010 The dmPFC gray matter density enhances elderly's positivity effect in emotional sentence retrieval
Sachiko Kiyama[1], Mitsunobu Kunimi[1], Rinus Verdonschot[2], Katsuo Tamaoka[2], Toshiharu Nakai[1]
[1]National Center for Geriatrics and Gerontology, Obu, Japan, [2]Nagoya University, Nagoya, Japan

2011 AtDCS over left temporo-parietal cortex modulates working memory capacity in sentence processing
Carina Krause[1], Bernhard Sehm[1], Angela Friederici[1], Anja Fengler[1], Hellmuth Obrig[1]
[1]Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany

2012 Language lateralization with MEG utilizing volume-based MNE for pre-surgical mapping applications
Erika Laing[1], Ajay Niranjan[2], Mark Richardson[2], Danielle Wagner[2]
[1]UPMC; Carnegie Mellon; Univ of Pittsburgh, Pittsburgh, PA, [2]University of Pittsburgh Medical Center, Pittsburgh, PA

2013 The relationship of white matter integrity in callosal subregions and language lateralization
Sebastian Ocklenburg[1], Erhan Genc[2], Onur Güntürkün[3], Jutta Peterburs[4], Kenneth Hugdahl[5], Rene Westerhausen[6]
[1]Ruhr-University Bochum, Bochum, NRW, [2]Ruhr University Bochum, Bochum, Germany, [3]Ruhr-University Bochum, Bochum, Germany, [4]University of Münster, Münster, Germany, [5]Dept Biological and Medical Psychology,University of Bergen, Norway, Bergen, Norway, [6]University of Bergen, Bergen, Norway

2014 Functional Connectivity of Language in Patients with Space-occupying Lesions: Clinical Application
Thomas O'Neill[1], David Powell[1], Dianne Mendelsohn[1], Zerrin Yetkin[1]
[1]University of Texas Southwestern Medical Center, Dallas, TX

2015 Dissecting the functional anatomy of sentence production
'Ōiwi Parker Jones[1], Susan Prejawa[1], Thomas Hope[1], Marion Oberhuber[1], Mohamed Seghier[1], David Green[2], Cathy Price[1]
[1]Wellcome Trust Centre for Neuroimaging, Institute of Neurology, UCL, London, United Kingdom, [2]Cognitive, Perceptual and Brain Sciences, UCL, London, United Kingdom

2016 Context-Driven Word Retrieval is Reflected in Hippocampal Theta Oscillations
Vitória Piai[1], Kristopher Anderson[1], Jack Lin[2], Nina Dronkers[3], Robert Knight[1]
[1]University of California Berkeley, Berkeley, CA, [2]University of California Irvine, Irvine, CA, [3]VA Northern California Health Care System/UC Davis, Martinez, CA

2017 Neural activations during feedback-based and paired associate category learning in aphasia
Sofia Vallila Rohter[1], Swathi Kiran[1]
[1]Boston University, Boston, MA

2018 Temporary dysfunction of the right dorsal stream impairs prosody perception
Daniela Sammler[1], Katrin Cunitz[1], Sarah Gierhan[1,2], Jens Adermann[3], Alfred Anwander[1], Jürgen Meixensberger[3], Angela Friederici[1]
[1]Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, [2]Berlin School of Mind and Brain, Berlin, Germany, [3]University Hospital Leipzig, Department of Neurosurgery, Leipzig, Germany

2019 Functional connectivity and structural analyses in the bilingual brain: implications for arithmetic
Amandine Van Rinsveld[1], Laurence Dricot[2], Mathieu Guillaume[1], Christine Schiltz[1]
[1]University of Luxembourg, Walferdange, Luxembourg, [2]Université Catholique de Louvain, Louvain-la-Neuve, Belgium

Language

Reading and Writing

2020* Timing the Impact of Literacy in Visual Processing, (O-M3)
Felipe Pegado[1,2,3,4], Enio Comerlato[5], Fabricio Ventura[5], Antoinette Jobert[6], Kimihiro Nakamura[2], Marco Buiatti[7], Paulo Ventura[8], Ghislaine Dehaene-Lambertz[9], Regine Kolinsky[10], Jose Morais[11], Lucia Braga[12], Laurent Cohen[13], Stanislas Dehaene[14]
[1]KU Leuven University, Leuven, Belgium, [2]INSERM, Paris, France, [3]CEA, Gif sur Yvette, France, [4]University Paris XI, Orsay, France, [5]SARAH, Brasilia, Brazil, [6]Inserm, Cognitive Neuroimaging Unit, Gif-sur-Yvette, France, [7]Neurospin, Paris, France, [8]Faculty of Psychology, University of Lisbon, Lisbon, Portugal, [9]Neurospin, Gif/Yvette, France, [10]Faculty of Psychology, Université Libre de Bruxelles, Brussels, Belgium, [11]Center for Research in Cognition and Neurosciences (CRCN), Brussels, Belgium, [12]SARAH Network–International Center for Neurosciences and Rehabilitation, Brazilia, Brazil, [13]AP-HP, Groupe hospitalier Pitié-Salpêtrière, Department of Neurology, Paris, France, [14]CEA, Saclay, France

2021 * A DTI study of structural connectivity within the reading network of young struggling readers, (O-T3)
Anna Romanowska-Pawliczek[1], Jenifer Juranek[1], Paul Cirino[2], Jack Fletcher[2]
[1]University of Texas Health Science Center at Houston, Houston, TX, [2]University of Houston, Houston, TX

2022 Japanese children with dyslexia showed reduced cortical volume in occipito-temporal junction
Kohei Asano[1], Benjamin Thyreau[1], Yasuyuki Taki[2], Hiroshi Hashizume[3], Yuko Sassa[2], Asano Michiko[2], Susumu Yokota[2], Higuchi Hiroki[4], Mitsunari Abe[2], Hikaru Takeuchi[5], Uno Akira[4], Ryuta Kawashima[2]
[1]IDAC, Tohoku university, Sendai, Japan, [2]IDAC, Tohoku University, Sendai, Japan, [3]IDAC, Tohoku University, Sendai, Miyagi, [4]Graduate School of Comprehensive Human Sciences, University of Tsukuba, Tsukuba, Japan, [5]IDAC Tohoku University, Sendai, Japan

2023 Altered Functional Connectivity in Functionally-defined Language Networks in Children with Dyslexia
Mary Askren[1], Zoe Mestre[1], Kevin Yagle[1], Thomas Grabowski[1], Todd Richards[1], Virginia Berninger[1]
[1]University of Washington, Seattle, WA

2024 Reading disorder in the brain: a functional and structural study of brain indices of dyslexia
Augusto Buchweitz[1], Adriana Costa[1], Rudineia Toazza[2], Ana Bassoa[1], Cristiano Aguzzoli[1], Valentina Cará[1], Guilherme Peixoto[1], Rômulo Raffin[1], Luiz Dresch[1], Mirna Portuguez[1], Alexandre Franco[1]
[1]PUCRS - Pontifícia Universidade Católica do Rio Grande do Sul, Porto Alegre, Brazil, [2]Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil

2025 Identifying the neural representation of word reading in children diagnosed with dyslexia
Caroline Froehlich[1], Felipe Meneguzzi[1], Alexandre Franco[2], Luiz Dresch[1], Augusto Buchweitz[1]
[1]PUCRS - Pontifícia Universidade Católica do Rio Grande do Sul, Porto Alegre, Brazil, [2]Pontifícia Universidade Católica do Rio Grande do Sul, Porto Alegre, Brazil

2026 Reading-related neural-circuits disruption in children with dyslexia at a familial-risk for dyslexia
Tzipi Horowitz-Kraus[1], Claudio Toro-Serey[2]
[1]Cincinnati Children's Hopital Medical Center, Cincinnati, United States, [2]CCHMC, Cincinnati, OH

2027 Neural Representations for Spoken and Written Language In Young Readers: Insights from fNIRS & fMRI
Kaja Jasinska[1], Bonnie Buis[1], Bryan Cort[1], Brian Parbhu[1], Peter Molfese[2], W Mencl[1], Heather Bortfeld[2], Ken Pugh[1]
[1]Haskins Laboratories, New Haven, CT, [2]University of Connecticut, Storrs, CT

2028 Neural basis of phonological awareness in beginning readers with familial risk of dyslexia
Katarzyna Jednoróg[1], Agnieszka Dębska[1,2], Magdalena Łuniewska[1,2], Katarzyna Chyl[1], Anna Banaszkiewicz[3], Agata Żelechowska[1], Marek Wypych[4], Artur Marchewka[4]
[1]Laboratory of Psychophysiology, Nencki Institute of Experimental Biology, Warsaw, Poland, [2]Warsaw University, Warsaw, Poland, [3]Laboratory of Psychophysiology, Nencki Institue of Experimental Biology, Warsaw, Poland, [4]Laboratory of Brain Imaging (LOBI), Neurobiology Center, Nencki Institute of Experimental Biology, Warsaw, Poland

2029 FMRI of a Naturalistic Handwriting Task
Mahta Karimpoor[1], Fred Tam[2], Nathan Churchill[3], Corinne Fischer[4], Tom Schweizer[5], Simon Graham[6]
[1]Sunnybrook Research Institute, University of Toronto, Toronto, Canada, [2]Sunnybrook Research Institute, Toronto, Canada, [3]St. Michael's Hospital, Toronto, Ontario, [4]Keenan Research Centre of the Li Ka Shing Knowledge Institute of St. Michael's Hospital, Toronto, Canada, [5]Keenan Research Centre, Li Ka Shing Knowledge Institute, St. Michael's, Toronto, Canada, [6]Sunnybrook Research Institute, Sunnybrook Health Sciences Centre, Toronto, Canada

2030 Grapheme-Phoneme Integration in the Temporal Cortex of the Prereading Brain
Iliana Karipidis[1,2], Georgette Pleisch[1,2], Martina Röthlisberger[1], Philipp Stämpfli[3], Silvia Brem[1,2]
[1]University Clinic for Child and Adolescent Psychiatry (UCCAP), University of Zurich, Zurich, Switzerland, [2]Neuroscience Center Zurich, University of Zurich and ETH Zurich, Zurich, Switzerland, [3]Department of Psychiatry, Psychotherapy and Psychosomatics, University Hospital of Psychiatry, Zurich, Switzerland

2031 Cortical thickness differences in prereading children with and without familial risk for dyslexia
Indra Kraft[1], Riccardo Cafiero[1], Jens Brauer[1], Angela Friederici[1], Michael Skeide[1]
[1]Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany

2032 Inter-subject neuronal correlation (ISC) during natural article reading
Yun-Fei Liu[1], Wen-Jui Kuo[2], Fa-Hsuan Lin[3]
[1]Graduate Institute of Biomedical Electronics and Bioinformatics, National Taiwan University, Taipei, Taiwan, [2]Institute of Neuroscience, National Yang-Ming University, Taipei, Taiwan, [3]Institue of Biomedical Engineering, National Taiwan University, Taipei, Taiwan, Taipei, Taiwan

2033 Does writing help alphabetic readers accommodate for an ideographic system? Evidence from fMRI
Marieke Longcamp[1], Aurélie Lagarrigue[2], Jean-Luc Velay[3], Laurent Prévot[4], Jean-Luc Anton[5], Bruno Nazarian[5], Fan Cao[6], Cheryl Frenck-Mestre[4]
[1]Aix Marseille Université/CNRS, Marseille, France, [2]2-LEAD - CNRS UMR 5022 - Université de Bourgogne,, Dijon, France, [3]LNC UMR 7291 CNRS Université Aix Marseille, Marseille, France, [4]CNRS, Aix en Provence, France, [5]Centre IRM Fonctionnelle - IFR 131, Marseille, France, [6]Michigan State University, Haslett, MI

2034 Using Beta Series Variance and Mean Activation to Predict Reading Intervention Success
Jeffrey Malins[1], Bonnie Buis[1], Candice Goerger[2], Peter Molfese[3], Stephen Frost[1], Ken Pugh[1], W Mencl[1], Rose Sevcik[2], Robin Morris[2]
[1]Haskins Laboratories, New Haven, CT, [2]Georgia State University, Atlanta, GA, [3]University of Connecticut, Rocky Hill, CT

2035 Long-Term Experience with Chinese Language Shapes the Fusiform Asymmetry of English Reading
Leilei Mei[1], Chuansheng Chen[2], Zhong-lin Lu[3], Gui Xue[4]
[1]South China Normal University, Guangzhou, China, [2]Department of Psychology and Social Behavior, University of California, Irvine, Irvine, CA, [3]Centre for Cognitive Science, Ohio State University, Columbus, OH, [4]State Key Laboratory of Cognitive Neuroscience and Learning, Beijing Normal University, Beijing, China

2036 Cerebellar Grey and White Matter and their Relationship to Reading and Cognition
Marita Partanen[1], Daniel Kim[2], Lynne Williams[2], Linda Siegel[1], Deborah Giaschi[1]
[1]University of British Columbia, Vancouver, Canada, [2]Child & Family Research Imaging Facility, Vancouver, Canada

2037 Neural Basis of Grapheme-Phoneme Training in Children: An EEG-fMRI Study on Visual Print Processing
Georgette Pleisch[1,2], Iliana Karipidis[1,3], Martina Röthlisberger[1], Christian Brauchli[4], Philipp Stämpfli[5], Daniel Brandeis[1,3,2,6], Silvia Brem[7,3]
[1]University Clinic for Child and Adolescent Psychiatry (UCCAP), University of Zurich, Zurich, Switzerland, [2]Zurich Center for Integrative Human Physiology, Zurich, Switzerland, [3]Neuroscience Center Zurich, University of Zurich and ETH Zurich, Zurich, Switzerland, [4]University Clinic for Child and Adolescent Psychiatry, (UCCAP), University of Zurich, Switzerland, Zürich, Switzerland, [5]MR-Center of the Psychiatric University Hospital and the Department of Child and Adolescent Psychia, Zurich, Switzerland, [6]Department of Child and Adolescent Psychiatry and Psychotherapy, CIMH, Medical Faculty Mannheim/ Heidelberg University, Mannheim, Germany, [7]University Clinic for Child and Adolescent Psychiatry (UCCAP), University of Zurich, Zurich, Switzer, Zürich, Switzerland

2038 Diffusion Tensor Imaging in Learning Disabilities Following Computerized Instruction in Children
Todd Richards[1], Paul Robinson[1], Mary Askren[1], zoe mestre[1], Thomas Grabowski[1], Kevin Yagle[1], Virginia Berninger[1]
[1]University of Washington, Seattle, WA

2039 Hey, people with dyslexia, train your auditory working memory! The EEG-fMRI evaluation of therapy
Mateusz Rusiniak[1], Monika Lewandowska[1], Tomasz Wolak[1], Katarzyna Ciesla[1], Agnieszka Pluta[1], Henryk Skarżyński[1]
[1]The Institute of Physiology and Pathology of Hearing, Warsaw, Poland

2040 Cortical morphology underlying distinct cognitive components in Chinese reading
Xiaochen Sun[1,2], Shuang Song[1,2], Hua Shu[1,2], Gaolang Gong[1,2]
[1]State Key Laboratory of Cognitive Neuroscience and Learning, Beijing Normal University, Beijing, China, [2]IDG/McGovern Institute for Brain Research, Beijing Normal University, Beijing, China

2041 Neuroanatomical relationships with reading and phonological processing in children and adults
Caitlin Taylor[1], D. Lynn Flowers[1], Eileen Napoliello[1], John VanMeter[1], Guinevere Eden[1]
[1]Georgetown University, Washington, DC

2042 The Neural Mechanisms Underlying Lexical and Nonlexical Processing in Competitive Scrabble Players
Sophia van Hees[1,2], Penny Pexman[1,2], Ian Hargreaves[1], Lenka Zdrazilova[1], Kaia Myers-Stewart[1], Filomeno Cortese[1,3], Andrea Protzner[1,2]
[1]University of Calgary, Calgary, Canada, [2]Hotchkiss Brain Institute, Calgary, Canada, [3]Neuroimaging Research Unit, Hotchkiss Brain Institute, Calgary, Canada

2043 Correlations between reading performance and BOLD activation during word rhyming
Karen Waldie[1], Reece Roberts[1], Anna Wilson[2]
[1]The University of Auckland, Auckland, New Zealand, [2]University of Canterbury, Christchurch, New Zealand

2044 Eyetracking during Sentence Processing in an fMRI Study of Children with Learning Disabilities
Kevin Yagle[1], Todd Richards[1], Mary Askren[1], Scott Beers[2], Zoe Mestre[1], Thomas Grabowski[1], Virginia Berninger[1]
[1]University of Washington, Seattle, WA, [2]Seattle Pacific University, Seattle, WA

2045 Early encoding of radical position legality in Chinese character reading: An ERP study
Yen Na Yum[1], I-Fan Su[1], Sam-Po Law[1]
[1]University of Hong Kong, Hong Kong, Hong Kong

2046 Gains in letter-speech sound integration in children with dyslexia: a six-month longitudinal study
Gojko Žarić[1], Gorka Fraga Gonzalez[2], Jurgen Tijms[3], Maurits van der Molen[2], Leo Blomert[1], Milene Bonte[1]
[1]Department of Cognitive Neuroscience, Maastricht University, Maastricht, Netherlands, [2]Department of Psychology, University of Amsterdam, Amsterdam, Netherlands, [3]IWAL Institute, Amsterdam, Netherlands

2047 Neural mechanisms of ventral and dorsal visual path ways during natural reading
Wei Zhou[1], Hua Shu[2], Zhichao Xia[2]
[1]Beijing Key Lab of Learning and Cognition, Department of Psychology, Capital Normal University, Beijing, China, [2]State Key Laboratory of Cognitive Neuroscience and Learning, Beijing Normal University, Beijing, China

Language

Speech Perception

2048* Top-down signals during speech processing modulate the phase of oscillations in auditory cortex (O-W3)
Hyojin Park[1], Robin Ince[1], Philippe Schyns[1], Gregor Thut[1], Joachim Gross[1]
[1]Institute of Neuroscience and Psychology, University of Glasgow, Glasgow, United Kingdom

2049 Intrinsic connectivity of human auditory cortex:Testing the Dual Stream model of auditory processing
Daniel Abrams[1], Sayuli Bhide[2], Tianwen Chen[3], Srikanth Ryali[4], john kochalka[5], Vinod Menon[6]
[1]Stanford University, Stanford, CA, [2]Stanford University, Palo Alto, CA, [3]Stanford Univeristy, Stanford, CA, [4]Stanford University School of Medicine, Stanford, United States, [5]stanford, Palo alto, United States, [6]Stanford school of medicine, Palo Alto, CA

2050 How much cortex does it take to make a phonological decision?
Sophie Bouton[1], Rémi Tyrand[1], Valérian Chambon[1,2], Anne-Lise Giraud Mamessier[1]
[1]Dpt of Fundamental Neurosciences, University of Geneva, Geneva, Switzerland, [2]Laboratory of Cognitive Neuroscience, École Normale Supérieure, Paris, France

2051 Aging-Related Compensatory Over-Recruitment and Dedifferentiation During Speech in Noise Perception
Yi Du[1], Bradley Buchsbaum[1,2], Cheryl Grady[1,2], Claude Alain[1,2]
[1]Rotman Research Institute at Baycrest Centre for Geriatric Care, Toronto, Canada, [2]University of Toronto, Toronto, Canada

2052 Bilingual speech discrimination in the first year of life: A magnetoencephalography study
Naja Ferjan Ramirez[1], Rey Ramirez[1], Samu Taulu[1], Patricia Kuhl[1]
[1]University of Washington, Seattle, WA

2053 A Network of Right- and Left-Hemispheric Regions Involved in the Recognition of Linguistic Prosody
Jens Kreitewolf[1], Tomás Goucha[1], Angela Friederici[1]
[1]Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany

2054 Online Modulation of Brainstem Pitch Encoding in Tone Language Speakers
Joseph CY Lau[1], Patrick Wong[1,2], Akshay Maggu[1], Bharath Chandresekaran[3]
[1]The Chinese University of Hong Kong, Hong Kong, China, [2]Northwestern University, Evanston, Illinois, The United States of America, [3]The University of Texas at Austin, Austin, Texas, The United States of America

2055 Cortical electrophysiological mechanisms of linguistic sound change
Akshay Maggu[1], Tak Wai Lau[1], Patrick CM Wong[1,2]
[1]The Chinese University of Hong Kong, Hong Kong, China, [2]Northwestern University, Evanston, IL

2056 Interactive effects of musical and lexical auditory experience on brainstem encoding of pitch
Akshay Maggu[1], Fang Liu[1], Joseph CY Lau[1], Patrick CM Wong[1,2]
[1]The Chinese University of Hong Kong, Hong Kong, China, [2]Northwestern University, Evanston, IL

2057 Individual variation in the perception of Cantonese rising tones: Behavioral and ERP correlates
Jinghua Ou[1], Sam Po Law[1], Roxana S.Y. Fung[2]
[1]The University of Hong Kong, Hong Kong, [2]The Hong Kong Polytechnic University, Hong Kong

2058 Atypical auditory adaptation to repeated speech in children with dyslexia
Tyler Perrachione[1], Joanna Christodoulou[2], John Gabrieli[3]
[1]Boston University, Boston, MA, [2]MGH Institute of Health Professions, Boston, MA, [3]Massachusetts Institute of Technology, Cambridge, MA

2059 Amplitude rise time and formant rise time processing in dyslexia: A mismatch negativity (MMN) study
Varghese Peter[1], Denis Burnham[1], Marina Kalashnikova[1]
[1]University of Western Sydney, Sydney, Australia

2060 Audiovisual integration for speech: a voxel-based lesion symptom mapping study
Corianne Rogalsky[1], Kuan-Hua Chen[2], William Matchin[3], Steve Anderson[2], Jeffrey Binder[4], Hanna Damasio[5], Tracy Love[6], Gregory Hickok[7]
[1]Arizona State University, Tempe, AZ, [2]University of Iowa, Iowa City, IA, [3]University of Maryland, College Park, MD, [4]Medical College of Wisconsin, Wauwatosa, WI, [5]University of Southern California, Los Angeles, CA, [6]San Diego State University, University of California, San Diego, CA, [7]University of California, Irvine, CA

2061 Through the looking-glass: neural basis of self representation during speech perception
marc sato[1], Avril Treille[2], Coriandre Vilain[2], Jean-Luc Schwartz[2]
[1]Speech and Language Laboratory & CNRS, Aix-en-Provence, France, [2]GIPSA-lab & CNRS, Grenoble, France

2062 Activity in superior temporal sulcus scales with speech sound complexity
Mathias Scharinger[1], Ulrike Domahs[2], Frank Domahs[3], Elise Klein[4]
[1]Department of Cognitive incl. Biological Psychology, University of Leipzig, Leipzig, Germany, [2]Institute for German Language and Literature II, University of Cologne, Cologne, Germany, [3]Institute for Germanic Linguistics, University of Marburg, Marburg, Germany, [4]Knowledge Media Research Center, Tuebingen, Germany

2063 Neural Correlates of Speech Processing in Bilinguals
Kambiz Tavabi[1], Adrian Garcia-Sierra[2], Patricia Kuhl[1]
[1]University of Washington, Seattle, WA, [2]University of Connecticut, Storrs, CT

2064 Music exposure enhances infants' neural processing of temporal structure in music and speech
T. Christina Zhao[1], Patricia Kuhl[1]
[1]University of Washington, Seattle, WA

Language

Speech Production

2065 Evidence for shared mechanisms during compensation and adaptation to speech errors
Zarinah Agnew[1], Caroline Niziolek[2], Srikantan Nagarajan[2], John Houde[2]
[1]UCSF, san francisco, CA, [2]University of California, San Francisco, San Francisco, CA

2066 Exploring the Neural Networks Associated with Rapid Naming: A Graphical Model Approach
Jacqueline Cummine[1], George Georgiou[1], Ivor Cribben[2]
[1]University of Alberta, Edmonton, Alberta
[2]Alberta School of Business, University of Alberta, Edmonton, AB

2067 Dopamine modulates lateralization of motocortical activity during speech: a fMRI and Modeling Study
Stefan Fuertinger[1], Joel Zinn[1], Kristina Simonyan[1]
[1]Mount Sinai School of Medicine, New York, NY

2068 Dopamine influences activity in the laryngeal motor cortex during speech: an iEEG and modeling study
Stefan Fuertinger[1], Walter Hinds[2], Joel Zinn[1], Ashwini Sharan[3], Farid Hamzei-Sichani[1], Kristina Simonyan[1]
[1]Mount Sinai School of Medicine, New York, NY, [2]Drexel University, Philadelphia, PA, [3]Thomas Jefferson University Hospital, Philadelphia, PA

2069 Association between functional connectivity and language abilities in school-age children
Liliana García[1], Beatriz Moreno[1], Juan Ortiz[1], Fernando Barrios[1], Sarael Alcauter[1]
[1]Instituto de Neurobiología, Universidad Nacional Autónoma de México, Querétaro, México

2070 Network dysfunction in post-stroke aphasia
Fatemeh Geranmayeh[1], Robert Leech[1], Richard Wise[1]
[1]Imperial College London, London, United Kingdom

2071 Localization of Broca's Area of a Healthy Human Being by MRI Methods: Quantitative Comparisons
Bob Hou[1], Xiaoluo Zhang[2], Jeffrey Carpenter[1], Jie Zhang[2], Sanjay Bhatia[1], Jinsong Wu[2]
[1]WVU, Morgantown, WV, [2]Huashan Hospital of Fudan University, Shanghai, China

2072 Word processing during non-experimental speech production investigated using electrocorticography
Olga Iljina[1,2,3,4,5], Sheila Albrich[5], Johanna Derix[1,5,6], Andreas Schulze-Bonhage[1,6], Tonio Ball[1,5,6]
[1]Epilepsy Center, University Medical Center, Albert-Ludwigs-University, Freiburg, Germany, [2]GRK 1624 'Frequency effects in language', Albert-Ludwigs-University, Freiburg, Germany, [3]Department of German Linguistics, Albert-Ludwigs-University, Freiburg, Germany, [4]Hermann Paul School of Linguistics, Albert-Ludwigs-University, Freiburg, Germany, [5]Intracranial EEG Lab, Albert-Ludwigs-University, Freiburg, Germany, [6]Excellence Cluster 'BrainLinks-BrainTools', Albert-Ludwigs-University, Freiburg, Germany

2073 Meaning Based Covert Speech Classification Using Electrocorticography
Taekyung Kim[1], Youngmin Park[1], Jinsick Park[1], Inyoung Kim[1], Dongpyo Jang[1]
[1]Department of Biomedical Engineering, Hanyang University, Seoul, Korea, Republic of

2074 Neural Encoding of Auditory Speech Targets Is Task-Dependent
Caroline Niziolek[1], Srikantan Nagarajan[1], John Houde[1]
[1]University of California, San Francisco, San Francisco, CA

2075 Dopaminergic genotypes and frontostriatal volumes predict methylphenidate response in ADHD
Soon-Beom Hong[1], Sarah Whittle[2], Taewoong kang[3], Subin Park[4], Young-Hui Yang[4], Min-Hyeon Park[5], In-Chan Song[1], Chul-Ho Sohn[1], Min-Sup Shin[4], Soo-Churl Cho[4], Doughyun Han[6], Jae Hoon Cheong[7], Jae-Won Kim[1], Bung-Nyun Kim[8]

2076 Speech artefacts removal from EEG recordings during overt picture naming: comparison across methods
Camillo Porcaro[1], Maria Teresa Medaglia[1,2], Andrea Krott[2]
[1]LET'S-ISTC-CNR, Rome, Italy, [2]School of Psychology and BUIC, University of Birmingham, Birmingham, United Kingdom

2077 Language production is facilitated by semantic richness but inhibited by semantic density
Milena Rabovsky[1], Daniel Schad[2], Rasha Abdel Rahman[1]
[1]Department of Psychology, Humboldt-Universitaet zu Berlin, Berlin, Germany, [2]Charité, Universitätsmedizin Berlin, Berlin, Germany

2078 Cortical signature of vowels in listening, covert and overt articulation
Alessandra Rampinini[1], Giacomo Handjaras[1], Andrea Leo[1], Luca Cecchetti[1], Emiliano Ricciardi[1], Giovanna Marotta[2], Pietro Pietrini[3,4,5]
[1]Laboratory of Clinical Biochemistry and Molecular Biology, University of Pisa, Pisa, Italy, [2]Department of Philology, Literature, and Linguistics, University of Pisa, Pisa, Italy, [3]Clinical Psychology Branch, University of Pisa, Pisa, Italy, [4]Department of Neuroscience, Azienda Ospedaliero Universitaria Pisana, Pisa, Italy, [5]University of Pisa Medical School, Pisa, Italy

2079 The Development of White Matter Regions involved in Foreign Speech Sound Production
Mary Elizabeth Sutherland[1,2], Pierre-Yves Hervé[3], Tomas Paus[4], Robert Zatorre[5]
[1]Universidad Católica de Chile, Santiago, Chile, [2]McGill University, Montreal, Quebec, Canada, [3]Université Bordeaux Segalen, Bordeaux, France, [4]Rotman Research Institute - Baycrest Centre, Toronto, ON, [5]Montreal Neurological Institute, Montreal, Quebec

Learning and Memory

Implicit Memory

2080 Statistical learning under high cognitive load
Marta Garrido[1], James Teng[2], Jason Mattingley[3]
[1]Centre for Advanced Imaging and Queensland Brain Institute, Brisbane, Australia, [2]The University of Queensland, Brisbane, Australia, [3]University of Queensland, Brisbane, Australia

2081 Is Repetition Suppression Modulated by attention and stimulus categories?
Chih-hao Lien[1], Chun-Yu Lin[2]
[1]National Chang Kung University, Tainan, Taiwan, [2]National Cheng Kung University, Tainan City, Chinese Taipei

2082 Visual perceptual prediction errors are generated in feature-specific regions: An fMRI study
Gabor Stefanics[1], Jakob Heinzle[2], Klaas Enno Stephan[3]
[1]Translational Neuromodeling Unit (TNU), IBT, University of Zurich & ETH Zurich, Zurich, Switzerland, [2]Translational Neuromodelling Unit, University Zurich & ETH Zurich, Zurich, Switzerland, [3]University of Zurich & ETH Zurich, Zurich, Switzerland

2083 Neural basis of facilitations for implicit memory performance using emotional contexts
Chiaki Terao[1], Rui Nouchi[2], Sugiko Hanawa[3], Yuki Yamamoto[4], Kohei Sakaki[5], Kosuke Motoki[4], Motoaki Sugiura[4], Ryuta Kawashima[4]
[1]Department of Functional Brain Imaging, Institute of Development, Aging and Cancer, Tohoku University, Sendai, Japan, [2]International Research Institute of Disaster Science (IRIDeS), Tohoku University, Sendai, Miyagi, [3]Tohoku university, Sendai, Japan, [4]Tohoku University, Sendai, Japan, [5]Institute of Development, Aging and Cancer (IDAC), Tohoku University, Sendai, Japan

Learning and Memory

Learning and Memory Other

2084 A Graph theory approach to understand network dynamics underlying directed forgetting
Babu Adhimoolam[1], Teena Moody[2], Barbara Knowlton[2]
[1]UCSF, San Francisco, CA, [2]UCLA, Los Angeles, CA

2085 Hippocampal Dentation as a Predictor of Verbal Memory Performance in Healthy Adults
Julia Beattie[1], Roy Martin[1], Hrishikesh Deshpande[1], Seongtaek Lee[1], Lawrence Ver Hoef[1]
[1]University of Alabama at Birmingham, Birmingham, AL

2086 Functional imaging correlates of interference in motor learning and memory consolidation using PET
Georgia Box[1], Ken Nagata[2]
[1]St Vincent's Hospital, Melbourne, Australia, [2]Research Institute for Brain and Blood Vessels, Akita, Japan

2087 Dynamics of the structural connectome underlying working memory training
Karen Caeyenberghs[1], Claudia Metzler-Baddeley[2], Sonya Foley[2], Derek Jones[2]
[1]Australian Catholic University, Melbourne, Australia, [2]Cardiff University, Cardiff, United Kingdom

2088 The neural correlates that underlie rule-based and information-integration category learning
Kathryn Carpenter[1], Andy Wills[2], Abdelmalek Benattayallah[1], Fraser Milton[1]
[1]University of Exeter, Exeter, United Kingdom, [2]Plymouth University, Plymouth, United Kingdom

2089 Memory encoding assessed with signal detection theory and functional magnetic resonance imaging
Benjamin Clemens[1], Christina Regenbogen[2], Frank Schneider[3], Thilo Kellermann[4], Ute Habel[5]
[1]RWTH Aachen, Aachen, Germany, [2]Karolinska Institutet, Stockholm, Sweden, [3]RWTH Aachen University, Aachen, Germany, [4]Uniklinik RWTH Aachen, Aachen, Germany, [5]University of Aachen, Aachen, Germany

2090 Internet search using made people more dependent on search tools and less confident about our memory
Guangheng Dong[1], Marc Potenza[2]
[1]Zhejiang Normal University, Jinhua, China, [2]Yale School of Medicine, New Haven, CT

2091 Individual differences in right DLPFC volume and repetition of error responses during S-R learning
Eunjoo Kang[1], Hojin Jeong[1], Jinhee Kim[1]
[1]Kangwon National University, Chuncheon, Korea, Republic of

2092 Fronto-Temporal Interaction during Fixation after Memory Retrieval
Masaki Katsura[1], Satoshi Hirose[1,2], Koji Jimura[1,2,3], Harushi Mori[1], Akira Kunimatsu[1], Kuni Ohtomo[1], Seiki Konishi[1,2]
[1]The University of Tokyo, Tokyo, Japan, [2]Juntendo University, Tokyo, Japan, [3]Tokyo Institute of Technology, Yokohama, Japan

2093 Neurofeedback learning in the immersive art environment of 'My Virtual Dream'
Natasha Kovacevic[1], William Tays[1], Sylvain Moreno[1], Petra Ritter[2], Randy McIntosh[1]
[1]Rotman Research Institute, Baycrest Centre, Toronto, Canada, [2]Charité Universitaetsmedizin, Berlin, Germany

2094 Hippocampal context processing in acquisition of a learning task is associated with renewal
Silke Lissek[1], Benjamin Glaubitz[1], Martin Tegenthoff[1]
[1]Department of Neurology, BG University Hospital Bergmannsheil, Ruhr-University Bochum, Bochum, Germany

2095 Spatial memory consolidation: local use-dependent changes in the wake and sleep EEG
Angelica Quercia[1], Filippo Zappasodi[2], Giorgia Committeri[3], Mariangela Valentini[1], Vittorio Pizzella[4], Michele Ferrara[5]
[1]Dept. of Neuroscience and Imaging, University of Chieti, Chieti, Italy, [2]Dept. of Neuroscience and Imaging, Gabriele d'Annunzio University, Chieti, Italy, [3]Department of Neuroscience e Imaging, University G. d'Annunzio, Chieti, Italy, [4]Department of Neuroscience and Imaging, G. d'Annunzio University of Chieti-Pescara, Chieti, Italy, [5]Department of Life, Health and Environmental Sciences, University of L'Aquila, L'Aquila, Italy

2096 Towards a population analysis of behavioral and neural state transitions during associative learning
Karsten Tabelow[1], Matthias Deliano[2], Marcus Jörn[2], Reinhard König[2], Andre Brechmann[2], Joerg Polzehl[1]
[1]WIAS Berlin, Berlin, Germany, [2]LIN Magdeburg, Magdeburg, Germany

2097 Visual Perceptual Learning Shapes Spontaneous Neuronal Activity of Human Visual Cortex
Fang Wang[1], Zhengjia Dai[1], Yaping Lv[1], Jing Huang[1], Yong He[1], Yan Song[1]
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Learning and Memory

Long-Term Memory (Episodic and Semantic)

2098* Sleep Reorganizes Memory-related Plasticity Processes in Children, (O-M3)
Charline Urbain[1,2,3], Xavier De Tiège[2], Marc Op de Beeck[2], Mathieu Bourguignon[2], Denis Verheulpen[4], Patrcik Van Bogaert[2,4], Philippe PEIGNEUX[1,3]
[1]Neuropsychology and Functional Neuroimaging Research Unit at CRCN - Center for Research in Cognition, Brussels, Belgium, [2]LCFC - Laboratoire de Cartographie Fonctionnelle du Cerveau, Hôpital Erasme, Brussels, Belgium, [3]UNI-ULB Neuroscience Institute, Université Libre de Bruxelles, Brussels, Belgium, [4]Department of Pediatric Neurology, Erasme Hospital, Université Libre de Bruxelles (ULB), Brussels, Belgium

2099 Characterizing the Default Mode Network Across Rest, Retrieval and Future Imagining
Buddhika Bellana[1,2], Zhongxu Liu*[2,3], Nick Diamond[1,2], Cheryl Grady[1,2,4], Levine Brian[1,2], Morris Moscovitch[1,2]*
[1]Dept. of Psychology, University of Toronto, Toronto, Canada, [2]Rotman Research Institute, Baycrest, Toronto, Canada, [3]Dept. of Applied Psychology and Human Development, University of Toronto, Toronto, Canada, [4]Dept. of Psychiatry, University of Toronto, Toronto, Canada

2100 Mnemonic Discrimination Relates to Perforant Path Integrity: A High Resolution DTI Study
Ilana Bennett[1], Craig Stark[1]
[1]Department of Neurobiology and Behavior, University of California, Irvine, Irvine, CA

2101 Pre-encoding Activity in the Insula Predicts Subsequent Memory
Noga Cohen[1], Aya Ben-Yakov[1], Yadin Dudai[1], Micah Edelson[1], Rony Paz[1]
[1]Weizmann Institute of Science, Rehovot, Israel

2102 Reward Effects on Encoding and Retrieval Representational Similarity in the Human Hippocampus
Natalie De Shetler[1], Nanthia Suthana[1], Nicole Yap[1], Garrett Nastarin[1], Barbara Knowlton[1], Jesse Rissman[1]
[1]University of California, Los Angeles Los Angeles, CA

2104 New Memory Task to isolate the Neuronal Activity Related to Self-Initiation of Semantic Encoding
Synthia Guimond[1], Colin Hawco[2], Martin Lepage[3]
[1]McGill University, Montréal, Québec, [2]University of Toronto, Centre for Addiction and Mental Health, Toronto, Ontario, [3]McGill University, Douglas Mental Health University Institute, Montréal, Québec

2105 Examination of the Long-axis Specialization of the Human Hippocampus: An fMRI Study
Ching Huang[1], Chun-Yu Lin[2]
[1]National Cheng Kung University, Tainan, Taiwan, [2]National Cheng Kung University, Tainan City, Chinese Taipei

2106 Viscoelasticity of hippocampal tissue in healthy young adults relates to memory task performance
Curtis Johnson[1], Hillary Schwarb[1], Matthew McGarry[2], Neal Cohen[1]
[1]University of Illinois at Urbana-Champaign, Urbana, IL, [2]Dartmouth College, Hanover, NH

2107 Mnemonic representation of temporal similarity in the precuneus
Sze Chai Kwok[1,2,3], Emiliano Macaluso[4]
[1]Santa Lucia Foundation, Rome, Italy, [2]East China Normal University, Shanghai, China, [3]NYU-Shanghai University, Shanghai, China, [4]Santa Lucia Foundation, Roma, Italy

2108 Influence of disgust and sadness on long-term memory-an fMRI study with the Nencki Affective Picture
Artur Marchewka[1], Dawid Droździel[1], Michał Szczepanik[1], Marek Wypych[1], Katarzyna Jednoróg[2]
[1]Laboratory of Brain Imaging (LOBI), Neurobiology Center, Nencki Institute of Experimental Biology, Warsaw, Poland, [2]Laboratory of Psychophysiology, Nencki Institute of Experimental Biology, Warsaw, Poland

2109 Grey matter changes in the medial prefrontal cortex link mnemonic training to superior memory
Nils Müller[1], Boris Konrad[1], William Shirer[2], Guillén Fernández[1], Michael Czisch[3], Michael Greicius[2], Martin Dresler[1]
[1]Donders Institute for Brain, Cognition and Behaviour, Nijmegen, Netherlands, [2]Functional Imaging in Neuropsychiatric Disorders Laboratory, Stanford University, Stanford, CA, [3]Max Planck Institute of Psychiatry, Munich, Germany

2110 Neural basis of the memory enhancement after reading aloud
Rui Nouchi[1,2], Motoaki Sugiura[2,1], Yuki Yamamoto[2], Calos Miyauchi[2], Kunio Iizuka[2], Atsushi Sekiguchi[3,2], Ryuta Kawashima[2]
[1]International Research Institute of Disaster Science (IRIDeS), Tohoku University, Sendai, Japan, [2]Institute of Development, Aging & Cancer (IDAC), Tohoku University, Sendai, Japan, [3]Tohoku Medical Megabank Organization, Tohoku University, Sendai, Japan

2111 Effects of testosterone on spatial abilities and brain activity in healthy women
Carl Pintzka[1], Hallvard Røe Evensmoen[1], Hanne Lehn[1], Asta Håberg[1]
[1]NTNU, Trondheim, Norway

2113 Disambiguating the neural bases of emotional memory with high-resolution imaging
Maureen Ritchey[1], Shao-Fang Wang[1], Andy Yonelinas[1], Charan Ranganath[1]
[1]University of California, Davis, Davis, CA

2114 Memory formation during the natural reading of literature: an EEG study
Naoyuki Sato[1]
[1]Future University Hakodate, Hakodate-shi, Japan

2115 Effects of brief hypoxia on hippocampal integrity and memory functions
Vess Stamenova[1], Raneen Nicola[2], Asaf Gilboa[1], Judith Aharon-Peretz[3], Dorit Goldsher[3], Michael Kpliovich[3]
[1]Rotman Research Institute, Toronto, Ontario, [2]University of Haifa, Haifa, Israel, [3]Rambam Medical Center, Haifa, Israel

2116 Spatiotemporal fractionation of autobiographical memory networks using event-related ICA
Chris Tailby[1], Genevieve Rayner[2], Sarah Wilson[2], Graeme Jackson[3]
[1]Florey Institute of Neuroscience and Mental Health, Heidelberg, VIC, Australia, [2]University of Melbourne, Melbourne, Australia, [3]Florey Institute of Neuroscience and Mental Health, Melbourne, Australia

2117 Sources of Individual Variability in Regional Brain Activity During Recognition Memory
Benjamin Turner[1], Michael Miller[1]
[1]UC Santa Barbara, Santa Barbara, CA

2118 Physical exercise performed 4 hours after learning improves the retention of associative memories
Eelco van Dongen[1], Ingrid Kersten[1], Guillén Fernández[1]
[1]Donders Institute for Brain, Cognition and Behaviour, Radboudumc, Nijmegen, Netherlands

2119 Lexical retrieval modulates episodic memory in Logopenic Variant of Primary Progressive Aphasia
Khaing Win[1], John Pluta[1], Paul Yushkevich[1], David Wolk[1], Murray Grossman[1]
[1]University of Pennsylvania, Philadelphia, PA

2120 Neural pattern similarity underlies the mnemonic advantages for living words
Xiaoqian Xiao[1,2], Qi Dong[1,2], Chuansheng Chen[3], Gui Xue[1,2]
[1]State Key Laboratory of Cognitive Neuroscience and Learning & IDG/McGovern Institute for Brain Resea, Beijing, China, [2]Center for Collaboration and Innovation in Brain and Learning Sciences, Beijing Normal University, Beijing, China, [3]Department of Psychology and Social Behavior, University of California, Irvine, United States

Learning and Memory

Neural Plasticity and Recovery of Function

2121 * Resting state network reorganization in hemiplegic cerebral palsy treated with constraint therapy, (O-M3)
Kathryn Manning[1], Darcy Fehlings[2], Craig Campbell[3], Jan Willem Gorter[4], Ronit Mesterman[5], Lauren Switzer[6], Ravi Menon[7]
[1]Robarts Research Institute, London, Ontario, [2]University of Toronto, Toronto, Ontario, [3]Western University, London, Ontario, [4]McMaster University, Hamilton, Ontario, [5]McMaster Children's Hospital, Hamilton, Ontario, [6]Holland Bloorview Kids Rehabilitation Hospital, Toronto, Ontario, [7]3Robarts Research Institute, University of Western Ontario, London, Canada

2122 Changes in Effective Connectivity Show a Novel Type of Primary Cortex Reorganization
Ahmad Amini[1,2,3], Florian Fischmeister[1,2], Dara O'Hogain[1,2], Eva Matt[1,2], Robert Schmidhammer[4], Frank Rattay[3], Roland Beisteiner[1,2]
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2123 Structural correlates of a new type of cortical neuroplasticity
Ahmad Amini[1,2,3], Wolfgang Bogner[4,2], Florian Fischmeister[1,2], Dara O'Hogain[1,2], Eva Matt[1,2], Robert Schmidhammer[5], Frank Rattay[3], Roland Beisteiner[1,2]
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2124 Neural Correlates of Memory Training in Individuals with Subjective Cognitive Impairment
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2125 The exercising brain – changes in functional connectivity induced by "Life-Kinetik" training
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2126 Movement therapy after stroke normalizes activity in bilateral sensorimotor networks
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2127 The Dynamics of Short-Term Plasticity with Diffusion MRI
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2128 Neural Correlates of Game-guided Exercise in Improving Cognitive Function in Older Adults
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2129 Treatment-Induced Neuroplasticity in Aphasia and Practice Effects in Healthy Aged-Matched Volunteers
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2130 Plasticity of motor imagery activity patterns and functional connectivity patterns
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2131 Sensorimotor network connectivity changes due to facial peripheral neuropathy: fMRI study
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2132 Long-term Outcome of Surgical Resection of Right Frontal Glioma on Visuospatial Cognition
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2133 Are there changes in intrinsic functional connectivity when we learn a new vocabulary?
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2134 Rapid bidirectional activity-dependent changes in white-matter structure in humans
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2135 The effects of the videogame play on the development of brain's microstructural property
Hikaru Takeuchi[1], Yasuyuki Taki[2], Hiroshi Hashizume[3], Kohei Asano[4], Michiko Asano[5], Yuko Sassa[2], Susumu Yokota[6], Yuka Kotozaki[6], Rui Nouchi[7], Ryuta Kawashima[6]
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2136 Motor learning rapidly alters motor cortex structure
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2137 Eccentricity-specific characteristics of V1 are altered following central vision loss
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2138 Long-term memory formation is required for training-associated changes in brain structure volume
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2139 Acute Exercise Modulates Prefrontal-amygdala Connectivity Decreasing Negative Affect
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Learning and Memory

Skill Learning

2141 Functional connectivity underlying postural motor adaptation in people with multiple sclerosis
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2142 Effector-Independent Representation of the Motor Sequence Knowledge in the "Trained" M1
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2143 Action Video Game Playing Induces Functional and Structural Plasticity in the Brain
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2144 Neural plasticity and oscillatory dynamics of visually and auditory guided sequence learning
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2145 Brain become more plastic by the effective learning
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2146 Computational modeling of hippocampal-neocortical pathways for children's cognitive development
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2147 Finding the neural correlates of creativity and its enhancement
Manish Saggar[1], Eve-Marie Quintin[1], Eliza Kienitz[1], Nicholas Bott[1], Zhaochun Sun[1], Daniel Hong[2], Yin-hsuan Chien[2], Ning Liu[1], Robert Dougherty[1], Adam Royalty[1], Grace Hawthorne[1], Allan Reiss[1]
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2148 Effects of abacus-based mental training on topological properties of brain structural networks
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2149 Brain Resilience of Neural Network of Body Representation in Dancer
Ching-Ju Yang[1,2], Tzu-Yi Hong[1,2], Chia-Shu Lin[3], Tai-Ying Liu[1,2], Hsin-Yen Yu[4], Li-Fen Chen[1,2], Jen-Chuen Hsieh[1,2]
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Learning and Memory

Working Memory

2150 Neural Working Memory Maturation in Adolescence: Meta-analyses and Implications for Schizophrenia
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2151 Rapid TMS of dorsolateral prefrontal cortex enhances working memory of healthy
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2152 Effects of Load on Maintaining Spatial Relations vs. Locations in Working Memory
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2153 The neural substrate of lateralized visual short-term memory representations
Sabrina Brigadoi[1,2], Simone Cutini[2,3], Federica Meconi[2], Marco Castellaro[4], Paola Sessa[2,3], Mattia Marangon[5], Alessandra Bertoldo[4], Diego Miotto[6], Roberto Dell'Acqua[2,3]
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2154 Caffeine Induced CBF Reduction Is Correlated with Caffeine Induced Brain Activation Increase
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2155 Neural Activation During a Working Memory Task Predicts Prospective Memory Ability: An fMRI Study
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2156 Improved Working Memory Load and ERP Signatures Resulting from tDCS-Enhanced Mindfulness Training
Michael Hunter[1], Gregory Lieberman[1], Brian Coffman[2], Aaron Jones[1], Mike Trumbo[1], Mika Armenta[1], Sam Robinson[1], Elizabeth McCallion[1], Corey Roos[1], Anthony O'Sickley[1], David Brown[1], Tristan Collar[1], Sean Gaurino[3], Victoria Romero[3], Katie Witkiewitz[1], Vincent Clark[1]
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2157 Occipital Cortex Contributions to Capacity and Resolution in Visual Working Memory
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2158 Attention boosts to memory while multitasking with congruent or violated contexts
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2159 Cooperative Processing in SI and PPC during Tactile Working Memory: A TMS Study
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2160 Load Dependent Modulation of Lateralized Alpha Oscillations During a Working Memory Sternberg Task
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2161 Verbal Working Memory Network: A Network Connectivity Study
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2162 Intrinsic Brain Network Connectivity Underlies Individual Differences in Spatial Working Memory
Jin Liu[1,2], Mingrui Xia[1,2], Zhengjia Dai[1,2], Xiaoying Wang[1,2], Xuhong Liao[1,2], Yanchao Bi[1,2], Yong He[1,2]
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2163 Disruption of prefrontal cortical function with TMS disrupts goal-directed visual processing
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2164 Alpha activity reflects semantic interference resolution in an auditory working memory task
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2165 Training-induced cortical thickness changes in executive and salience regions
Claudia Metzler-Baddeley[1], Karen Caeyenberghs[2], Sonya Foley[3], Derek Jones[3]
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2166 Pre-stimulus gamma activity predicts P300 response in odd ball task: an EEG study
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2167 Developmental reduction in maintenance-related variability supports improvements in working memory
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2168 Is there meta-analytic evidence for an association between COMT genotype on brain activation?
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2169 Effect of catecholaminergic treatment during goal-directed behavior in ADHD
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2170 Memory reliant post-error slowing is associated with learning transfer and fronto-occipital activity
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2171 The neuronal basis of individual differences in subprocesses of working memory
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2172 PFC maintains abstract quantitative but not spatial tactile stimulus features during working memory
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2173 Cerebellar contributions to visual working memory
Monika Sobczak-Edmans[1], Alvin Kheng Seng Lim[1], Gladys Jia Min Heng[1], Yee Cheun Chan[2], Effie Chew[3], Kai-Hsiang Chuang[4], S.H. Annabel Chen[1]
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2174 Neural Correlates of Emotional and Task-Similar Distraction of Spatial Working Memory
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2175 A Study of Interdependence between Salivary Cortisol, Psychological Stress and Arithmetic Abilities
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2176 Working Memory-Related Prefrontal-Hippocampal Functional Connectivity in Children and Adolescents
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2177 Decoding neural representations of Chinese Characters stored in Working Memory
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2178 Non-Perceptual Regions in the Left Inferior Parietal Lobe Support Phonological Short-Term Memory
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2179 Working memory in healthy relatives of schizophrenia patients: a meta-analysis of fMRI studies
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2180 Analysis of Hippocampal Subregion Activation in Spatial Memory
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Modeling and Analysis Methods

Bayesian Modeling

2181* Short-term plasticity of laminar synaptic connections in Alzheimer's disease - An MEG study, (O-M4)
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2182 Impaired consciousness is linked to changes in effective connectivity of the posterior cingulate
Julia Sophia Crone[1], Matthias Schurz[2], Yvonne Höller[3], Jürgen Bergmann[4], Martin M Monti[5], Eugen Trinka[6], Martin Kronbichler[7]
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2183 Application of a Bayesian Model To Asses Localized Brain Activity and Connectivity in a study of AD
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2184 Local quadratic approximation of Laplace priors for Bayesian Model Averaging in M/EEG source imaging
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2185 Functional parcellation of the striatum using Bayesian non-parametric modeling
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2186 Spatial Bayesian Latent Factor Regression Modelling of Coordinate-Based Meta-Analysis Data
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2187 Empirical bayesian Mixed-norm and Elastic Net for spatiotemporal electromagnetic source imaging

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2188 Prediction from FMRI using Gaussian Processes with Pseudo-Likelihood Hyperparameter Optimization

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2189 Spatial point process modeling of Coordinate-Based Meta-Analysis data

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2190 Cross-Validated Bayesian Model Selection for Methodological Control in fMRI Data Analysis

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2191 Bayesian estimation of multiple static dipoles from EEG time series: validation of an SMC sampler

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2192 A Bayesian Hierarchical Spatial Point Process Model for MS Subtype Classification

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2193 Bayesian Heteroscedastic Non-Central Chi Regression for Neuroimaging

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2194 Dynamic Causal Modelling: Optimizing the (Hyper) Priors

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Modeling and Analysis Methods

Diffusion MRI Modeling and Analysis

2195* Combining ex vivo diffusion imaging with CLARITY in human hippocampus, (O-T4)
Kristi Clark[1], Farshid Sepehrband[2], Alexander Talishinsky[1], Samuel Barnes[3], Russell Jacobs[4], Shagun Mehta[1], Celia Williams[1], Carol Miller[5]
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2196* In Vivo Observation of Time-dependent Diffusion in Human White Matter, (O-T4)
Els Fieremans[1], Lauren Burcaw[1], Jelle Veraart[1], Dmitry Novikov[1]
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2197* Measuring the pulsation of the brain using a phase sensitive reconstruction of DWIs, (O-W5)
Tim Sprenger[1], Jonathan I. Sperl[2], Brice Fernandez[3], Axel Haase[4], Marion I. Menzel[2]
[1]Technical University, Munich, Germany, [2]GE Global Research, Munich, Germany, [3]GE Healthcare, Munich, Germany, [4]Technical University Munich, Munich, Germany

2198 DTI Detection of WM Abnormalities using Randomization Test with Complete and Incomplete Pairs
Sumra Bari[1], Il Yong Chun[1], Larry Leverenz[1], Eric Nauman[1], Thomas Talavage[2]
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2199 Principle Component Analysis of Orientation Distribution Function in Diffusion Spectrum Imaging
Jingyun Chen[1,2], Steven Baete[2], Meng Qian[1], Meng Li[1], Charles Marmar[1], Fernando Boada[2]
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2200 Reduced global connectivity, but a relatively preserved rich club network in Alzheimer's disease
Madelaine Daianu[1], Neda Jahanshad[2], Adam Mezher[3], Talia Nir[2], Clifford Jack[4], Michael Weiner[5], Matt Bernstein[4], Paul Thompson[6]
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2201 Characterizing white matter pathways with Profilometry, with application to Multiple Sclerosis
Michael Dayan[1], Elizabeth Monohan[1], Sneha Pandya[1], Amy Kuceyeski[1], Thanh Nguyen[1], Susan Gauthier[1], Ashish Raj[1]
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2202 Mean Fractional Anisotropy Measures Are Location-Dependent along the Corticospinal Tract
Jeng-Ren Duann[1], Chun-Ming Chen[2]
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2203 Estimation of Brain Tissue Micro-structure Model Parameters using Diffusion MRI Data
Hamza Farooq[1], Junqian Xu[2], Essa Yacoub[1], Tryphon Georgiou[1], Christophe Lenglet[1]
[1]University of Minnesota, Minneapolis, MN, [2]Icahn School of Medicine at Mount Sinai, New York, NY

2204 Automated Uncinate Fasciculus Reconstruction with FOD-based Analysis and Intrinsic Surface Mapping
Ashley Hu[1], Yonggang Shi[2]
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2205 The unfavorable fitting landscape of two-compartment models of diffusion in the human brain
Ileana Jelescu[1], Jelle Veraart[1], Els Fieremans[1], Dmitry Novikov[1]
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2206 A Tractography Language Fascicle Reconstruction Study of Inter- and Intra-Operator Reliability
Kesshi Jordan[1], Eduardo Caverzasi[1], Valentina Panara[2], Anisha Keshavan[1], Bagrat Amirbekian[1], Nico Papinutto[1], Mitchel Berger[1], Roland Henry[1]
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2207 A study of fractional anisotropy in white matter of patients with obstructive sleep apnea
Jin Uk Kim[1], Min-Hee Lee[1], Sang Hyeon Lee[1], Seung Ku Lee[2], Chol Shin[2], Bong Soo Han[3], Dong Youn Kim[1], Chang-Ho Yun[4]
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2208 Heritability of Advanced Diffusion Metrics Compared to DTI-FA in Old Order Amish population
Peter Kochunov[1], Mao Fu[2], Braxton Mitchell[2], Susan Wright[3], Elliot Hong[4], Katie Nugent[5]
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2209 Comparison of HARDI-based Tractography Methods: Systematic Differences in Tract-averaged Measures
Jian Lin[1], Ken Sakaie[1], Katherine Koenig[1], Mark Lowe[1]
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2210 Characterizing functionally distinct gray matter regions using diffusion MRI parameters
Kirsten Lynch[1], Arthur Toga[1], Kristi Clark[2]
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2211 LEMONADE: Linearly Estimated Moments provide Orientations of Neurites And Diffusivities Exactly
Dmitry Novikov[1], Ileana Jelescu[1], Jelle Veraart[1], Els Fieremans[1]
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2212 Language-related white matter tracts in neonates with congenital heart disease
Lauren O'Donnell[1,2], Henry Cheng[3,2], Borjan Gagoski[4], Janet Soul[3,2], Jane Newburger[3,2], P Ellen Grant[3,2], Yogesh Rathi[1,2]
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2213 Diffusion-weighted tractography of the optic radiation in support of temporal lobe epilepsy surgery
Pauly Ossenblok[1], Stephan Meesters[2], Louis Wagner[1], Remco Duits[2], Olaf Schijns[3], Paul Boon[1], Luc Florack[2], Anna Vilanova[4]
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2214 The Impact of Preprocessing Pipeline upon the Multivariate Analysis of Diffusion MRI Data
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2215 White matter cellular heterogeneity in schizophrenia: A q-space trajectory imaging study
Ofer Pasternak[1], Markus Nilsson[2], Filip Szczepankiewicz[2], Danielle van Westen[2], Cecilia Mattisson[2], Mats Bogren[2], Marek Kubicki[1], Carl-Fredrik Westin[1,2]
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2216 A tract-specific approach to assessing white matter microstructure in preterm newborn infants
Diliana Pecheva[1,2], Paul Yushkevich[3], Dafnis Batalle[1], Emer Hughes[1], Paul Aljabar[1], Julia Wurie[1], Joseph V. Hajnal[1], A. David Edwards[1], Daniel Alexander[2], Serena Counsell[1], Gary Zhang[2]
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2217 Bias in low SNR diffusion MRI Experiments: Problem and Solution
Joerg Polzehl[1], Karsten Tabelow[2]
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2218 Improved Diffusion Anisotropy Measures Increase Sensitivity to Groupwise Differences
Robert Reid[1], Christopher Schwarz[1], Jennifer Whitwell[1], Keith Josephs[1], Ronald Petersen[1], Clifford Jack[1]
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2219 Consistency-Based Thresholding of the Human Connectome
James Roberts[1], Michael Breakspear[1]
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2220 Novel Super-Resolution Tractography Density Marker for Tract Based Spatial Statistics
Stefan Sommer[1,2], Tobias Hauser[3,4], Reto Iannaccone[3], Sebastian Kozerke[1], Susanne Walitza[3], Silvia Brem[3], Erich Seifritz[2], Philipp Stämpfli[2]
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2221 Towards higher spatial resolution in DTI using smoothing
Karsten Tabelow[1], Joerg Polzehl[2], Henning Voss[3]
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2222 Ensemble tractography: reducing parameter dependency of tracking algorithms
Hiromasa Takemura[1,2], Brian Wandell[1], Franco Pestilli[3]
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2223 Validation of NODDI estimation of dispersion anisotropy in V1 of the human neocortex
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2224 Gibbs ringing removal in diffusion MRI using second order total variation minimization
Jelle Veraart[1], Florian Knoll[1], Jan Sijbers[2], Els Fieremans[1], Dmitry Novikov[1]
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2225 Language Ability and White Matter Brain Structure in Preschool Aged Children: A DTI study
Matthew Walton[1], Ashleigh Frayne[1], Deborah Dewey[1], Alyssa Mah[1], Catherine Lebel[1]
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2226 DTI Segmentation (DSEG) Detects Brain Change Related to Cognitive Decline in Small Vessel Disease
Owen Williams[1], Thomas Barrick[2], Hugh Markus[3], Philip Benjamin[1], Andrew Lawrence[3], Robin Morris[4], Eva Zeestraten[5]
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2227 Is functional signal directional? – a preliminary study on diffusivities in functional DTI
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2228 MR. Diffusion: A light one-stop solution to Diffusion MR imaging data analysis
Sangma Xie[1], Liangfu Chen[2], Tianzi Jiang[1], Nianming Zuo[2]
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2229 Spatial Distribution of Diffusion Changes Along Tracts in Right and Left Temporal Lobe Epilepsy
clarissa yasuda[1,2], Donald Gross[2], Zhang Chen[2], Fernando Cendes[1], Christian Beaulieu[2]
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2230 Predicting human brain resting-state functional connectivity from neurite morphology
Ruibin Zhang[1], Junjing Wang[2], Andrew Zalesky[3], Changhong Li[2], Qin Xu[2], Ling Weng[2], Timothea Toulopoulou[1,4,5], Ruiwang Huang[2]
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Modeling and Analysis Methods

EEG/MEG Modeling and Analysis

2231* Spatiotemporal Dynamic Models of Brain Activity Could Dramatically Improve MEG/EEG Source Imaging, (O-M4)
Camilo Lamus[1,2], Matti Hämäläinen[3,4,5], Emery Brown[1,2,3,6], Patrick Purdon[2,3]
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2232* Neural Basis of Cooperative Behavior by Simultaneous Multisubject EEG Recordings during Joint Action, (O-TH2)
Laura Astolfi[1,2], Jlenia Toppi[1,2], Pascal Vogel[3], Angela Ciaramidaro[4], Michael Siniatchkin[5]
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2233 Inferring group differences in the occurrence of fast transient brain states
Adam Baker[1], Diego Vidaurre[2], Matthew Brookes[3], Anna Nobre[1], Mark Woolrich[4]
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2234 Spectral fingerprints of intrinsic brain dynamics
Tjeerd Boonstra[1,2], Saeid Mehrkanoon[3], juliane Britz[4], Michael Breakspear[5]
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2235 Identifying systems of cross-frequency interacting brain sources from EEG/MEG data
Federico Chella[1], Vittorio Pizzella[1], Filippo Zappasodi[2], Guido Nolte[3], Laura Marzetti[4]
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2236 Multivariate leakage correction for MEG connectomes enhances consistency of network estimation
Giles Colclough[1], Matthew Brookes[2], Stephen Smith[3], Mark Woolrich[1]
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2237 Tailor made conductivity models for EEG forward modelling
Jan De Munck[1], Juhani Dabek[2], Konstantina Kalogianni[3], Edwin Rotgans[4], Andreas Daffertshofer[5], Edwin Van wegen[1], Gert Kwakkel[1], Frans van der Helm[6]
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2238 MNE-CPP: Cross-platform standalone MEG/EEG applications
Christoph Dinh[1,2], Lorenz Esch[1], Limin Sun[2], Daniel Baumgarten[1], Yoshio Okada[3,4], Matti Hämäläinen[2,5], Jens Haueisen[1,6]
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2239 High gamma modulations of intracerebral recordings during a picture-naming task
Anne-Sophie Dubarry[1], Anais Llorens[1], Agnès Trebuchon[2], Romain Carron[2], Catherine Liégeois-Chauvel[3], Christian Bénar[3], F-Xavier Alario[4]
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2240 Optimizing MEG and EEG source estimation using automated regularization of covariance
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2241 ERP functional brain network entropy and aging
Xiaoling Fang[1], Alan Evans[1]
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2242 Trends in MEG and EEG data processing using MNE
Alexandre Gramfort[1], Denis A. Engemann[2], Eric Larson[3], Martin Luessi[4], Christian Brodbeck[5], Mainak Jas[6], Teon Brooks[5], Daniel Strohmeier[7], Roman Goj[8], Marijn van Vliet[9], Alan Leggitt[10], Martin Billinger[11], Hari Bharadwaj[4], Lauri Parkkonen[6], Matti Hamalainen[6]
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2243 Space-time Smooth EEG Source Reconstruction
Sofie Therese Hansen[1], Lars Kai Hansen[1]
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2244 Extracting single-trial time courses from EEG/MEG data using multi-component signal-space projection
Olaf Hauk[1], Matthias Treder[2], Dennis Norris[3]
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2245 Beamformer making visible the invisible in EEG and TMS-EEG data
Julio C Hernandez-Pavon[1], Jukka Sarvas[1], Risto Ilmoniemi[1]
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2246 MEG Microstate Topographic Stability
Matthew Kelsey[1], Fred Prior[1], Linda Larson-Prior[1,2]
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2247 Classification aided analysis of oscillatory connectivity during controlled retrieval
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2248 EEG Interpolation by Source Space Projection
Melanie Knorr[1], Thomas Knösche[2]
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2249 EEG Oscillations of Soldier's Visual Attention on the Shooting Tasks in the Tank Simulator
Li-Wei Ko[1], In-Chung Chang[2], PENG-WEN LAI[3], Chin-Teng Lin[3], YI-CHENG SHIH[3]
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2250 Manifold Representation of Brain Activity Evoked by Faces with Different Orientations using MEG Data
Po-Chih Kuo[1], Li-Fen Chen[2], Yong-Sheng Chen[1]
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2251 Changes in Theta EEG functional connectivity During Buddhist Meditation
Chii-Shyang Kuo[1], Vincent Chien[1], Arthur Tsai[1], Michelle Liou[2], Philip E. Cheng[3]
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2252 Engagement with Tactile Contents of a Movie is Reflected in the State of the Sensorimotor Cortex
Kaisu Lankinen[1], Eero Smeds[1], Pia Tikka[2], Elina Pihko[1], Riitta Hari[1], Miika Koskinen[1]
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2253 Differences in auditory attention-related brain networks between controls and schizophrenia patients
Jorne Laton[1], Jeroen Van Schependom[1], Jeroen Gielen[1], Jeroen Decoster[2], Tim Moons[2], Jacques De Keyser[1], Marc De Hert[2], Guy Nagels[1,2]
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2254 Improving EEG-based Emotion Classification Using Transfer Learning
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2255 Modularity-based clustering of similar intracranial EEG recordings
David Meunier[1,2], Anne-Lise Saive[1], Garcia Samuel[1], Thévenet Marc[1], Karim Jerbi[3,2], Royet Jean-Pierre[1], Plailly Jane[1], Ravel Nadine[1]
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2256 Independent component analysis of saccade-related EEG data
Makoto Miyakoshi[1], Ozgur Balkan[2], Clement Lee[2], Felipe Medeiros[2], Scott Makeig[3]
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2257 Optimizing beamformer weights calculation in the presence of source localization and modeling errors
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2258 Correlation between EEG power and end tidal-CO2 in voluntary breath-hold and free breathing tasks
Maria Sole Morelli[1], Nicola Vanello[2], Alberto Giannoni[3], Francesca Frijia[3], Valentina Hartwig[4], Domenico Montanaro[3], Sara De Cori[3], Michelangelo Maestri[2], Enrica Bonanni[2], Luca Carnicelli[2], Vincenzo Positano[3], Claudio Passino[3], Luigi Landini[2], Michele Emdin[3]
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2259 Comparing effective connectivity from cortical recordings and reconstructed sources
Margarita Papadopoulou[1], Karl Friston[2], Daniele Marinazzo[3]
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2260 Investigation of anatomical confounds in EEG-BOLD relationships
David Provencher[1], Yves Bérubé-Lauzière[1], Kevin Whittingstall[1]
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2261 Estimation of event-related directional information flow from MEG during a working memory task
Stephen Robinson[1], Arnold Mandell[2], Richard Coppola[1]
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2262 Mapping EEG Signatures Linked to rTMS-induced Effects in a Balance Disorder
Guofa Shou[1], Han Yuan[2,3], Diamond Urbano[3], Yoon-Hee Cha[3], Lei Ding[1,3]
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2263 EEG source imaging of interictal epileptic spikes through Bayesian multiple dipole modeling
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2264 Brain functional Connectivity at Rest as Similarity of neuronal Activities
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2265 Rhythmic Components in MEG Reveal Multifaceted Task Modulation of Phase-Coupled Oscillatory Networks
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2266 Solving the M/EEG inverse problem using a family of Newton-Raphson algorithms
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2267 Identifying spectrally resolved transient connectivity from MEG
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2268 Validating a Bayesian multi-dipole modeling tool with experimental MEG data
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2269 Topological Detection of Seizure Origin in Single-Trial Electroencephalographic Signals
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2271 Simultaneous Recordings of Intracerebral EEG and MEG Validates ICA and Beamforming in Epilepsy
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2272 Temporal Dynamics During Preparatory Phase of Attentional Control in Visual Search
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2273 EEG Dynamic Connectivity Analysis using Persistent Vineyard
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2274 A finite-element solution for EEG forward modeling with realistic individual head models
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2275 Efficacy Evaluations of Applying Ensemble Empirical Mode Decomposition on Task fMRI Analysis
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2276 A computational model of the cortical electric field induced by a regional personalized electrode
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2277 Degree-based statistics (DBS): a cluster-wise correction for multiple testing of connectivity matrix
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2279 Different Partial Volume Correction Methods Lead to Different Conclusions: an FDG PET Study of Aging
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2280 Adaptive Sampling for Improved PET Quantification
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2281 * Lag threads organize the brain's intrinsic activity (O-T5)
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2282 Low Flip-angle Reduces Respiration Induced Effects in rs-fMRI
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2283 Alpha oscillations modulate 1/f slope of slow spontaneous brain activity
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2284 Oxytocin reduces functional connectivity of the ventral attentional network to default mode regions
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2285 Few spontaneous BOLD events are sufficient for single subject mapping of functional networks at 7T
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2286 Patterns of altered functional connectivity in Alzheimer disease and vascular dementia
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2287 Surface-based parcellation of posterior cingulate cortex using resting-state FMRI
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2288 Tractography-driven resting-state fMRI for investigating inter-subject variability
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2289 Neural activity associated with spontaneous eye opening and closure in the awake macaque
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2290 Exploring Resting-State Functional Connectivity through Dynamic Factor Analysis
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2291 Dissociated anti-correlations between the task-positive network and the dorsal/ventral DMN at rest
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2293 Task evoked fMRI model for testing rs-fcMRI noise correction methods
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2294 Comparison of Simultaneous Gradient and Spin Echo EPI for Functional Connectivity Analysis
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2295 The neural correlates of consciousness recovery: a multimodal neuroimaging study
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2296 Cortical GABAA receptors correlate with variability in the BOLD signal
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2297 Changes in resting-state functional connectivity in children with fetal alcohol spectrum disorders
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2298 Sex Differences of Temporal Variability of Dynamic Resting State Functional Connectivity
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2300 Caudate resting state activity predicts impulsivity performance in subsequent Balloon Analogue Risk
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2301 Cognitive function in multiple sclerosis correlates with resting state fMRI networks
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2303 Single-subject mappings of the cortico-striatal connectivity gradient using resting-state fMRI
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2304 Toward assessing language lateralization with resting-state fMRI
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2305 Resting-state Dynamics Affect Personality by Constraining Task-Related Responses
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2307 Architecture of resting brain networks predicts task-evoked placebo response and prediction error
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2308 BOLD fMRI Correlation Reflects Frequency-Specific Neuronal Correlation
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2311 Functional hierarchy within the network for ocular-motor control and visual motion processing
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2316 Relationship Between BOLD fluctuation changes and hemispheric synchrony levels in resting state FMRI
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2317 A Novel Method for Investigation of Frequency Dependency of Resting State Functional Connectivity
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2319 Immediate Effects of Serotonergic and Cholinergic Stimulation on Functional Brain Connectivity
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2320 Inattention and disrupted functional connectivity of the cerebellar default node in ADHD
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2321 Neural correlates of resting theta oscillations in primary dysmenorrhea: An MEG study
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2322 Abnormal resting-state functional connectivity in salience network in bothersome tinnitus
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2323 Reconstructing resting state networks from EEG: investigating the effect of number of channels
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2324 Validation of Global Mean Normalization for Resting State Fluctuation Amplitude Measurements
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2325 Richness in the functional connectome depends on the neuronal integrity of its structural backbone
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2326 Improved Estimation and Rescaling of Amplitude of Low Frequency Fluctuations in Resting-State fMRI
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2327 Orchestrating the Brain at Rest by Cross-Frequency Coupling between Gamma and Low Frequency Rhythms
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2328 Robust Leverage-Weighted Principal and Independent Components Analysis
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2329 The Good, the Bad and the Ugly truth about global signal regression
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2330 A putative Multiple-Demand system in the macaque brain
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2331 The Correlation between Behavioral Performance and Resting State Network Activation
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2332 Intrinsic resting state connectivity in apraxia of speech and hypokinetic dysarthria
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2333 Static and Transient Functional Connections of Insula Subregions
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2334 Deriving Frequency Dependent Spatial Network Patterns Using Resting State MEG
Allison Nugent[1], *Stephen Robinson*[1], *Richard Coppola*[1], *Carlos Zarate, Jr.*[1]
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2335 Improvements in event-related ICA for detection of abnormal brain networks
Amir Omidvarnia[1], *Chris Tailby*[2], *Kaushik Bhaganagarapu*[1], *Graeme Jackson*[1], *David Abbott*[1]
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2336 Functional Segmentation of Brain fMRI Based on Inter-Subject Correlation
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2337 Optimal wavelet basis selection for resting state fMRI signal analysis
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2338 Despiking rs-fMRI time series improves data quality and motion correction
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2339 EEG independent topographies match to electrode-space projections of fMRI default mode networks
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2340 Neural correlates of LSD-induced visual hallucinations
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2341 Filter dependence of dynamic functional connectivity
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2342 High-Frequency Heart Rate Variability Correlates with Default Mode Network Connectivity
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2343 Investigations into the Dynamics of Functional Connectivity in Resting-State fMRI
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2344 Functional connectivity of the surgically disconnected temporal pole
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2345 Multisite study of robust resting-state fMRI differences in normal aging & mild cognitive impairment
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2346 Reduced executive function and default mode network connectivity in HIV infected children at age 7
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2347 Can apparent resting state connectivity arise from systemic fluctuations?
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2348 Spatiotemporal dynamics of the resting-state networks in C9orf72+bvFTD -a sliding window ICA study
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2349 Resting State Networks in Subjects under Low and High Sleep Pressure
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2350 Resting-state fMRI global signal amplitude and EEG vigilance in the eyes open and eyes closed states
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2351 Extraction of Default mode network using ICA: Comparison between individual and group analysis
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2352 Facing the artificial effects of surface-based computation in Resting-state fMRI study
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2353 Lifespan developmental trajectories of temporal dynamics in intrinsic regional activity
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2354 Neural Correlates of Symptomatic Improvement with Stimulant Treatment in Adults with ADHD
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2355 Mapping the mouse brain with rs-fMRI: An optimized pipeline for functional network identification
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2356 Discover the brain mystery by lifespan trajectories of local connectivity
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2357 Dose Related Effects of Oxytocin on Resting-state Brain Activity and Functional Connectivity
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Motor Behavior

Brain Machine Interface

2358* Predicting and Interrupting Movement Intentions with a Closed Loop BCI, (O-M1)
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2359 Real-time decoding of covert attention in high order visual areas
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2360 Real-Time MEG-based Neurofeedback for Training Hand-Related Motor Activity
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2361 Discrimination of ERD during observation of grasping and pinching behaviors
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2362 Neural Correlates of Embodied Experiences through Avatar Self-Identification
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2363 Roles of the posterior parietal cortex in continuous decoding of arm movements from MEG cortical sou
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2364 Turning fMRI experiments on its head using rt-fMRI - opening new avenues in cognitive neuroscience
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2365 Vertical target locations modulate the latency of steady-state visual evoked potentials
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2366 Tracking Resting State Networks in Real Time to Control Experimental Events and Task Performance
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2367 Evoked EEG Signatures Index Cognitive Workload in Human-Machine Interaction
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2368 A Subject-Independent Pattern-based BCI for Neurofeedback
Andreas Schmidt[1], Ranganatha Sitaram[2,1], Mohit Rana[2,1], Emanuele Pasqualotto[3], Korhan Buyukturkoglu[1], Cuntai Guan[4], Kai Keng Ang[4], Francisco Aboitiz[5], Francisco Zamorano[6,7], Sergio Ruiz[5,1]
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2369 Comparison of different learning approaches for brain self-regulation using real-time fMRI
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2370 Playing "20 Questions" With a Direct Non-Invasive Brain-to-Brain Interface
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2371 Asynchronous brain--computer interface using canonical correlation analysis
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2372 Illusory body experience using brain-computer interface enhances event-related desynchronization
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2373 EEG Pattern Lateralization During Motor Imagery of Upper Limbs in Brain-Computer Interface Training
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2374 A Dry-EEG Brain-Machine Interface for Autonomous Robot-Assisted Drinking
Martin Völker[1,2,3,4], Lukas Fiederer[1,2,3,4], Sebastian Schröer[5,2], Ingo Killmann[5,2], Barbara Frank[5,2], Wolfram Burgard[5,2], Tonio Ball[1,2,3]
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2375 Lateralization patterns of covert but not overt movements change with age: An EEG feedback study
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Motor Behavior

Mirror System

2376 Characterising Structure-Function Differences between Hand and Finger Imitation Skills
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2377 Mu rhythm desynchronisation during the observation of a posture-movement coordination: a MEG study
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2378 Motor cortical activity is causally linked to object and effector recognition
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2379 EEG activity during observation of a humanoid robot
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2380 Investigating the role of movement familiarity on Action Observation Network engagement: A DCM study
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2381 Recruitment of the Action Observation Network in Stroke Patients with Mild to Moderate Impairments
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2382 Shifting of self and other perspective takings: an fMRI study
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2383 Reach-and-grasp Observation and Execution: a comparative fMRI Study in Human and Non-human Primates
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2384 Motor cognition: an fMRI study
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2385 Mirror neurons system modulation by the perception of angry actions changes during late adolescence
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2386 Action Observation and Execution Activate Three Distinct Shared Voxel Regions within the Cerebellum
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2387 Exploring the temporal horizon of the mirror neuron system
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2388 Visual action population codes in the human brain
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Motor Behavior

Motor Behavior Other

2389 Effective Connectivity Analysis of the Human Sensorimotor Cortex using Granger Causality and fMRI
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2390 Importance of right inferior fronto-parietal network connected by SLF III in corporeal awareness
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2391 White Matter Integrity, Balance and Bilateral Motor Control in Adolescents with FASD
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2392 Motor Development And Subcortical Volumes with Prenatal Exposure to Methamphetamine and Tobacco
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2393 Noninvasive EEG mapping of hand- and foot-movement-related high gamma activity
Martin Glasstetter[1,2], Lukas Fiederer[1,2], Tonio Ball[1,2,3]
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2394 Individual differences in cortical GABA concentrations and motor excitability
Ian Greenhouse[1], Sean Noah[1], Richard Maddock[2], Richard Ivry[3]
[1]University of California, Berkeley, Berkeley, CA, [2]University of California, Davis, Davis, CA, [3]UC Berkeley, Berkeley, CA

2395 EXERCISE EFFECTS ON MOBILITY AND THE COURSE OF GRAY MATTER CHANGES OVER 70 DAYS OF BED REST
Vincent Koppelmans[1], Lori Ploutz-Snyder[2], Yiri De Dios[3], Vahagn Stepanyan[3], Darcy Szecsy[3], Nichole Gadd[3], Scott Wood[4], Patricia Reuter-Lorenz[1], Igor Kofman[5], Jacob Bloomberg[6], Ajitkumar Mulavara[6], Rachael Seidler[1]
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2396 Observing assembly of a toy model elicits inter-subject correlation in somatosensory and motor areas
Kathrin Kostorz[1,2], Aleksandra Kupferberg[1,2], María Gutiérrez-Herrera[1,2], Virginia Flanagin[1,2], Stefan Glasauer[3,4,2,1]
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2397 Efficient foot motor control by Neymar's brain
Eiichi Naito[1], Satoshi Hirose[1]
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2398 Neuropsychophysiological mapping:Concurrent psychophysiological recording and fMRI at 7T
Jennifer Robinson[1], Matthew Miller[1], Keith Lohse[1], Ronald Beyers[2], Kirk Grand[1], Lauren Kirby[1], Ashley Hill[1], Jerry Murphy[1], Alan Macy[3], Ken Graap[3]
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Motor Behavior

Motor Planning and Execution

2399* The SMA and cingulate cortex sustain premovement activity in readiness for action: An EEG-fMRI study, (O-M1)
Ross Cunnington[1], Vinh Nguyen[1,2], Michael Breakspear[3]
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2400 Simple and Complex Manual Coordination: a PET Study
Anne-Marie Belanger[1], Marie-Ève Marchand[2], Jen-Kai Chen[1], Olivier Morin-Moncet[2], Joelle Crane[1], Denise Klein[1], Miriam Beauchamp[2], Gabriel Leonard[1]
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2401 Spatial patterns of movement-related networks investigated with intracranial EEG
Sina Bert[1,2], Markus Kern[1,2,3], Johanna Ruescher[1,2,3], Gunilla Johann[1,2], Ad Aertsen[1,3,4], Andreas Schulze-Bonhage[1,3,4], Tonio Ball[1,2,3,4]
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2402 Learning processes underlying the set-up of new anticipatory postural adjustments: A MEG study
Franck Di Rienzo[1], Fanny BARLAAM[2,3,4], Sébastien DALIGAULT[5], Alice Catherine ROY[2], Claude DELPUECH[3,4,5], Karim Jerbi[3,4,6], Christina Schmitz[3,4]
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2403 Structural asymmetry of the Central Sulcus Network predicts dexterity and handedness
Henrietta Howells[1], Michel Thiebaut de Schotten[2], Flavio Dell'Acqua[3], Declan Murphy[4], Marco Catani[5]
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2404 Reconfiguration and Stability of Human Neuronal Networks During a Reach and Grasping Movement
Gunilla Johann[1,2], Sina Bert[1,2], Andreas Schulze-Bonhage[1,3,4], Tonio Ball[1,2,3,4]
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2405 Directional tuning patterns in human EEG during wrist movement
Hiroyuki Kambara[1], Hirokazu Tanaka[2], Makoto Miyakoshi[3], Scott Makeig[4]
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2406 A voxel-based morphometry study of rhythm perception and production
Hui Li[1], Shinya Fujii[1], Psyche Loui[2], Gottfried Schlaug[1]
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2407 Visuomotor Resting-state Functional Connectivity Predicts Motor Learning by Observing
Heather McGregor[1], Paul Gribble[1]
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2408 Interhemispheric Brain Processing during Action Selection
Caio Moreira[1], Melanie Wilke[2], Igor Kagan[1]
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2409 The neural correlates of behavioral changes in voluntary actions
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2410 Linking Brain Connections to Motor Behavior: An EEG Study
Antony Passaro[1], Stephen Gordon[1], Jonathan McDaniel[1], Jean Vettel[2]
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2411 Novel Gesture Learning Demonstrates Specific Strengthening of Left-Sided Praxis Network
Ajay Pillai[1], Balaji Lakshmanan[1], Katarina Ament[1], Mark Hallett[2], Nathan Crone[3], Stewart Mostofsky[4], Joshua Ewen[1]
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2412 Reduced Motor Imagery Capability in Motor Impaired Adults Performing Mental Rotation: an fMRI Study
Saman Rassaei Kashuk[1,2], Graham Thorpe[2], Jacqueline Williams[2], Peter Wilson[3], Gary Egan[1]
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2413 Frontal pole activity as an index of cognitive load in multi-modal decision making
Tatsuya Suzuki[1], Yasunori Nomoto[1], Yumie Ono[1], Jack Noah[2], Xian Zhang[3], Shimada Sotaro[1], Atsumichi Tachibana[4], Shaw Bronner[2], Joy Hirsch[2]
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2414 An ALE meta-analysis of simple motor movements in young and old adults
Ted Turesky[1], Peter Turkeltaub[2], Guinevere Eden[1]
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2415 Granger causality analysis of motor execution and motor imagery in older people
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2416 Neural representation of swallowing retained with age as shown by classical and Bayesian inference
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Motor Behavior

Visuo-Motor Functions

2417 Brain activation during sudden and gradual visual-motor adaptation
Patrick Bédard[1], Jerome Sanes[1,2,3]
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2418 The effective connectivity of the activated brain regions during driving
Mi Hyun Choi[1], Jung-Chul Lee[1], Sung-Jun Park[1], Ji-Hye Baek[1], Ul-Ho Jeong[1], Seon-Young Gim[1], Hyung-Sik Kim[1], Soon-Cheol Chung[1]
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2419 Integrating time-to-contact with motor action modulates a bilateral fronto-parietal network
Raymundo de Azevedo Neto[1], Alana Batista[1], Edson Amaro Junior[1]
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2420 Network connectivity dynamics predict continuous behavioral measures in a complex visuo-motor task
Javier Garcia[1,2], Jean Vettel[1], Scott Kerick[1], Tony Johnson[3], nima bigdely-shamlo[2], Tim Mullen[2]
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2421 Dissociation between action and associative knowledge in different object categories
Johnny King Lau[1], Laura Chatland[1], Aimee Goldstone[1], Glyn Humphreys[2], Pia Rotshtein[1]
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2422 Effects of saccade practice and trial type probability on fMRI activation of antisaccade circuitry
Jordan Pierce[1], Jennifer McDowell[1]
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2423 Mapping the polar-angle representation of eye movements in human superior colliculus
David Ress[1], Sucharit Katyal[2]
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2424 Thalamo-cortical pathways involved in precision grasping
Naianna Robertsson[1], Henrietta Howells[1], Flavio Dell'Acqua[2], Luis Lacerda[2], Marco Catani[3]
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Physiology, Metabolism and Neurotransmission

Cerebral Metabolism and Hemodynamics

2425* Application of a new physiological forward fMRI signal model on experimental multimodal imaging, (O-T5)
Martin Havlicek[1], Alard Roebroeck[1], Kamil Uludağ[2]
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2426 A 4D Frequency Domain Approach to Cerebral Lateralization at Rest
Oktay Agcaoglu[1,2], Robyn Miller[1], Andrew Mayer[1,3], Kenneth Hugdahl[4], Vince Calhoun[1,2]
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2427 Validation of a Semi-Automated Pipeline for Quantifying Cerebral Blood Flow Territories using MRI
Daniel Arteaga[1], Manus Donahue[2], Carlos Faraco[2], Larry Davis[2], Brent Roach[2], Lori Jordan[2], Allison Scott[2], Megan Strother[2]
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2428 Using IVIM to measure cerebral perfusion: a direct comparison with arterial spin labeling (ASL)
Hannah Hare[1], Daniel Bulte[1]
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2429 New model for the BOLD hemodynamic response evoked by brief neural activity in the human brain
Jung Hwan Kim[1], David Ress[1]
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2430 Resting State Fluctuations reflect Impaired Cerebrovascular Reactivity in Multiple Sclerosis
Mark Lowe[1], Xiaopeng Zhou[1], Katherine Koenig[1], Wanyong Shin[1], Robert Bermel[1], Lael Stone[1], Micheal Phillips[1]
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2431 The Impact of Phase Errors on Mapping the Flow of the Cerebral Vasculature with Phase Contrast MRI
Matthew Ethan MacDonald[1], Nils Daniel Forkert[1], Bruce Pike[1], Richard Frayne[1]
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2432 Influence of Alzheimer's Risk on Regional Cerebral Blood Flow Throughout Lifespan
Emily Mason[1], Swati Rane[1], Erin Hussey[1], Brandon Ally[1], Manus Donahue[1]
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2433 Task performance reduces aerobic glycolysis in the default-mode network
Benjamin Shannon[1], Marcus Raichle[1], Andrei Vlassenko[1]
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2434 Multi-delay multi-parametric arterial spin-labeled perfusion MRI in early-stage Parkinson's disease
Xueling Suo[1], Du Lei[1], Lei Li[1], Fuqin Chen[1], Nannan Li[2], Lan Cheng[2], Panli Zuo[3], Rong Peng[2], Danny JJ Wang[4], Qiyong Gong[1]
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2435 To Investigate the Regional BOLD Alterations of Brain in Hypercapnia
Yu-Sheng Tseng[1], Yi-Jui Liu[2], Teng-Chieh Cheng[2], Teng-Yi Huang[1], Wen-Chau Wu[3], Chao-Chun Lin[4], Chia-Wei Lin[4], Wu-Chung Shen[4]
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2436 Magnetic Resonance Advection Imaging (MRAI) depicts vascular anatomy
Henning Voss[1], Jonathan Dyke[1], Douglas Ballon[1], Nicholas Schiff[1], Karsten Tabelow[2]
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2437 Weekly Rhythms of Resting State fMRI Signals: a Preliminary Report of One-month Measurements
Hong Yi Wu[1], Yun-Ting Ciou[2], Pei-Jung Tsai[3], Changwei Wu[1], Yi-Ping Chao[2]
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Physiology, Metabolism and Neurotransmission

Neurophysiology of Imaging Signals

2438* The relation between oscillatory EEG activity and the laminar specific BOLD signal, (O-T5)
Rene Scheeringa[1], Peter Koopmans[1], Tim van Mourik[1], Ole Jensen[1], David Norris[1]
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2439* Neuronal and Physiological Correlation of Hemodynamic Resting-State Fluctuations and Connectivity, (O-T5)
Alberto Vazquez[1], Matthew Murphy[1], Seong-Gi Kim[2]
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2440 Effects of hyperoxia on hypercapnic blood oxygenation and R2*
Carlos Faraco[1], Megan Strother[1], Jeroen Siero[2], Daniel Arteaga[1], Allison Scott[1], Manus Donahue[1]
[1]Vanderbilt University, Nashville, United States, [2]UMC Utrecht, Utrecht, The Netherlands

2441 Coupling between fMRI and electrophysiology during visual motion processing in human MT+
Anna Gaglianese[1,2], Mariska Vansteensel[1], Ben Harvey[3], Serge O. Dumoulin[3], Nick Ramsey[1], Natalia Petridou[2]
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2442 Neural Correlates of Functional Connectivity
Jingfeng Li[1], William Bentley[2], Lawrence Snyder[3]
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2443 Functional Connectivity in Unit Activity
Jingfeng Li[1], Lawrence Snyder[2]
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2444 Inconsistent Transitions between Connectivity and Variability during NREM Sleep
Changwei Wu[1,2], Pei-Jung Tsai[3], Yu-Ting Ko[4], Pai-Chuan Hung[5], Ching-Po Lin[6]
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Pharmacology and Neurotransmission

2445 Resting state changes after administration of low-dose ketamine

Ryan Cardinale[1], Edward Domino[1], Alexander Hayek[1], Brian Mickey[1], Patricia Deldin[1], Scott Peltier[1]
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2446 Dopaminergic neuromodulation of distributed brain networks

David Cole[1,2], Andreea Oliviana Diaconescu[1,2], Sandra Iglesias[1,2], Klaas Enno Stephan[1,2,3,4]
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2447 Effects of Cholinergic Modulation of Attention on Neural Stimulus Representation in Visual Cortex

Giacomo Handjaras[1], Emiliano Ricciardi[2], Pietro Pietrini[3], Maura Furey[4]
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2448 Pre-stimulus Brain Activity on Subsequent Behavioural Performance and the Effect of Three Drugs

Keitaro Machida[1], Jessica Barnes[2], Redmond O'Connell[3], Sanjay Nandam[4], Angela Dean[4], Mark Bellgrove[4], Katherine Johnson[1]
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Physiology, Metabolism and Neurotransmission

Physiology, Metabolism and Neurotransmission Other

2449 Changes in brain activation with carbohydrate consumption during physical exercise

Gabriela Castanho[1], Eduardo Fontes[1], Brunno Campos[2], Paula Fernandes[1]
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2450 Brain Morphometry is associated with Gut-derived Metabolites involved in Tryptophan Metabolism

Jennifer Labus[1], Numan Oezguen[2], Mher Alaverdyan[1], Tor Savidge[2], James Versalovic[2], Kirsten Tillisch[1], Emeran Mayer[1]
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2451 Exercise-Related Changes in Between-Network Connectivity in Overweight/Obese Adults

Kristina McFadden[1], Korey Wylie[1], Marc-Andre Cornier[1], Edward Melanson[1], Jason Tregellas[1]
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* Indicates poster will also be presented during an Oral Session. The oral session number is indicated in parantheses after the poster title.

Information listed, including author affiliations, appear as submitted.

Brain Stimulation Methods

Deep Brain Stimulation

3000* Surgical Target Selection for Subcallosal Cingulate Region DBS Based on Structural Connectivity (O-TH4)
KI SUENG CHOI[1], Patricio Riva-Posse[1], Cameron McIntyre[2], Robert Gross[1], Steven Garlow[1], Justin Rajendra[1], Helen Mayberg[1]
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3001 Deep brain stimulation artefact rejection from MEG data using mutual information
Omid Abbasi[1,2], Jan Hirschmann[1], Georg Schmitz[2], Alfons Schnitzler[1], Markus Butz[1]
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3002 Subthalamic nucleus target optimization for movement disorders using functional connectivity mapping
Erik Beall[1], Xiaopeng Zhou[1], Andre Machado[1], Mark Lowe[2]
[1]Cleveland Clinic, Cleveland, OH, [2]Cleveland Clinic, Cleveland, United States

3003 MVPA for Deep Brain Stimulation: Characterization of fMRI activation pattern in STN and GPi DBS
Shinho Cho[1], Paola Testini[1], Megan Settell[1], Erika Ross[1], William Gibson[1], Kevin Bennet[2], Kendall Lee[1], Hoon-Ki Min[1]
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3004 VC/VS DBS Results in Mood Elevation by Modulation of Thalamocortical Connectivity: a DCM-fMRI study
William Gibson[1], Hoon-Ki Min[1], Osama Abulseoud[2], Su Youne Chang[1], Joel Felmlee[1], Krzysztof Gorny[1], Kendall Lee[1]
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3005 Assessment of an iconic-geometric nonlinear registration method for deep brain stimulation planning
Ana Beatriz Graciano Fouquier[1], Eric Bardinet[2], Marie-Laure Welter[3], Carine KARACHI[3], Jerome Yelnik[4], Sara Fernandez-Vidal[2], Stanley Durrleman[1]
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3006 Deep brain stimulation in Parkinson's disease: The potential benefit of preoperative DTI
Silvina Horovitz[1], Peter Lauro[2], Kareem Zaghloul[3], Ziad Saad[4], Codrin Lungu[2], Nora Vanegas-Arroyave[2]
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3007 A closer look at deep brain stimulation for the disabling tics in tourette's syndrome
Yasukazu Kajita[1], Yoshiki Kaneoke[2], Hiromasa Kataoka[3], Daisuke Nakatsubo[3], Takahiro Nakura[4], Takashi Okada[5], Toshihiko Wakabayashi[3]
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3008 Intraoperative fMRI for DBS in Parkinson's disease patients
Emily Knight[1], Paola Testini[2], Hoon-Ki Min[2], William Gibson[2], Krzysztof Gorny[2], christopher favazza[2], Joel Felmlee[2], Inyong Kim[2], Kirk Welker[2], Daniel Clayton[3], Bryan Klassen[2], Su Youne Chang[2], Kendall Lee[2]
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3009 Cortico-Basal Ganglia Coupling in Parkinson's Disease is Spatially Specific and Movement Dependent
Mahsa Malekmohammadi[1], Nicholas Au Yong[1], Nader Pouratian[1]
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3010 Validation of four different source analyses algorithms
Muthuraman Muthuraman[1], Praghajieeth Raajhen[2], Kidist Mideksa[3], Günther Deuschl[4]
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3011 The effect of Deep Brain Stimulation on cortico-subthalamic coupling in Parkinson's disease
Ashwini Oswal[1], Ashwani Jha[1], Spencer Neal[1], Alphonso Reid[1], David Bradbury[1], Patricia Limousin[1], Thomas Foltynie[1], Ludvic Zrinzo[1], Marwan Hariz[1], Peter Brown[2], Vladimir Litvak[1]
[1]UCL Institute of Neurology, London, United Kingdom, [2]University of Oxford, Oxford, United Kingdom

3012 Glu & DA-dependent functional network effect by fornix DBS in hippocampal and mesolimbic structures
Erika Ross[1], Hoon-Ki Min[1], Joo Kim[1], Seongrok Han[1], Megan Settell[1], Charles Blaha[2], Kendall Lee[1]
[1]Mayo Clinic, Rochester, MN, [2]Mayo Clinic, Rochester, United States

3013 Ventral tegmental area (VTA) DBS evoked electrochemical and fMRI responses
Megan Settell[1], Paola Testini[1], Joo Pyung Kim[2], Seongrok Han[1], Kevin Bennet[2], Kendall Lee[1], Hoon-Ki Min[1]
[1]Mayo Clinic, Rochester, MN, [2]Mayo Clinic, Rochester, United States

3014 Apomorphine Experiment in Parkinson's Disease: Wavelet Coherence and Phase-Locking Analysis
Michael von Papen[1], Joachim Saur[1], Esther Florin[2], Haidar Dafsari[2], Lars Timmermann[2]
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Brain Stimulation Methods

Direct Electrical/Optogenetic Stimulation

3015 Comparison of Presurgical Language Mapping using Electrographic High Gamma, fMRI, and TMS
Abbas Babajani-Feremi[1], shalini narayana[1], Roozbeh Rezaie[1], Asim Choudhri[1], Stephen Fulton[1], Frederick Boop[1], James Wheless[1], Andrew Papanicolaou[1]
[1]University of Tennessee Health Science Center, Memphis, TN, United States

3016 Optimizing repetitive brain stimulation using direct electrical recordings in human neocortex
Corey Keller[1], Maria Fini[2], Chris Honey[3], Fred Lado[4], Ashesh Mehta[5]
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3017 State-dependent Processing in the Brain
Andre Marreiros[1], Oxana Eschenko[1], Nikos Logothetis[1]
[1]MPI Cybernetics, Tübingen, Germany

3018 Developing optimal stimuli for seizure abatement in a heterogeneous epileptic neural population mode
Nishant Sinha[1], Justin Dauwels[1], Justin Ruths[2]
[1]Nanyang Technological University, Singapore, Singapore, [2]SUTD, Singapore, Singapore

3019 Electrode arrays and optical imaging: a new approach to studying cortical circuitry and behavior
Luke Torre-Healy[1], Mykyta Chernov[1], gang chen[1], Anna Roe[1]
[1]Vanderbilt University, Nashville, TN

Brain Stimulation Methods

Invasive Stimulation Methods Other

3020 Imaging amygdala connections to the monkey face-processing system using electrical stimulation
Adam Messinger[1], Jakob Seidlitz[1], Roger Tootell[1], Leslie Ungerleider[2]
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Brain Stimulation Methods

Non-invasive Electrical/tDCS/tACS/tRNS

3021* **Effect of Rhythmic Electrical Stimulation on the BOLD Signal and Functional Connectivity, (O-TH4)**
Yuranny Cabral Calderin[1,2], Carsten Schmidt-Samoa[1], Kathleen Williams[1], Melanie Wilke[1,2]
[1]Dept. of Cognitive Neurology, University Medicine Göttingen, Göttingen, Germany, [2]German Primate Center, Leibniz Institute for Primate Research, Göttingen, Germany

3022 **Enhanced fluid intelligence performance through combined cognitive training and brain stimulation**
Anna-Katharine Brem[1,2], Jessamy Almquist[3], Roi Cohen Kadosh[1], Michael Dillard[3], Deniz Erdogmus[4], Garrett Kimball[5], Karen Mansfield[1], James McKanna[4], Eben Myers[5], Umut Orhan[3], Alvaro Pascual-Leone[2], Misha Pavel[4], Franziska Plessow[2], Emiliano Santarnecchi[2], Nick Yeung[1], Santosh Mathan[3]
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3023 **Personalizing the electrode to neuromodulate an extended cortical region**
Andrea Cancelli[1], Carlo Cottone[1], Filippo Carducci[2], franca tecchio[1]
[1]LET'S-ISTC-CNR, Roma, Italy, [2]Department of Physiology and Pharmacology - Neuroimaging Laboratory - University of Rome, Rome, Italy

3024 **Cortical inhibition and excitation by bilateral transcranial alternating current stimulation**
Andrea Cancelli[1], Carlo Cottone[1], Giancarlo Zito[1], Marina Di Giorgio[2], Patrizio Pasqualetti[3], franca tecchio[1]
[1]LET'S-ISTC-CNR, Roma, Italy, [2]Department of Clinical Neuroscience, Fatebenefratelli Hospital, Rome, Italy, [3]Medical Statistics and Information Technology, Fatebenefratelli Foundation for Health Research and E, Roma, Italy

3026 **Simulation of the current density distribution for transcranial electric stimulation around the eye**
Alexander Hunold[1], Stefanie Freitag[1], Klaus Schellhorn[2], Jens Haueisen[1]
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3027 **Transcranial alternating current stimulation affects human BOLD responses during motion adaptation**
Kohitij Kar[1], Bart Krekelberg[1], Jessica Wright[1]
[1]Rutgers University, Newark, NJ

3028 **Frontal brain stimulation influences both functional MRI connectivity and cognitive inhibition**
Daniel Keeser[1,2], Kirsch Valerie[3], Birgit Ertl-Wagner[2], Alkomiet Hasan[1], Paul Reidler[2], Jana Wörsching[1], Boris Rauchmann[2], Elisa Funk[1], Ulrich Palm[1], Susanne Karch[1], Oliver Pogarell[1], Frank Padberg[1]
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3029 **TDCS replaces ECT in a Patient with Corpus Callosum Agenesis and Catatonic Schizophrenia**
Daniel Keeser[1,2], Elif Weidinger[1], Andrea Linhardt[1], Ulrich Palm[1], Marco Paolini[2], Oliver Pogarell[1], Birgit Ertl-Wagner[2], Peter Falkai[1], Norbert Müller, Prof.[1], Frank Padberg[1]
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3030 **Optimization of transcutaneous vagus nerve stimulation (tVNS): a preliminary fMRI study**
Eui-Cheol Nam[1], Natalia Yakunina[2], Woo Suk Tae[3], Tae Su Kim[4], Sam Soo Kim[5]
[1]Department of Otolaryngology, School of Medicine, Kangwon National University, Chuncheon, Korea, Republic of, [2]Department of Otolaryngology, School of Medicine, Kangwon National University, Chunchon, Korea, Republic of,[3]Neuroscience Research Institute, School of Medicine, Kangwon National University, Chunchon, Korea, Republic of, [4]Department of Otolaryngology, Kangwon National University Hospital, Chunchon, Korea, Republic of, [5]Department of Radiology, School of Medicine, Kangwon National University, Chuncheon, Korea, Republic of

3031 **The Effect of Transcranial Alternating Current Stimulation on Brain Dynamics: a MEG Study**
Claudia Tesche[1]
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3032 **BOLD signal effects of alpha tACS: a concurrent tACS-fMRI study**
Johannes Vosskuhl[1], René Huster[1], Christoph Herrmann[1]
[1]University of Oldenburg, Experimental Psychology Lab, Oldenburg, Germany

Brain Stimulation Methods

Non-invasive Magnetic/TMS

3033 The lateral occipital cortex plays a causal role in aesthetic appreciation of figurative paintings

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3034 Effects of PEMF stimulation on effective and functional connectivity: an fNIRS, EEG and patch clamp

Branislava Curcic-Blake[1], Natasha Maurits[2], Nikola Valchev[3], Ljiljana Nikolic[4], Evgeniya Kirilina[5], Branka Petkovic[6], Djurdjica Ignjatovic[7], Olivier David[8], André Aleman[9], Rudie Kortekaas[10]
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3035 Reductions in cortico-striatal hyperconnectivity accompany response to dmPFC-rTMS in OCD

Katharine Dunlop[1], Patricia Colton[2], Marion Olmsted[2], D. Blake Woodside[3], Peter Giacobbe[4], Jonathan Downar[2]
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3036 Loss of determinism and cortical downstate in vegetative patients: a TMS/EEG study

Matteo Fecchio[1], Mario Rosanova[2], Andrea Pigorini[2], Simone Sarasso[2], Francesca Seregni[2], Adenauer Casali[2], Olivia Gosseries[3], Silvia Casarotto[2], Maurizio Mariotti[2], Steven Laureys[4], Marcello Massimini[2]
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3037 The effects of theta-burst stimulation on model-free learning

Masashi Hamada[1], John Rothwell[2]
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3038 Dual-mode-Noninvasive Brain Stimulation over the Primary Motor Cortices in Stroke Patients

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3039 Clinical Utility of TMS in Determining Language Laterality: A MEG Validation Study

shalini narayana[1], Roozbeh Rezaie[2], Liliya Birg[3], Katherine Schiller[3], Frederick Boop[4], James Wheless[4], Andrew Papanicolaou[4]
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Brain Stimulation Methods

Sonic/Ultrasound

3043 Computational exploration of focused ultrasound insertion behavior for human neuromodulation

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Brain Stimulation Methods

TDCS

3044* In-vivo MRI mapping of electrical current of transcranial Direct Current Stimulation (tDCS), (O-M4)

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3045 Assessment of neuromodulation & behavioral effects by motor arm training priming with tDCS on stroke
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3046 The use of tDCS to improve inhibitory control in adolescents with ADHD
Carolin Breitling[1], Tino Zaehle[2], Bjoern Bonath[3], Jana Tegelbeckers[4], Hans-Henning Flechtner[3], Kerstin Krauel[5]
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3047 Simultaneous tDCS-fMRI Identifies Resting State Networks Mediating Visual Search Enhancement
Daniel Callan[1], Brian Falcone[2], Atsushi Wada[1], Raja Parasuraman[2]
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3048 TDCS protocol effect on motor performance and brain plasticity of healthy old people
Gaelle Dumel[1], Marie-Eve Bourassa[2], Martine Desjardins[3], Dave Saint-Amour[4], Louis De Beaumont[5]
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3049 Delineating neurovascular effects of tDCS using TMS and resting-state ASL perfusion imaging
Asif Jamil[1], Michael Nitsche[2]
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3050 Transcranial DCS modulates subcortical brain activity in response to food cues among obese subjects
Jae-Chang Kim[1], jihye noh[2], Hye Mi Pyo[3], Jae Eun Kim[3], Kyongsik Yun[4], Hyun Jeong Jeon[3], Taekeun Oh[3], Hyeon-Man Baek[5], Hyung Jin Choi[3]
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3051 Regional electric field generated by tDCS for the treatment of hallucinations in schizophrenia
Won Hee Lee[1], Sophia Frangou[1]
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3052 Changes in Cortical Thickness after tDCS-Enhanced Brain Training and Mindfulness Practice
Gregory Lieberman[1], Michael Hunter[1], Matt Bezdek[2], Mike Trumbo[1], Aaron Jones[1], Brian Coffman[3], Elizabeth McCallion[1], Mika Armenta[1], Anthony O'Sickey[1], David Brown[1], Corey Roos[1], Sam Robinson[1], Nicole Martin[2], Eric Schumacher[2], Sean Guarino[4], Leonard Eusebi[4], Seth Elkin-Frankston[4], Victoria Romero[4], Katie Witkiewitz[1], Vincent Clark[1]
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3053 SimNIBS: A versatile toolbox for simulating fields generated by transcranial brain stimulation
Guilherme Saturnino[1,2], Andre Antunes[2], Johanes Stelzer[1], Axel Thielscher[1,2,3]
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3054 A generic approach for realistic head modelling for electrical field mapping and source localization
Johannes Stelzer[1], Christian Bauer[2], Axel Thielscher[3]
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3055 Neurometabolic effects of bilateral and unilateral tDCS
Sara Tremblay[1], Louis-Philippe Lafleur[1], Sébastien Proulx[2], Vincent Beaulé[1], Julien Doyon[1], Malgorzata Marjanska[3], Hugo Théoret[1]
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3056 Site and Domain Specificity of the Effects of tDCS for Symbolic Processing
Jessica Wise[1], Melissa Randazzo Wagner[2], James Booth[3]
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3057 Why electrical stimulation over DLPFC can reduce cigarette craving in smokers: an fMRI-tDCS study
Li-Zhuang Yang[1], Bin Shi[2], Wei Zhang[1], Feng Gu[1], Ying Wang[1], Ying Liu[2], Xiaochu Zhang[1]
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Brain Stimulation Methods

TMS

3058* Boosting the sensitivity of concurrent TMS/fMRI in motor cortex using a dedicated MR coil array, (O-TH4)
Lucia Navarro de Lara[1,2], Martin Tik[1,2], Michael Woletz[1,2], Henryk Bukowski[3], Inga-Lisa Stuerkat[3], Claus Lamm[3], Ewald Moser[1,2], Christian Windischberger[1,2]
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3059 Long-Range Temporal Correlations as predictors of TMS effects in paired-pulse paradigms
Evgeny Blagoveshchensky[1], Maria Nazarova[1], Tommaso Fedele[1], Vadim Nikulin[2]
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3060 Metabolic changes in motor cortices after rTMS & constraint therapy in pediatric perinatal stroke
Helen Carlson[1], Frank MacMaster[2], Adam Kirton[3]
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3061 Resting state sensorimotor networks in perinatal stroke: Effects of rTMS and CIMT
Helen Carlson[1], Kristine Woodward[1], Adam Kirton[2]
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3062 Alterations in Fronto-insular Network Connectivity Following Transcranial Magnetic Stimulation
Sarina Iwabuchi[1], Dorothee Auer[1], Felix Raschke[1], Sudheer Lankappa[2], Lena Palaniyappan[1]
[1]University of Nottingham, Nottingham, United Kingdom, [2]Nottingham Healthcare NHS Trust, Nottingham, United Kingdom

3063 Inter-individual modulation of cortical excitability is reflected by motor network connectivity
Charlotte Nettekoven[1], Lukas Volz[2], Martha Leimbach[2], Eva-Maria Pool[1], Simon Eickhoff[3,1], Gereon Fink[2,1], Christian Grefkes[2,1]
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3064 Corticospinal excitability assessed by standard and high density electromyography
Jason Neva[1], Alessio Gallina[1], Sue Peters[1], S. Jayne Garland[1], Lara Boyd[1]
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3065 Targeting accuracy and efficiency of a multichannel TMS array: A simulation study
Aapo Nummenmaa[1], Tommi Raij[1,2], Matti Hämäläinen[1], Yoshio Okada[3,4]
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3066 Targeting functional networks with TMS
Alexander Opitz[1], Michael Fox[2], Cameron Craddock[3], Stan Colcombe[4], Michael Milham[5]
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3067 TMS effects on connectivity of default mode and executive control networks in generalized anxiety
Liron Rabany[1], Gretchen Diefenbach[2,3], Christopher Hyatt[1], Luis Zertuche[1], Laura Bragdon[3], Lauren Hallion[3], David Tolin[2,3], John Goethe[4,5], Michal Assaf[1,2]
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3068 Cryogenically cooled 2-channel transcranial magnetic stimulation system
Tommi Raij[1], Aapo Nummenmaa[2], Matti Hämäläinen[2], Anthony Mascarenas[3], Douglas Paulson[3], Kevin Pratt[3], Jose Robles[3], Yoshio Okada[4]
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3069 Ventrolateralprefrontal cortex contributions to working memory interference by emotional distraction
Diego Redolar-Ripoll[1], Raquel Viejo-Sobera[1], Marc Palaus[1], Antoni Valero-Cabre[2], Mercè Boixadós[1], Elena Marrón[1]
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3070 Suprathreshold TMS during maximal voluntary biceps brachii contraction improves muscle performance
Kyohei Takahashi[1], Atsuo Nuruki[2], Takaaki Nakama[2], Masaki Goto[2]
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3071 10Hz rTMS over the left DLPFC specifically modulates ACC connectivity within IC network 17
Martin Tik[1], André Hoffmann[1], Ronald Sladky[1], Livia Tomova[2], Allan Hummer[1], Lucia Navarro de Lara[1], Bharat Biswal[3], Juergen Pripfl[2], Claus Lamm[2], Christian Windischberger[1]
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3072 Theta burst stimulation modulates cortical pathway recruitment: multimodal mechanistic insights
Lukas Jan Volz[1], Masashi Hamada[2], John Rothwell[3], Christian Grefkes[4]
[1]University of California, Santa Barbara, Santa Barbara, CA, [2]the University of Tokyo, Tokyo, [Select a State], [3]UCL Institute of Neurology, London, United Kingdom, [4]Department of Neurology, Cologne, Germany

3073 Impact of rTMS on resting state functional connectivity in mal de debarquement syndrome
Han Yuan[1,2], Diamond Urbano[1], Lei Ding[2], Yoon-Hee Cha[1]
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Disorders of the Nervous System

Addictions

3074 Nicotine Craving is Associated with Attenuated Brain Processing of Interoception in the Insula
Jason Avery[1], Kara Kerr[1], Casey Mullins[1], Martin Paulus[1], Kaiping Burrows[2], Jerzy Bodurka[1], W. Kyle Simmons[1]
[1]Laureate Institute for Brain Research, Tulsa, OK, [2]Laureate Institute for Brain Reserach, Tulsa, OK

3075 Neural hyperactivarion in cocaine-dependence during a Stroop task with reward contingencies
Alfonso Barros-Loscertales[1], Patricia Rosell-Negre[1], Juan Bustamante[2], Paola Fuentes-Claramonte[1], Victor Costumero[1]
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3076 Specific effects of FAAH and CNR on neural response to different reward types
Derek Beaton[1], Joseph Dunlop[2], Hervé Abdi[1], Francesca Filbey[2]
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3077 Effects of baclofen on cue reactivity in alcohol dependence: a pharmaco-fMRI study
Anne Beck[1], Patricia Pelz[2,1], Josephine Krüger[3], Robert Lorenz[3], Katrin Charlet[4], Olga Geisel[3], Andreas Heinz[3], Christian Müller[3]
[1]Charité - Univeristätsmedizin Berlin, Berlin, Germany, [2]Area of Excellence Cognitive Science, University of Potsdam, Potsdam, Germany, [3]Charité - Universitätsmedizin Berlin, Berlin, Germany, [4]Charité - Universitaetsmedizin Berlin, Berlin, Germany

3078 Investigating the Neural Correlates of Distress Tolerance in Cocaine Dependence
Ryan Bell[1], Thomas Ross[2], Jonathan Ryan[1], Elliot Stein[2], Stacey Daughters[1]
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3079 White Matter Tract Abnormalities in Alcohol-naïve Adolescents at High Risk for Alcohol Use Disorders
Jeffrey Bloch[1], Manish Khatiwada[1], Benson Stevens[1], Gabrielle-Ann Torres[1], Valerie Darcey[1], Emma Rose[2], John VanMeter[1], Diana Fishbein[2]
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3080 Impaired Learning From Errors in Cannabis Users: Dorsal Anterior Cingulate Cortex hypoactivity
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3081 Influence of habitual negative affect on processing of negative facial stimuli in alcoholic patients
Katrin Charlet[1], Linda Wulkau[1], Evangelos Zois[2], Anne Beck[3], Anne Jorde[4], Henrik Walter[5], Falk Kiefer[6], Andreas Heinz[7]
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3082 Proton Magnetic Resonance Spectroscopy in Adolescent Marijuana Users
Christine Cloak[1], Linda Chang[1], Eric Cunningham[1], Daniel Alicata[1], Steven Buchthal[1], Thomas Ernst[1]
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3083 Do nicotine dependent subjects show functional differences in response to risk?
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3084 Avatar's neurobiological traces in the self-concept of online role-playing game addicts
Julia Dieter[1], Holger Hill[2], Madlen Sell[1], Iris Reinhard[1], Sabine Vollstädt-Klein[1], Falk Kiefer[1], Karl Mann[1], Tagrid Leménager[1]
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3085 An Investigation of BOLD Response to Cocaine Stimuli Following Attentional Bias Modification Therapy
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3086 Delayed recruitment of right insula in smokers during parametric modulations of response conflict
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3087 The effects of chronic marijuana use on brain metabolism and function
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3088 Family history of drug abuse predicts variability in brain structure in drug naïve children
Emma Rose[1], Valerie Darcey[2], John VanMeter[3], Diana Fishbein[4]

3089 Nucleus Accumbens associated Pavlovian-Instrumental-Transfer effects in alcohol dependence
Maria Garbusow[1], Daniel Schad[2], Christian Sommer[3], Miriam Sebold[4], Eva Friedel[5], Florian Schlagenhauf[6], Ulrich Zimmermann[7], Michael Smolka[8], Quentin Huys[9], Michael Rapp[10], Andreas Heinz[5]
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3090 Alterations in functional connectivity in response to personalized guided imagery in smokers
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3091 Reduced loss aversion in addiction is related to altered neural gain and loss sensitivity
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3092 Cortical thickness in cocaine users: relationship to resting functional connectivity and cocaine use
Xiujuan Geng[1], Yuzheng Hu[2], Hong Gu[2], Betty Jo Salmeron[2], Elliot Stein[2], Yihong Yang[2]
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3093 Brain Connectivity Changes Associated with Chronic Video Game Playing in Adolescents
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3094 Nicotine deprivation affects neural response patterns to smoking related objects in LOC
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3095 Gray Matter Volume in the Lateral Frontal Pole Predicts Stages of Cocaine Addiction and Recovery
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3096 White matter abnormalities in Adolescents with a Familial History of Substance Use Disorders
Xiaofu He[1], Lupo Geronazzo[1], Seonjoo Lee[1], Lawrence Amsel[1], Zhishun Wang[1], George Musa[1], Cristiane Duarte[1], Thao Doan[1], Joy Hirsch[2], Christina W. Hoven[1]
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3097 Dynamic brain activity changes during induced nicotine craving: an ASL study
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3098 Time, Chance and Addiction: Unique Neural Response to Delay and Risk in Meth and Alcohol Dependence
William Hoffman[1,2], Ryan Lisowski[2], Daniel Schwartz[2], Britta Tremblay[2], Vanessa Wilson[2], Laura Dennis[2], Suzanne Mitchell[2]
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3099 Thalamus volume is associated with cocaine severity
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3100 Alterations of regional homogeneity in youth and adults with Internet gaming disorder at rest
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3101 Sex Differences in Impulsivity and Brain Morphometry in Methamphetamine Users
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3102 Neural response to alcohol taste in youth with high alcohol sensitivity: effects of the OPRM1 gene
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3103 Inhibitory control networks are unaffected by nicotinic receptor modulation in smokers
Elise Lesage[1], Matthew Sutherland[2], Thomas Ross[1], Betty Jo Salmeron[1], Elliot Stein[1]
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3104 Altered corticostriatal functional networks in adolescents with Internet addiction disorder
Fuchun Lin[1], Yasong Du[2], Yan Zhou[3], Jianrong Xu[3], Hao Lei[1]
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3105 Brain regions related to impulsivity mediate the effects of early adversity on anti-social behavior
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3106 Resting state functional connectivity, temperament and ethanol self-administration in rhesus monkeys
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3107 Functional connectivity and Quantitative EEG in females with Alcohol Dependence
Raul Mendoza Quiñones[1], Adianes Herrera[1], Lester Melié-Garcia[2], Antonio Caballero[3], Iraklys Salazar-Guerra[3], Mario Carballoso[3], Yuniel Romero-Quintana[1], Gretel Sanabria[1], Pedro A. Valdes-Sosa[1]
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3108 Task Reversal and Prediction Error Activations in Alcohol Dependent Patients
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3109 Gray-Matter Volume and Dopamine D2/D3 Receptors in Methamphetamine Users
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3110 Neural Correlates of Waiting Impulsivity: A Dimensional Approach to Alcohol Misuse
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3111 Acute effects of alcohol and nicotine on perfusion in reward and cognitive-control brain regions
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3112 Character of ANS responses and brain reactivity induced by anger emotion among alcoholics
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3113 Alterations in amygdala connectivity in alcohol dependence implicate both reward and stress circuits
Csaba Orban[1], John McGonigle[1], Louise Paterson[1], Rebecca Elliott[2], Karen Ersche[3], Remy Flechais[1], Anna Murphy[2], Dana Smith[3], John Suckling[3], Eleanor Taylor[2], JF William Deakin[2], Trevor Robbins[3], David Nutt[1], Anne Lingford-Hughes[1]
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3114 Reduced N1 and P3 amplitudes of the ERP during Auditory oddball task in Internet gaming disorder
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3115 A large-scale investigation of the effects of marijuana on sub-cortical morphometry
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3116 Delay discounting in alcohol-dependent patients: An fMRI study
Patricia Pelz[1], Robert C. Lorenz[1], Katrin Charlet[1], Josephine Krüger[1], Carolin Wackerhagen[1], Ben Eppinger[2], Olga Geisel[1], Eva Friedel[1], Roman Banas[1], Andreas Heinz[1], Christian Müller[1], Anne Beck[1]
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3117 Methamphetamine users may have smaller cerebellar gray matter volume
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3118 Impaired suppression of the DMN in heavy chronic marijuana smokers during inhibitory processing
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3119 Self-regulation of the anterior insula in nicotine addicted smokers unmotivated to quit
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3120 MRI vertex-wise shape analysis of the basal ganglia in pathological gambling
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3122 Brain connectivity underlying stress, autonomic nervous system disruption, and alcohol abuse
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3123 Alcohol-pictures elicit behavioral and neural Pavlovian-instrumental transfer in alcohol dependence
Daniel Schad[1], Maria Garbusow[2], Eva Friedel[3], Christian Sommer[4], Ulrich Zimmermann[5], Michael Smolka[6], Florian Schlagenhauf[7], Quentin Huys[8], Andreas Heinz[3], Michael Rapp[9]
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3124 Longer Duration of Cannabis Use is Associated with Smaller Nucleus Accumbens in Treated HIV Patients
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3125 NAChR agonists induce heterogeneous functional alterations across the brain: An ALE meta-analysis
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3126 Imaging biomarker of smoking addiction and evaluating treatment efficacy
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3127 Increased functional connectivity at rest between insula and reward system in pathological gamblers
Kosuke Tsurumi[1], Ryosaku Kawada[1], Naoto Yokoyama[1], Kimito Hirose[1], Makiko Yamada[2], Masaaki Hazama[1], JUN MIYATA[1], TOSHIYA MURAI[1], HIDEHIKO TAKAHASHI[1]
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3128 Dynamic Functional Network Connectivity in the Brain of Nicotine and Alcohol Users
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3129 Validation of the incentive-habit model for alcohol addiction with fMRI
Sabine Vollstädt-Klein[1], Helmut Nakovics[1], Martina Kirsch[1], Wolfgang Sommer[1], Karl Mann[1], Falk Kiefer[1]
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3130 Nicotine addiction disrupts the modulation of reward prediction errors process by uncertainty in ACC
Zhengde Wei[1]
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3132 Marijuana and brain health: hippocampal injury, protection and recovery
Murat Yucel[1], Valentina Lorenzetti[1], Chao Suo[1], Andrew Zalesky[2], Alex Fornito[1], Francesca Fernandez[3], Michael Takagi[4], Dan Lubman[5], Nadia Solowij[3]
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3133 Corticolimbic Connectivity when Food Cued Predicts Craving in Prenatally Cocaine Exposed Adolescents
Yasmin Zakiniaeiz[1], Cheryl Lacadie[1], Sarah Yip[1], Rajita Sinha[1], Linda Mayes[1], Marc Potenza[1]
[1]Yale University School of Medicine, New Haven, CT

3134 Lower cortical thickness in healthy adults who use multiple substances of abuse
Artemis Zavaliangos-Petropulu[1], Neda Jahanshad[1], Joshua Faskowitz[1], Hugh Garavan[2], Patricia Conrod[3], Paul Thompson[1]
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Disorders of the Nervous System

Alzheimer's Disease and Other Dementias

3135* Brain Network Activity in Rest and Task Differentially Predicts Alzheimer's Risk and Cognition, (O-TH3)

Yang Jiang[1], Haiqing Huang[2], Erin Abner[1], Lucas Broster[1], Gregory Jicha[1], Frederick Schmitt[1], Richard Kryscio[1], Anders Andersen[1], David Powell[1], Linda Van Eldik[1], Brian Gold[1], Peter Nelson[1], Charles Smith[1], Mingzhou Ding[2]
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3136* CSF markers of neural injury predict longitudinal brain Aβ burden in preclinical Alzheimer's disease (O-TH3)

Annie Racine[1,2,3,4,5], Christopher Nicholas[1,6,2], Jennifer Oh[1,2], Lindsay Clark[1,2,7], Rebecca Koscik[1,7], Ozioma Okonkwo[1,6,2], Ansel Hillmer[1,8,9], Dhanabalan Murali[1,8,10], Todd Barnhart[1,8], Catherine Gallagher[1,6,2], Howard Rowley[1,2,11], Maritza Dowling[1,6,2], Sanjay Asthana[1,6,2,7], Barbara Bendlin[1,6,2,7], Henrik Zetterberg[12,13], Cynthia Carlsson[1,6,2], Bradley Christian[1,8,9,10], Sterling Johnson[1,6,2,7,9]
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3137 Fibrillar Amyloid: Thinking Globally, Not Acting Locally

Andre Altmann[1], Bernard Ng[1], Susan Landau[2], William Jagust[2], Michael Greicius[3], The ADNI[4]
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3138 Cortical landscape of the Down's syndrome brain with and without Alzheimer's disease neuropathology

Tiina Annus[1], Liam Wilson[1], Julio Acosta-Cabronero[2], Arturo Cardenas-Blanco[2], Young Hong[1], Tim Fryer[1], Shahid Zaman[1], Anthony Holland[1], Peter Nestor[2]
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3139 Comparing MEG with MRI for Early Detection of Alzheimer's Disease

Cristina Blanco[1], Andrea Greve[1], Lisa Brindley[2], Elisa Cooper[1], Jason Taylor[3], John Olichney[4], Peter Nestor[5], Peter Watson[1], Richard Henson[1]
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3140 Use of Estrogen May Preserve Brain Structure Despite Progression of Dementia

Christina Boyle[1], Cyrus Raji[2], Kirk Erickson[3], Oscar Lopez[3], James Becker[3], Micahel Gach[4], William Longstreth[5], Mikhail Popov[3], Lewis Kuller[3], Owen Carmichael[6], Paul Thompson[7]
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3141 Patterns of atrophy: Alzheimer's Disease, Frontotemporal Dementia, and Progressive Supranuclear Palsy

Christina Boyle[1], Jason Chen[2], Jason Chen[2], Steve Horvath[2], Neel Parikshak[2], Jason Stein[3], Bruce Miller[4], Dan Geschwind[5], Giovanni Coppola[3], Paul Thompson[6]
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3142 Accelerated neurodegeneration in network neighbors in behavioral variant frontotemporal dementia

Jesse Brown[1], Alice Hua[1], Andrew Trujillo[2], Bruce Miller[1], Howard Rosen[1], William Seeley[3]
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3143 The influence of APOE and TOMM40 variants on the hippocampus in older, nondemented subjects

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3144 Metabolic Connectivity Patterns in Alzheimer's Disease are Continuously Modulated by Beta-Amyloid
Felix Carbonell[1], Alex Zijdenbos[1], Alan Evans[2], Barry Bedell[1]
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3145 Initial evidence for the correlation of extended functional alterations with MCI-AD conversion
Letizia Casiraghi[1,2], Gloria Castellazzi[3,2], Fulvia Palesi[4,2], Andrea De Rinaldis[3,2], Elena Sinforiani[5], Stefano Bastianello[6], Claudia Wheeler-Kingshott[7], Egidio D'Angelo[1,2], Carol Di Perri[2]
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3146 Brain structural change and cognition function in patients with dementia with lewy bodies
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3147 Diffusion Changes Along White Matter Tracts in Alzheimer's Disease - an ADNI cohort study
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3148 Glucose Metabolic brain networks in early onset versus late onset Alzheimer's disease
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3149 Associations between white matter lesion microstructure and imaging markers of Alzheimer's disease
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3150 Multivariate effects of imaging markers of Alzheimer's disease on white matter tissue integrity
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3151 Altered intrinsic functional activity in subjective cognitive decline: a resting-state fMRI study
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3152 Fractional Anisotropy reductions differentiate between Alzheimer Disease and Vascular Dementia
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3153 Frequency Specific of Default Mode Network Resting State fMRI in the Alzheimer's Disease
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3154 Gamma oscillations in prefrontal and temporal cortices track Alzheimer's disease memory performance
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3155 Apraxia of Emotion in Neurodegenerative Disease: A Neural System Underlying Emotional Simulation
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3156 1H-MRS asymmetry changes in the anterior and posterior cingulate gyrus in patients with mild cogniti
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3157 White Matter Microstructural Changes in High Risk Subjective Memory Impairment: MRI-based Analyses
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3158 Towards an Integrative Causal Description of Late-Onset Alzheimer´s Disease Progression
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3159 White Matter Tract Integrity, Amyloid load and Structural atrophy in aging and MCI: a PET-MRI study
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3160 Semantic impairment as a marker of late-onset Alzheimer's disease
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3161 Memory processing–related functional networks relevant to mild cognitive impairment
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3162 Classification of patients with AD using graph theoretical approaches
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3163 Five distinctive causal relationships between Amyloid-β and cortical thinning in patients with AD
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3164 Cerebral Gray Matter Volume Changes after Donepezil Therapy in Patients with Alzheimer's Disease
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3165 Tracking the trajectory of mild cognitive impairment and Alzheimer's disease: a longitudinal study
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3166 Profiling clinical heterogeneity in symptomatic and presymptomatic progranulin mutation carriers
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3167 Longitudinal study of Genetic Influence of APOE e4 on hippocampal atrophy with conformal geometry
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3168 White Matter Integrity Changes Preceding Alzheimer's Disease in Mild Cognitive Impairment
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3169 BIN1 genotype effects on working memory, hippocampal volume and functional connectivity
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3170 Acupuncture-induced Perfusion Alteration in Mild Cognitive Impairment: A Preliminary Study
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3171 Detection of Imaging Biomarkers between MCI Converters and Non-converters: A Longitudinal Study
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3172 Quantitative MR R2* Imaging to Investigate Increased Brain Iron Deposition in AD Patients
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3173 Cerebral blood-flow and mean diffusivity in subjects at high risk of Alzheimer's disease
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3174 Liver Enzyme Bilirubin, Brain Structure, and Alzheimer's Disease Pathology in 636 Older Adults
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3175 Targeting the Entorhinal Cortex in the Study of Alzheimer's Disease Biomarkers
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3176 Grey and white matter changes in Alzheimer's disease compared to normal aging
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3177 Vulnerability of highly connected brain regions to connectivity loss in Huntington's disease
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3178 Comparison of ApoE-Related Brain Connectivity Difference in EMCI and Normal Aging Populations
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3179 Longitudinal levels of GABA in mild cognitive impaired patients using edited MR spectroscopy
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3180 Integrated Classification of Amnestic Mild Cognitive Impairment Using Functional and Structural MRI
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3181 Language networks reorganization in Alzheimer's disease: A gray matter structural covariance study
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3182 Test-retest resting-state fMRI in healthy elderlies with a family history of Alzheimer's disease
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3183 Atrophy Patterns in Early Clinical Stages Across Distinct Phenotypes of Alzheimer's Disease
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3184 Multiple genetic risk factors lead to increased atrophy in Alzheimer's disease
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3185 Is the Superficial White Matter important in Alzheimer's Disease?
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3186 Classification of Alzheimer's disease connectivity through unlabeled Parkinson's disease data
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3187 A Network Diffusion Model Of Alzheimer Progression With Dynamically Degrading Networks
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3188 Plasma lymphocyte percent as an early risk marker for pre-clinical Alzheimer's disease
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3189 Alzheimer Disease SNPs and their effect on brain morphology: The Rotterdam Study
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3190 Altered resting state activity related to network-specific cognition in AD risk groups
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3191 In vivo Braak staging using [18F]-AV1451 tau PET imaging
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3192 Predicting behavioral variant FTD with meta-analyses & pattern classification of imaging data
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3193 Education Modulates Default Mode Network Differently in Mild Cognitive Impairment and Healthy Aging
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3194 Studying Ventricular Abnormalities in Mild Cognitive Impairment with Hyperbolic Ricci Flow
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3195 Reduced Functional Connectivity in Cingulate Cortex in Behavioral Variant Frontotemporal Dementia
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3196 Ambient air pollution on neurodegeneration
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3197 Patch-wise Modeling of Cortical Thickness Measurements Using Principal Component Analysis
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3198 Grey matter network disruptions and Alzheimer's disease pathology in non-demented elderly
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3199 Non-linear Changes in Cortical Thickness Related to Amyloid-β Level
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3200 Alterations in brain networks associated with apathy in Alzheimer's disease
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3201 Classification of Alzheimer's Disease using Nearest Shrunken Centroids on white matter DWI features
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3202 Grey-matter volume in AD patients with negative or positive CSF markers for neurodegeneration
Paolo Vitali[1,2,3], *Serge Gauthier*[3], *Tom Beaudry*[3], *Soucy Jean-Paul*[4,1], *Simona Maria Brambati*[5,1], *Pedro Rosa-Neto*[3]
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3203 Gray matter atrophy as a biomarker in people unaware of MCI: A three-year longitudinal study
Mikhail Votinov[1], *Katharina Goerlich-Dobre*[1], *Ellen Dicks*[1], *Ute Habel*[1,2]
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3204 Following the spread of brain structural changes in the course of Alzheimer's disease
Marina Weiler[1], *Federica Agosta*[2], *Elisa Canu*[2], *Monica Falautano*[2], *Giancarlo Comi*[2], *Giuseppe Magnani*[2], *Andrea Falini*[2], *Massimo Filippi*[2]
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3205 Classification of cerebral perfusion in Alzheimer's disease and frontotemporal dementia patients
Alle Meije Wink[1], *Sander Verfaillie*[1], *Sofie Adriaanse*[1], *Marije Benedictus*[1], *Joost Kuijer*[1], *Jan De Munck*[1], *Mike Wattjes*[1], *Wiesje van der Flier*[1], *Philip Scheltens*[1], *Bart van Berckel*[1], *Frederik Barkhof*[1]
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3206 Correlations between cortical thinning and white matter microstructure changes
Jin-Ju Yang[1], *Hee Jin Kim*[2], *Hunki Kwon*[1], *Kiho Im*[3], *Jong-Min Lee*[1], *Sang Won Seo*[2]
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3207 Relationship of Topographic Gray and White Matter Atrophies in AD and MCI
Fan-pei Gloria Yang[1], Peng-Yu Chen[1], Chieh-En Tseng[1], Tzu-rong Chen[2], Ya-Fang Chen[3], Ta-Fu Chen[4], Tien-Wen Cheng[5], Ming-Jang Chiu[6]
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Disorders of the Nervous System

Autism

3208* Towards autism subtypes? Unsupervised machine learning using fcMRI features, (O-TH2)
Colleen Chen[1], Barbara Bailey[1], Ralph-Axel Müller[1]
[1]San Diego State University, San Diego, CA

3209* Altered Cortical Trajectories in Autism Spectrum Disorders: Relation to Symtomatology, (O-TH2)
Budhachandra Khundrakpam[1], John Lewis[1], Penelope Kostopoulos[1], Alan Evans[1]
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3210* Neural substrates of emotional face processing in children with autism spectrum disorder, (O-TH2)
Rachel Leung[1], Elizabeth Pang[2], Mary Lou Smith[2], Margot Taylor[3]
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3211* Rewarding speech elicits reduced accumbens & amygdala activity and connectivity in children with ASD, (O-T2)
Daniel Abrams[1], Paola Odriozola[2], Tianwen Chen[3], Srikanth Ryali[4], john kochalka[5], Carl Feinstein[2], Jennifer Phillips[6], Vinod Menon[7]
[1]Stanford University, Stanford, CA, [2]Stanford University, Palo Alto, CA, [3]Stanford Univeristy, Stanford, CA, [4]Stanford University School of Medicine, Stanford, United States, [5]stanford, Palo alto, United States, [6]Stanford University School of Medicine, Stanford, CA, [7]Stanford school of medicine, Palo Alto, CA

3212 Sex differences in the Autistic Brain: Hypo-connectivity in Males but Hyper-connectivity in Females
Kaat Alaerts[1], Stephan Swinnen[1], Nicole Wenderoth[2]
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3213 Meta-analysis of structural MRI studies in Autism Spectrum Disorder: focus on subcortical structures
Anita Beggiato[1,2], Richard Delorme[2], Thomas Bourgeron[1], Roberto Toro[1]
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3214 Neuroanatomical diversity of the subcortical structures in the Autism Brain Imaging Data Exchange
Anita Beggiato[1,2], Richard Delorme[2,1], Thomas Bourgeron[1], Roberto Toro[1]
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3215 Effect of Demographic and Clinical Features on volume of Corpus Callosum in Preschoolers with Autism
Sara Calderoni[1], Irene Saviozzi[1], Alessia Giuliano[2,3], Paolo Brambilla[4], Elisa Veronese[5], Alessandra Retico[2], Filippo Muratori[1,6]
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3216 Structural gray matter differences in autism examined with Restriction Spectrum Diffusion Imaging
Ruth Carper[1], Jeffrey Treiber[2], Nathan White[2], Ralph-Axel Müller[1]
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3217 Intact object representations despite weak evoked responses in Autism Spectrum Condition
Ian Charest[1], Kendrick Kay[2], Ruud Berkers[3], Meng-Chuan Lai[4], Stamatis Beltsos[5], Michael Lombardo[4], Simon Baron-Cohen[6], Nikolaus Kriegeskorte[1]
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3218 Altered Subcortical-Cortical Gray-Matter Structural Covariance in Autism Spectrum Disorder

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3219 Abnormal connectivities within default mode network in adolescents with Autism Spectrum Disorder

Hsiang-Yun Chien[1], Susan Shur-Fen Gau[2], Yu-Jen Chen[1], Yu-Chun Lo[1], Hsiang-Yuan Lin[2], Yung-Chin Hsu[1], Wen-Yih Tseng[1,3]
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3220 Reduced neural synchronization during a social inhibition task in children with autism

Amanda Easson[1,2,3], Elizabeth Pang[2,4,5], Margot Taylor[1,2,3,4,5,6], Sam Doesburg[1,2,3,6], Evdokia Anagnostou[4,5,7]
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3221 Impaired Praxis Function in ASD is Associated With Altered Inter-Hemispheric Connectivity

Joshua Ewen[1], Danielle McAuliffe[1], Ajay Pillai[1], Balaji Lakshmanan[1], Carrie Nettles[1], Mark Hallett[2], Nathan Crone[3], Stewart Mostofsky[4]
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3222 Atypical lateralization of motor circuit connectivity in children with high-functioning autism

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3223 Differential Global Versus Regional Brain Structural Variation in Autism

Nicholas Foster[1,2], Megha Sharda[1,2], Ana Tryfon[1,2], Krissy Doyle-Thomas[3], Evdokia Anagnostou[3], Alan C. Evans[2], Krista Hyde[1,2], NeuroDevNet ASD imaging group[4]
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3224 Atypical intrinsic functional connectivity in males with autism and their unaffected brothers

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3225 Limited predictive power of structural MRI features for preschoolers with Autism Spectrum Disorders

Ilaria Gori[1,2], Alessia Giuliano[1,3], Filippo Muratori[4,5], Irene Saviozzi[4], Piernicola Oliva[2,6], Raffaella Tancredi[4], Angela Cosenza[4], Michela Tosetti[4], Sara Calderoni[4], Alessandra Retico[1]
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3226 Additive Effects of Oxytocin Receptor Gene Variants on Reward-Network Connectivity

Leanna Hernandez[1], Kate Krasileva[1], Lauren Sherman[1], Carolyn Ponting[1], Rosemary McCarron[1], Shulamite Green[1], Dan Geschwind[1], Susan Bookheimer[1], Mirella Dapretto[1]
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3227 White and grey matter abnormalities in autism spectrum disorder associate with verbal performance
Sabine Huemer[1], Jean Gehricke[2], Frithjof Kruggel[2], Virginia Mann[2]
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3228 Neural Predictors of Individual Differences in Math Problem Solving Skills in Autism
Teresa Iuculano[1], Kaustubh Supekar[1], Vinod Menon[1]
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3229 Male brain is more affected by autism spectrum traits than female
Minyoung Jung[1,2], Daisuke Saito[1,2,3], Akemi Tomoda[1,2], Hidehiko Okazawa[1,3], Yuji Wada[1,4], Hirotaka Kosaka[1,2,4]
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3230 The National Database for Autism Research: Quality Assurance Metrics for Structural Neuroimaging
David Kennedy[1], Christian Haselgrove[2], John Van Horn[3], Dan Hall[4]
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3231 Diffusion differences in normo- and macrocephalic subjects with autism
Katherine Koenig[1], Mark Lowe[1], Rebecca Embacher[2], Thomas Frazier[2], Charis Eng[3]
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3233 Variants in the Autism Risk Gene MET Relate to Amygdala Functional Connectivity
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3234 The spatial dynamics of abnormal corpus callosum development in autism spectrum disorders
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3235 Brain Network Efficiency of Young Children with Autism: An fNIRS Study
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3236 Persistence of megalencephaly in in a subset of preschool children with autism spectrum disorder
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3237 Resting state network topologies associated with ASD in fMRI
Benjamin Morgan[1], George Ibrahim[2], Vanessa Vogan[1,2], Rachel Leung[1,2], Wayne Lee[1], Margot Taylor[1,2]
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3238 Links between atypical local and long-distance connectivity in autism
Sangeeta Nair[1], Christopher Keown[2], Jose Maximo[3], Angela Abbott[1], Inna Fishman[1], Ralph-Axel Mueller[1]
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3239 Pragmatic language ability is related to amygdala connectivity in children with autism
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3240 Localizing focal structural alterations of the basal ganglia in autism spectrum disorders
Min Tae Park[1,2], Manu Schuetze[3], Signe Bray[3], Mallar Chakravarty[1,4]
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3241 Longitudinal Cortical Thickness Growth in Relation to Changes in SRS Scores in Autism
Molly Prigge[1], Tracy Abildskov[2], Nicholas Lange[3], Andrew Alexander[4], Erin Bigler[2], Janet Lainhart[4], BRANDON ZIELINSKI[1]
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3242 Altered neural connectivity of amygdalar input nuclei in adolescents with autism spectrum disorders
Annika Rausch[1], Wei Zhang[1], Maarten Mennes[1], Erno Hermans[2], Erik van Oort[3], Guido van Wingen[4], Koen Haak[2], Christian Beckmann[5], Jan Buitelaar[6,7], Wouter Groen[7]
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3243 FFA–occipital connectivity is associated with face memory performance in autism spectrum disorders
Kelly Sambrook[1], Maya Reiter[1], Emily Neuhaus[1,2], Annette Estes[1], Geraldine Dawson[1,3], Elizabeth Aylward[2], Natalia Kleinhans[1]
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3244 Assessing tactile perceptual inference and learning in autism spectrum disorders
Laurie-Anne Sapey-Triomphe[1], Gaëtan Sanchez[2], Marie-Anne Henaff[3], Sandrine Sonié[4], Christina Schmitz[5], Jérémie Mattout[6]
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3245 Sexual dimorphism in cerebral morphometry in children, adolescents and adults with autism
Marie Schaer[1], john kochalka[2], Aarthi Padmanabhan[3], Kaustubh Supekar[4], Vinod Menon[5]
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3246 Voice identity processing in high-functioning autism spectrum disorder
Stefanie Schelinski[1], Claudia Roswandowitz[1,2], Katharina von Kriegstein[1,3]
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3247 Modeling of the autism brain reveals influence of local E/I imbalance on global brain connectivity
Kaustubh Supekar[1], john kochalka[1], Apoorva Rangan[1], Vinod Menon[1]
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3248 Macrostructural integrity of the reward pathway predicts social communication deficits in autism
Kaustubh Supekar[1], Marie Schaer[1], Holly Wakeman[1], john kochalka[1], Roland Bammer[1], Aarthi Padmanabhan[1], Vinod Menon[1]
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3249 Electrophysiological Investigation of Sensory Hypersensitivity in Autism Spectrum Disorders
Yukari Takarae[1], Savanna Sablich[1], John Sweeney[1]
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3250 Age Related Differences in White Matter Diffusion Measures in Autism Spectrum Disorder
Abigail Thompson[1], Asal Shahidiani[1], Jonathan O'Muircheartaigh[2], Lindsay Walker[3], Vera D'almeida[1], Clodagh Murphy[1], Eileen Daly[4], Declan Murphy[5], Steven Williams[4], Sean Deoni[3], Christine Ecker[4]
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3251 The search for structural biomarkers in Autism Spectrum Disorders
Carinna Torgerson[1], GENDAAR Working Group the[2], Andrei Irimia[1], John Van Horn[1]
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3252 Resting State Networks in 6-Week-Old Infants at High and Low Risk for Autism
Tawny Tsang[1], Carolyn Ponting[1], Rosemary McCarron[1], Leanna Hernandez[1], Janelle Liu[2], Susan Bookheimer[3], Mirella Dapretto[4]
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3253 Reduced Fronto-Temporal Alpha Synchronization During Working Memory Processing in Autism
Charline Urbain[1,2], Vanessa Vogan[1,2], Annette Ye[1,2], Elizabeth Pang[2,3], Sam Doesburg[1,2,4], Margot Taylor[1,2,4]
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3254 Effects of ASD and ADHD symptoms on reward anticipation in ADHD, unaffected siblings, and controls
Eelco van Dongen[1], Daniel Von Rhein[1], Laurence O'Dwyer[1], Barbara Franke[1,2], Catharina Hartman[3], Dirk Heslenfeld[4], Pieter Hoekstra[3], Jaap Oosterlaan[4], Nanda Rommelse[1,5], Jan Buitelaar[1,6]
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3255 Miswired Autistic Connectomes derived from ABIDE
Hou Xiao-Hui[1], Xi-Nian Zuo[2]
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3256 Aberrant brain network organization in young children with Autism Spectrum Disorder
Jie Yang[1], Yi Pu[2]
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3257 Abnormalities in Large-Scale Brain Network Architecture in Autism
BRANDON ZIELINSKI[1], Molly Prigge[1], Andrew Alexander[2], Erin Bigler[3], Nicholas Lange[4], Guido Gerig[1], Janet Lainhart[2]
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Disorders of the Nervous System

Disorders of the Nervous System Other

3258* Fatigue relief in multiple sclerosis by bilateral somatosensory cortex neuromodulation, (O-TH4)
Andrea Cancelli[1,2], Carlo Cottone[1,3], Giancarlo Zito[1,4], Patrizio Pasqualetti[5,6], Anna Ghazaryan[4], Paolo Maria Rossini[2], Maria Maddalena Filippi[4], Franca Tecchio[1,6]
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3259 Interaction between Cerebellar Lesion Size and Cerebellar Atrophy is related to Processing Speed
Alyssa Ailion[1], Tricia King[1], Liya Wang[2], Michelle Fox[1], Bruce Crosson[2], Hui Mao[3]
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3261 MRI clinical correlations suggest impaired midbrain nerve conduction in Chronic Fatigue Syndrome
Leighton BARNDEN[1,2], Benjamin Crouch[3], Richard Kwiatek[4], Richard Burnet[3], Peter DelFante[5]
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3262 Determining microstructural vestibulocochlear properties in patients with vestibular schwannomas
Brendan Behan[1], David Qixiang Chen[1], Mojgan Hodaie[1]
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3263 Cognition-related Brain Activity Differentiates Mild Traumatic Brain Injury and PTSD in Veterans
Lucas Broster[1], Walter High[2,3], Shonna Jenkins[2,4], Robert Lipsky[5], Yang Jiang[6]
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3264 Regional Variations of White Matter Diffusion Abnormalities in Fetal Alcohol Spectrum Disorders
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3265 Investigating Resting State Functional Connectivity in Amyotrophic Lateral Sclerosis
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3266 Adaptation deficit of auditory N100 in patients with fibromyalgia
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3267 Functional and structural balances of homologous sensorimotor regions in multiple sclerosis fatigue

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3268 Neuronal correlates of psychiatric and cognitive symptoms in early Motor Neurone Disease

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3269 Impact of Timing and Dose of Prenatal Alcohol Exposure on Subcortical Brain Volumes in Children

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3270 Spinal cord atrophy: an MRI tool to investigate the selectivity of muscle weakness in SMA

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3271 The ENIGMA-HIV working group: Association of CD4 with subcortical volume in HIV-positive adults

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3272 Progressive atrophy, prediction and potential endpoints for trials in acute spinal cord injury

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3273 Prenatal alcohol exposure and relationships between brain volume, income, and maternal education
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3274 Hereditary diffuse leukoencephalopathy with spheroids: volumetry compared to MS and healthy controls
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3275 Cerebro-Cerebellar Dysfunction and Dysconnectivity Underlying Cognition in Friedreich Ataxia
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3276 Chronic neuropathic facial pain patients show increased fornix variability and fractional anisotropy
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3277 Abnormal reduction in choline levels from 5 to 7 years in HIV-infected children with delayed ART
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3278 MRI Texture Analysis Reveals Changes in Brain in Amyotrophic Lateral Sclerosis
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3279 Fractal dimension measurement indicates deterioration of brain white matter integrity in MS
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3280 Functional connectivity of the sensorimotor cortex relates to clinical motor disability in MS
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3281 Gray matter changes in children with copy number variation of the Williams syndrome genetic region
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3282 Posterior cingulate connectivity is increased in adults with Down syndrome
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3283 Abnormal Functional brain networks in Clinically Isolated Syndrome and Multiple Sclerosis
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3284 Cortical correlates of cognitive impairment in multiple sclerosis by T2* mapping at 7 Tesla MRI
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3285 Increased Gray Matter Volume of Emotional Circuit in Children without Parental Care
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3286 Evidence that structural differences in amygdala & insula in migraine emerge as early as adolescence
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3287 Using Support Vector Machine Classification of MR images as a Biological Marker of Preterm Birth
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3288 Clinical Application of Resting State Motor Networks in Patients with Intra-axial Lesions
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3289 Developmental voice-recognition impairments: Neural mechanisms
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3290 An anatomical connectivity substrate for disease spread in amyotrophic lateral sclerosis
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3291 Specific brain degeneration with MRI volumetry and DTI can predict the prognosis of ALS
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3292 Regional subcortical volume and cortical thickness differences in migraine with aura
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3293 Voxel-wise Whole Brain Analysis of High Blood Lead Levels Affecting R2* Values in Children
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3294 Detecting High Blood Lead Level Effects in Pediatric Brains with Whole Brain DTI
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3295 Diffusion Tensor Imaging, Cortical Thickness and Brain Volume in Prenatal Alcohol Exposure
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3296 Bout-associated intrinsic functional connectivity changes in patients with cluster headache
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3297 Abnormalities of cortical thickness and white matter integrity in burning mouth syndrome
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3298 Evaluating Iron Deposition in Multiple Sclerosis with Susceptibility Contrast Imaging
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3299 Functional Motor Network and Its Structural Changes Related to Motor Behaviour in Multiple Sclerosis
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3300 Cortical Thickness Differences in Prenatal Alcohol Exposure Evaluated with CIVET and FreeSurfer
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Disorders of the Nervous System

Eating Disorders

3301 Increased Insula White Matter Connectivity after Recovery from Anorexia Nervosa
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3302 Default mode network in Anorexia nervosa
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3303 Bariatric surgery and the visual perception of foods- an fMRI study
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3304 Effects of a multicomponent behavioral intervention on gray matter volumes in obese adolescents
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3305 Alterations of resting-state default mode and salience network activity in overweight children
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3306 Brain abnormalities in adolescents with anorexia nervosa: new findings from multivariate analysis
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Disorders of the Nervous System

Epilepsy

3307 Doughnut Method: Automated lesion detection in paediatric epilepsy using relative cortical thickness

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3308 Simultaneous EEG-fMRI of cerebral network activity preceding absence seizures

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3309 Resting-state functional connectivity alterations in patients with Newly Diagnosed Epilepsy

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3310 Widespread positive and negative BOLD in bi-temporal epilepsy studied with intracranial EEG-fMRI

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3311 MRI Phenotyping of hippocampal subfield pathology in temporal lobe epilepsy

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3312 Memory encoding in Juvenile Myoclonic Epilepsy: an fMRI study

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3313 Inter- and Intra-networks connectivity in left and right temporal lobe epilepsy

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3314 Multi-delay Arterial Spin Labeling Perfusion MRI in Patients with Idiopathic Generalized Epilepsy

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3315 EEG resting-state directed connectivity in temporal lobe epilepsy vs healthy controls

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3316 Longitudinal VBM shows abnormal grey matter growth in Childhood Absence Epilepsy

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3317 Enhanced dysfunctional wiring between hippocampus and thalamus in medial temporal lobe epilepsy
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3318 Voxel-Based Morphometry can distinguish temporal epilepsy patients with good vs poor seizure outcome
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3319 Mapping the convergent temporal epileptic network in left and right temporal lobe epilepsy
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3320 Small piece, large effect - Temporal lesionectomy may lead to hippocampal atrophy
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3321 Use of Arterial Spin Labeling MRI in Evaluation of Patients with Epilepsy: Comparison with EEG
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3322 Language deficits and changes in effort related brain activation in young adults with focal epilepsy
Helena Gauffin[1], Helene van Ettinger Veenstra[2], Thomas Karlsson[2], Anne-Marie Landtblom[1], Maria Engström[2]
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3323 Combining metabolic and inhibitory network for the left temporal lobe epilepsy: A PET study
Jarang Hahm[1], Hongyoon Choi[1], Seunggyun Ha[1], Ho-Young Lee[2], Hyekyoung Lee[1], Sang-Kun Lee[3], Hyejin Kang[1,4], Dong Soo Lee[1]
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3324 Temporal Lobe Epilepsy Diminishes Thalamocortical Connectivity in Ictal and Nonictal Hemispheres
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3325 Strong intrinsic functional connectivity of epileptic networks independent of scalp interictal epi
Giannina Rita Iannotti[1], Francesca Pittau[2], Frédéric Grouiller[3], Maria Centeno[4], Eugenio Abela[5], Margitta Seeck[2], Roland Wiest[6], David Carmichael[7], Christoph Michel[1], Serge Vulliemoz[2]
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3326 Pre-ictal & ictal pathological High Frequency Oscillations (HFOs) in focal epilepsy: an MEG study
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3327 Simultaneous Recording of intracerebral stereotaxic EEG, scalp EEG and MEG in epilepsy
Badier Jean-Michel[1], Anne-Sophie Dubarry[2], Martine GAVARET[3], Agnès Trebuchon[4], Romain Carron[5], Jean Régis[6], Patrick Chauvel[4], Fabrice Bartolomei[4], Christian Bénar[7]
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3328 Usefulness of source localizations with gamma band during ictal state: an MEG study
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3329 Functional Connectome before and following Temporal Lobectomy in Mesial Temporal Lobe Epilepsy
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3330 Automated Localization of the Seizure focus using Interictal Intracranial EEG
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3331 Hippocampal connectivity in the theta frequency band is related to memory dysfunction in mesial temp
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3332 Postoperative seizures and thalamotemporal tract abnormalities in temporal lobe epilepsy
Simon Keller[1], Mark Richardson[2], Jan-Christoph Schoene-Bake[3], Jonathan O'Muircheartaigh[2], Samia Elkommos[1], Barbara Kreilkamp[1], Anthony Marson[1], Christian Elger[4], Bernd Weber[5]
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3333 Cortical connectivity abnormalities in epilepsy: relationship with surgical outcome
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3334 Individual BOLD activations and DC shifts precede spike-wave discharges in generalized epilepsies
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3335 Abnormalities in Structural Connectivity Related to Age and Cognitive Abilities in Rolandic Epilepsy
Lei Li[1], Du Lei[1], Fenglai Xiao[2], Dong Zhou[2], Xinyu Hu[1], Huawei Zhang[1], Xueling Suo[1], Fuqin Chen[1], Guangxiang Chen[1], Xiaoqi Huang[1], Qiyong Gong[1]
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3336 Intrinsic Brain Activities a Diagnostic Biomarker in Rolandic Epilepsy
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3337 Multicontrast MRI Analysis of Gray and White Matter Pathology in Temporal Lobe Epilepsy
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3338 Longitudinal Cortical Changes with Motor Rehabilitation in Hemispherectomy Patients
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3339 Concordance rate between Wada and fMRI tests for visual memory in refractory temporal lobe epilepsy
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3340 Evidence for Complex Extratemporal Atrophy Pattern in TLE with Secondarily Generalized Seizures
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3341 Brain Network Architecture is Associated with Global Intelligence in Pediatric Epilepsy
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3342 Multivariate Pattern Analysis Classifies Abnormal Regional Activity in Extratemporal Focal Epilepsy
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3343 EEG-fMRI: generalised spike wave networks in newly diagnosed-drug naïve absence epilepsy children
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3344 The temporal instability of resting state network connectivity in intractable epilepsy
Lucy Robinson[1], Gaelle Doucet[2], Paul Barnett[2], Ashwini Sharan[3], Michael Sperling[3], Joseph Tracy[2]
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3345 The effect of interictal activity on brain networks in a natural stimulus in children with epilepsy
Elhum Shamshiri[1], Maria Centeno[1], Tim Tierney[1], Kelly St Pier[2], Ronit Pressler[2], Suejen Perani[1,3], J Helen Cross[2,1], David Carmichael[1]
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3346 The propagation of absence seizures through specific frequency bands of BOLD oscillations
Xiaopeng Song[1], Ji Li[2], Yijun Liu[2], Zhiqiang Zhang[3], Guangming Lu[4]
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3347 Convergent Lateralization of Functional Connectivity in Mesial Temporal Lobe Epilepsy
Longfei Su[1], Jie An[2], Rongchun Wu[3], Shijun Qiu[4], Dewen Hu[5]
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3348 BOLD signatures of Intrinsic Network Recruitment during Ictal and Interictal Epileptic Activity
Louis André van Graan[1], Lajos Rudolf Kozák[2], Umair Chaudhary[3], Ádám Szabó[4], Louis Lemieux[3]
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3349 Functional Connectivity Helps to Localize the Ictal Onset Zone from Ictal Scalp EEG
Pieter van Mierlo[1], Ana Coito[2], Gregor Strobbe[1], Gwénael Birot[2], Willeke Staljanssens[1], Margitta Seeck[3], Christoph Michel[2], Serge Vulliemoz[3]
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3350 Potential brain language reorganization in a boy with refractory epilepsy; fNIRS-EEG and fMRI study
Phetsamone Vannasing[1]
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3351 Timing and Laterality of Piriform Cortex activation in Focal versus Generalized Epilepsy
David Vaughan[1,2], Aaron Warren[1,3], Patrick Carney[1,2], David Abbott[1,3], John Archer[3,2,1], Graeme Jackson[1,2,3]
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3352 Peri-ictal Local Connectivity Changes in Focal Epilepsy using Dynamic Regional Homogeneity Analysis
Jennifer Walz[1], Mangor Pedersen[2], Amir Omidvarnia[1], Graeme Jackson[1]
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3353 Ascertaining atypical individual patterns from group mental rotation networks in epileptic children
Lynne Williams[1], Hong Cheol Kim[2], Kevin Fitzpatrick[2], Derek Beaton[3], Hervé Abdi[4], Bruce Bjornson[5]
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3354 ICA Connectivity Localization of Ictal Focus
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3355 Dynamic functional connectivity of epileptic networks in children with tuberous sclerosis complex
Annette Ye[1,2], Simeon Wong[2], Ayako Ochi[3], Hiroshi Otsubo[3], Sam Doesburg[2]
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3356 Analysis of Absence Seizure Generation Using Brain Function Network
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3357 Gamma-Band Neural Synchronization is Associated with Motor Difficulties in Childhood Epilepsy
Mingjun Zhang[1,2], Elizabeth Pang[3,4], Mary Lou Smith[1,3,4], Sam Doesburg[1,2,3,5]
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Disorders of the Nervous System

Medical illness with CNS impact (e.g. chemotherapy, diabetes, hypertension)

3358* Integrity of DLPF connections and Association with Executive Function in Childhood ALL, (O-TH1)
Wilburn Reddick[1], John Glass[1], Heather Conklin[2], Yimei Li[3], Qing Ji[1], Lisa Jacola[2], Jennifer Pryweller[1], Ching-Hon Pui[4], Sima Jeha[4]
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3359* Brain response to a working memory intervention in survivors of childhood cancer, (O-M3)
Matthew Scoggins[1], Heather Conklin[1], Jason Ashford[1], Kellie Clark[1], Melissa Jones[1], Ping Zou[1], Robert Ogg[1]
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3360 Reproducibility of fMRI Activations Associated With Bladder Filling: Implications For Trial Designs
AmanPreet Badhwar[1], Genevieve Albouy[1], Julien Doyon[1], Richard Hoge[2], Cara Tannenbaum[1]
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3361 Does congenital visual impairment affect the integrity of white matter structures?
Joe Bathelt[1], Suresh Pujar[2], Jamie Kawadler[2], Richard Chin[3], Michelle de Haan[2], Alison Salt[4], Naomi Dale[4], Chris Clark[2]
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3362 Structural and functional brain alterations in rheumatoid arthritis
Malin Bjornsdotter[1], Helena Backlund-Wasling[2], Maria Bokarewa[2], Lovisa Leifsdottir[2], Håkan Olausson[3], Sofia Töyrä Silverswärd[2]
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3363 High-resolution shape analysis reveals subcortical morphometry and lymphocyte relationships in HIV+
Christopher Ching[1], Boris Gutman[2], Talia Nir[2], Xue Hua[2], Neda Jahanshad[2], Jaroslaw Harezlak[3], David Tate[4], Giovanni Schifitto[5], Assawin Gongvatana[6], Jianhui Zhong[7], Tong Zhu[8], Michael Taylor[9], Thomas Campbell[10], Eric Daar[11], Jeffry Alger[12], Elyse Singer[13], Ron Cohen[14], Bradford Navia[15], Paul Thompson[2]
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3364 Diffuse T1-MRI White Matter Volume Decrease in Patients with Sickle Cell Disease
So Young Choi[1], Adam Bush[2], Matthew Borzage[2], Anand Joshi[3], Julie Coloigner[4], Vidya Rajagopalan[4], Natasha Lepore[4], Thomas Coates[5], John Wood[6]
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3365 Gray and white matter alteration in patients with metabolic syndrome
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3366 Anatomical Brain Connections Based on Body Mass Index in Lean, Overweight, and Obese Individuals
Arpana Gupta[1], Davis Woodworth[2], Jennifer Labus[3], Claudia Sanmiguel[4], Kirsten Tillisch[4], Benjamin Ellingson[5], Emeran Mayer[6]
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3367 Altered Small-world Functional Networks in Type 2 Diabetes using fMRI
Ying Hao[1,2], Jue Zhang[3], Vera Novak[2]
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3368 Altered Integration of Structural Covariance Networks in Young Children with Type 1 Diabetes
SM Hadi Hosseini[1], Paul Mazaika[1], Nelly Mauras[2], Bruce Buckingham[3], Stuart Weinzimer[4], Eva Tsalikian[5], Neil White[6], Allan Reiss[1], for the Diabetes Research in Children Network (DirectNet)[7]
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3369 The neurobiological correlates of improved inhibitory control in successful weight loss
Kelsey Hudson[1], Kathryn Olds[1], Doris Ogden[1], Mitchell Snowe[1], Jean Harvey[1], Hugh Garavan[1]
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3370 Peripheral Inflammatory Markers and Age-related Brain Atrophy: Is There a Diagnostic Utility?
Jiyang Jiang[1], Julian Trollor[2], John Crawford[3], Anbupalam Thalamuthu[4], Tao Liu[5], David Brown[6], Bernhard Baune[7], Perminder Sachdev[8], Wei Wen[4]
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3371 Recovery of thalamic microstructural damage after Shiga toxin 2-associated hemolytic–uremic syndrome
Julia Krämer[1], Michael Deppe[2], Kerstin Göbel[1], Karsten Tabelow[3], Heinz Wiendl[1], Sven Meuth[1]
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3372 Neural Correlates of Working Memory Training for Adult Polyglucosan Body Disease: A Case Report
Kristin Lee[1], Thomas Ernst[1], Gro Løhaugen[2,3], Xin Zhang[1], Linda Chang[1]
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3373 Altered white matter microstructure in adolescents with type-2 diabetes
Gregory Lee[1], Cassandra Brady[2], Larry Dolan[2], Jennifer Vannest[2], Scott Holland[3], Amy Shah[2]
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3374 Increased cortical thickness in patients with nasopharyngeal carcinoma after radiotherapy
Jiabao Lin[1], Xiaofei Lv[2], Meng Li[3], Lizhi Liu[2], Meiqi Niu[1], Ling Weng[1], Xiaojin Liu[1], Ling Zhao[1], Li Li[2], Ruiwang Huang[1]
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3375 Disrupted Neural Activity in Patients with Recent-onset, Unilateral Vascular Pulsatile Tinnitus
Han Lv[1], Wang Zhenchang[1], Liu Zhaohui[2], Fei Yan[2], Pengfei Zhao[1], Ting Li[2], Cheng Dong[1]
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3376 Human Biomotion Processing Differences between Deaf and Normal Hearing Adults
Alexandria Muise-Hennessey[1], Nicole White[2], Antoine Tremblay[1,3], Sean McWhinney[1], Hazlin Zaini[4], Aaron Newman[1]
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3377 Reduced brain volumes and gyrification in 7 year old HIV-infected children compared to controls
Emmanuel Nwosu[1], Frances Robertson[1], Martha Holmes[1], Kenneth Mbugua[1], Mark Cotton[2], Els Dobbels[3], Francesca Little[1], Andre J.W. van der Kouwe[4], Barabara Laughton[5], Ernesta M. Meintjes[6]
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3378 Frontostriatal Integrity and Association with Executive Function in Survivors of Childhood ALL
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3379 Neural plasticity of the thalamic volume 6 months after surgical operations in patients with breast
Chiho Sato[1], Atsushi Sekiguchi[1], Izumi Matsudaira[1], Yuka Kotozaki[1], Rui Nouchi[1], Hikaru Takeuchi[1], Yasuyuki Taki[1], Masaaki Kawai[2], Hiroshi Tada[1], Takanori Ishida[1], Ryuta Kawashima[1], Noriaki Ohuchi[1]
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3380 White matter microstructure and structural topology differences in neonatal congenital heart disease
Vincent Schmithorst[1], Vincent Lee[1], Lisa Paquette[2], Shaheda Suleiman[2], Jodie Votava-Smith[2], Vidya Rajagopalan[3], Ashok Panigrahy[4]
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3381 Widespread microstructural white matter damage to network links in the brains of COPD patients
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3382 Topological Reorganization of Functional Connectivity at Rest in Tumor Patients
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3383 Aberrant Oscillatory Dynamics Underlie Working Memory Operations in the Aging HIV Brain
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3384 The role of depression and anxiety in rACC functional connectivity in irritable bowel syndrome
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3385 Evidence for distinct irritable bowel syndrome subtypes when comparing rACC functional connectivity
Suzanne Witt[1], Olga Bednarska[2,3], Sofie Tapper[4,5,1], Maria Engström[5,1], Peter Lundberg[4,5,1], Susanna Walter[2,3,1]
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Disorders of the Nervous System

Obsessive-Compulsive Disorder and Tourette Syndrome

3386 White Matter Changes Across the Adult Lifespan in Obsessive Compulsive Disorder
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3387 Discontinuous neural changes and symptom remission in psychotherapy in obsessive-compulsive disorder
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3388 Developmental Meta-analyses of Structural Neural Correlates in Obsessive-Compulsive Disorder
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3389 Reduced connectivity in body dysmorphic disorder and anorexia nervosa while viewing fearful faces
Nathan Hutcheson[1], Teena Moody[1], Sarah Madsen[1], Sahib Khalsa[1], Jamie Feusner[1]
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3390 Connectivity predicts relapse after cognitive-behavioral therapy in obsessive-compulsive disorder
Teena Moody[1], T Lai[1], Courtney Sheen[1], Jesse Brown[2], Giulia Salgari[1], Jennifer Levitt[1], Jeffry Alger[1], Joseph O'Neill[1], Jamie Feusner[1]
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3391 Neural Correlates of Risk Aversion in Obsessive-Compulsive Disorder
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3392 Functional and structural connectivity in patients with obsessive-compulsive disorder
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3393 Resting state effective connectivity in anterior cingulate cortex and relationship to response inhib
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3394 Compromised Structural Connectivity Network in Patients with Obsessive-Compulsive Disorder
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3395 Atlas-based DTI analysis using LDDMM in Early Tourette Syndrome Children
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3396 Abnormal small-world brain network in obsessive-compulsive disorder
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3397 Decreased Thalamic Glutamate Level Predicts Functional Connectivity in Obsessive-Compulsive Disorder
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Genetics

Genetic Association Studies

3398* Identification of common and low-frequency genetic variants associated with gyrification in humans, (O-W4)
Thomas Mühleisen[1,2,3], Alexander Teumer[4], Katharina Wittfeld[5], Christiane Jockwitz[1], Stefan Herms[6,3], Per Hoffmann[1,6,2,3], Markus Nöthen[2,3], Svenja Caspers[1], Susanne Moebus[7], Georg Homuth[8], Katrin Hegenscheid[9], Karl Zilles[1,10,11], Katrin Amunts[1,10,12], Sven Cichon[1,6,2,3], Hans Jörgen Grabe[13]
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3399 Alzheimer's disease risk gene TREM2 and lower synchronicity of fMRI signal in young adults
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3400 APOE-E4 affects hippocampal and posterior cingulate activity in MCI subjects during non-memory task
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3401 Smoking and the rs16969968 SNP effects on adolescent grey matter
Bader Chaarani[1], Scott Mackey[1], Kees-Jan Kan[1], Catherine Orr[1], Philip Spechler[1], Stephen Higgins[1], Elliot Stein[2], Robert Althoff[1], Hugh Garavan[1], IMAGEN Consortium[3]
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3402 Evidence for the Contribution of NOS1 Gene Polymorphism (rs6490121) to the cognitive function
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3403 Oxidative stress regulating genetic variant linked to protective effect on elderly brain volumes
Christopher Ching[1], Derrek Hibar[2], Neda Jahanshad[2], Xue Hua[2], Katie McMahon[3], Greig de Zubicaray[3], Margaret Wright[4], Paul Thompson[2]
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3404 RPS6KA2 gene is associated with attention: A preliminary imaging genetic study
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3405 The Effect of APOE4 on Default Mode Network Architecture in a Large Cohort of Young Adults
Theresa Harrison[1], Jesse Brown[2], Annchen Knodt[3], Emily Drabant Conley[4], Susan Bookheimer[1], Ahmad Hariri[3]
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3406 Fast Voxelwise Genome Wide Association Analysis of Large-scale Imaging Genetic Data
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3407 Meta-analyzing genome-wide associations with white matter microstructure – the ENIGMA-DTI group
Neda Jahanshad[1], Peter Kochunov[2], Nicola Armstrong[3], Mark Bastin[4], Carrie Bearden[5], Rachel Brouwer[6], Dara Cannon[7], Xavier Caseras[8], Aiden Corvin[9], Costa Rica- Colombia Bipolar Consortium[10], Benedicto Crespo-Facorro[11], Ian Deary[4], Anouk den Braber[12], Greig de Zubicaray[13], Gary Donohoe[14], Scott Fears[15], Barbara Franke[16], Janice Fullerton[17], Ahmad Hariri[18], Ryota Hashimoto[19], Derrek Hibar[1], Hilleke Hulshoff Pol[20], Sinead Kelly[21], Rebecca Knickmeyer[22], Annchen Knodt[18], Stephanie Le Hellard[23], Herve Lemaitre[24], René Mandl[25], Philip Mitchell[26], Colm McDonald[7], Katie McMahon[13], Andrew MCINTOSH[4], Thomas Nichols[27], Lars Nyberg[28], Gloria Roberts[26], Perminder Sachdev[29], Gunter Schumann[30], Emma Sprooten[31], Elliot Stein[32], Philip Szeszko[33], Diana Tordesillas-Gutierrez[11], Kimm van Hulzen[16], Dennis van 't Ent[34], Yihong Yang[35], Joanna Wardlaw[36], Wei Wen[37], Marcel Zwiers[38], The ADNI[39], Asta K. Håberg[40], Margaret Wright[41], Paul Thompson[1], David Glahn[42]
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3408 The Effect of BDNF Val66Met Polymorphism on Modular Organization of Brain Network

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3409 PBRM1 polymorphism associated with gray and white matter and mania-like symptoms in adolescents

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3410 Age-related Interaction of BDNF Val66Met Variants and Cortical Morphology in Non-demented Adults

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3411 DNA Methylation Associated with Brain Volume in Healthy Individuals and Schizophrenia Patients

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3412 Molecular genetic association between dopamine D2 receptor genotype and the structural connectome

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3413 Brain structural abnormality in relation to CTG expansion in myotonic dystrophy type 1

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3414 Genetic variant linked to GAD2 gene transcription level modulates motivated interference processing
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3415 Genetic pleiotropy between subcortical brain volumes and MS risk variants: a preliminary analysis
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3416 Evaluating Overlap between Genetic Influences on Schizophrenia Risk and Subcortical Brain Volumes
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3417 The Genetic Basis of Fairness Preference: A Twin fMRI Study
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3418 Polygenic contributions of ENIGMA2 hippocampal SNPs in 8,835 epilepsy patients and 29,037 controls
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Genetics

Genetic Modeling and Analysis Methods

3419 Accelerated Bivariate Heritability Inference Using the Endophenotype Ranking Value
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3420 Human cortical gene expression matches the properties of functional networks:a hierarchical approach
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3421 Accelerated Permutation Inference for Pedigree Heritability Inference with Family-Based Neuroimaging
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3422 Massively Expedited Genome-wide Heritability Analysis (MEGHA)

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3423 Comparison of Mathematical Models of Heritability of Cortical Thickness

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3424 Voxelwise Meta Analysis for Multi-Site Brain Mapping

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3425 Heritability of Fractional Anisotropy: A Comparison of Human Connectome Project and ENIGMA-DTI Data

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3426 Hippocampal volume was induced by regulation of Cisd2 gene expression in mice
Shen Pei Lin[1], Yi-Fan Chen[2], Chun-Hung Yeh[3], Chun-Yi Zac Lo[3], Ting-Fen Tsai[4], Chen Chang[5], Ching-Po Lin[3,1]
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3427 Genome-wide linkage of schizophrenia-related grey matter component to 12q24
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3428 Investigation into the heritabilities of some HCP traits
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3429 Polygenic Risk Profile Scores for Alzheimer's Disease Predict Hippocampal Function
Ena Xiao[1], Qiang Chen[2], Aaron Goldman[1], Kaitlin Healy[3], Brad Zoltick[4], Saumitra Das[5], Karen Berman[5], Daniel Weinberger[1], Venkata Mattay[1]
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3430 Genetic Analysis of Brain Structural Connectivity via DICCCOL Models in 522 Twins
Dajiang Zhu[1], Liang Zhan[2], Joshua Faskowitz[1], Madelaine Daianu[1], Neda Jahanshad[1], Greig de Zubicaray[3], Katie McMahon[3], Nicholas Martin[4], Margaret Wright[4], Paul Thompson[1]
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Genetics

Genetics Other

3431 Hemispheric differences in the heritability of cortical thickness and cortical surface area
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3432 Effects of Psychiatric Risk Genes on Chinese Aging Brain and Cognition
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3433 Differences in diffusion metrics of reward valuation system and limbic network between COMT Val/Val
Woo-Kyoung Yoo[1], Hyun Jung Ahn[2], So-Yeon Jang[3], Ah Young Jun[1], Kwang-Ik Jung[1], Hyoung Seop Kim[4], Unjoo Lee[5], Suk-Hoon Ohn[1]
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Genetics

Neurogenetic Syndromes

3434 Neurophysiological investigation of congenital mirror movements in DCC mutation carriers
Vincent Beaulé[1,2], Sara Tremblay[1,2], Daniel Vosberg[3], Amanda Chalupa[3], Louis-Philippe Lafleur[1,2], Dominique Allard[3], Franco Lepore[4], Maryse Lassonde[1], Myriam Srour[3], Chawki Benkelfat[3], Alain Dagher[3], Ridha Joober[3], Cecilia Flores[3], Guy Rouleau[3], Marco Leyton[3], Hugo Théoret[1,2]
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3435 Changes in Skull Shape and Brain Gyrification in Children with Copy Number Variation of 7q11.23
Michael Gregory[1], J. Kippenhan[1], Ranjani Prabhakaran[1], Daniel Eisenberg[1], Lisa Yankowitz[1], Tiffany Nash[1], Crystal Insel[1], Katherine Roe[1], Melanie Sottile[1], Philip Kohn[1], Carolyn Mervis[2], Karen Berman[1]
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3436 MRI Morphometry Reveals Caudate Subnuclear Damage Prior to Manifestation of Huntington disease
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3437 Aberrant Functional Connectivity of Insula and Temporal Lobe in Children with 16p11.2 Deletions
Julia Owen[1], Yi-Shin Chang[1], Eva Palacios[1], Abid Qureshi[2], Nicholas Pojman[1], Tony Thieu[1], Jeffrey Berman[3], Timothy Roberts[3], Elysa Marco[1], Randy Buckner[2], Srikantan Nagarajan[1], Elliott Sherr[1], Pratik Mukherjee[1]
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3438 Volume and Shape of Subcortical Structures in Human Sex Chromosome Aneuploidies
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3439 Genomic mapping of autism neuroimaging endophenotypes
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Genetics

Transcriptomics

3440* Differential expression of SLC6A4 and SLC6A2 in cytoarchitectonic areas of the human frontal pole, (O-W4)
Sebastian Bludau[1], Thomas Mühleisen[1], Simon Eickhoff[2], Hartmut Mohlberg[1], Katrin Amunts[1]
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3441 Lateralization of Gene Expression in Human Language Cortex
Clyde Francks[1], Guy Karlebach[1]
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3442 Comprehensive Gene Expression Profiles in the Brain of the Common Marmoset
Misato Seki[1], Mariko Tsuchiya[1], Sumitaka Hase[1], Takashi Inoue[2], Hideyuki Okano[3], Erika Sasaki[2], Yasubumi Sakakibara[1]
[1]Keio University, Yokohama, Japan, [2]Central Institute for Experimental Animals, Kawasaki, Japan, [3]Keio University, School of Medicine, Tokyo, Japan

Higher Cognitive Functions

Executive Function

3443* Complementary roles of cortical oscillations in automatic and controlled processing, (O-TH1)
Silvia Isabella[1,2], Paul Ferrari[1,3], Cecilia Jobst[1], J. Allan Cheyne[4], Douglas Cheyne[1,2]
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3444* Multi-voxel pattern analysis reveals translation of instruction knowledge into task sets, (O-TH1)
Paul Muhle-Karbe[1], Wouter De Baene[2], John Duncan[3], Marcel Brass[2]
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3445 Causal signaling from the right anterior insula to inferior frontal cortex during inhibitory control
Weidong Cai[1], Tianwen Chen[2], Srikanth Ryali[3], Chiang-shan Li[4], Vinod Menon[5]
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3446 The Cognitive Neuroscience of Preparatory Processes: Controlling for Execution in Executive Function
Jose Ceballos[1], Andrea Stocco[1], Theresa Becker[2], Brianna Yamasaki[1], Chantel Prat[1]
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3447 Identifying the Neural Substrates of the Ambiguity-Humor Interaction: An fMRI Study
Yu-Chen Chan[1]
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3448 Distinct brain networks for components of executive function
Chunhui Chen[1], Qi Dong[1], Gui Xue[1]
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3449 Identify the distinct neural mechanisms of 'emotion reversal' jokes: An fMRI study
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3450 Neurobehavioral evidence for cognitive enhancement in cocaine dependent individuals
Dongil Chung[1,2], Richard De La Garza[3], Thomas Newton[4], Katherine McCurry[1,2], Brooks King-Casas[1,2,5,6], Pearl Chiu[1,2,5,6]
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3451 Relationship between cognitive flexibility and prefrontal cortical functional connectivity
Dina Dajani[1], Lucina Uddin[1]
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3452 Task-dependent changes in mirror-image sensitivity in the human ventral and dorsal visual streams
THUY DINH[1], Kimihiro Nakamura[1], Tania Fernandes[2], Hidenao Fukuyama[1], Regine Kolinsky[2]
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3453 Facial Motor-respiratory Coordination Activates Brain Default-mode Network Regions
Seulgi Eun[1], Ramy Sayed[1], Abdalla Mohammed[1], Jeungchan Lee[2], Eunyoung Lee[3], Hwajin Lee[4], Sanghoon Lee[4], Seungmin Lee[4], Wooseok Choi[4], Kyungmo Park[1]
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3454 Functional networks for response inhibition modulated by reward sensitivity
Paola Fuentes-Claramonte[1], César Ávila[1], Aina Rodríguez-Pujadas[1], Victor Costumero[1], Noelia Ventura-Campos[1], Juan Bustamante[2], Patricia Rosell-Negre[1], Alfonso Barrós-Loscertales[1]
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3455 Brain Dynamics of Response Inhibition Revealed by Spatiotemporal Analysis of ERP
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3456 Single-trial classification of stopping performance from EEG connectivity
René Huster[1], Signe Schneider[2], Christina Lavallee[1], Stefanie Enriquez-Geppert[1], Christoph Herrmann[1]
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3457 Functional MRI of the Trail Making Test with Improved Ecological Validity
Mahta Karimpoor[1], Fred Tam[2], Nathan Churchill[3], Tom Schweizer[4], Simon Graham[5]
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3458 Paradoxical effects of a 7-day meditation retreat in meditators and non-meditators
Elisa Kozasa[1], Joana Balardin[2], João Sato[3], Khallil Chaim[1], Shirley Lacerda[1], Luiz Eugênio Mello[4], João Radvany[1], Edson Amaro Junior[5]
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3459 Interaction between emotion and higher cognition in subclinical schizotypy: an fMRI investigation
Elisa Kreienkamp[1], Frank Schneider[2], Ute Habel[3], Nils Kohn[4], Katharina Pauly[2]
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3460 A Neural System for Human Learning
Olave Krigolson[1]
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3461 Where Is the Bottleneck in Human Multitasking? - Evidence from Neuroimaging Meta-Analyses
Robert Langner[1], Britta Worringer[2], Iring Koch[2], Simon Eickhoff[1], Claudia Eickhoff[2], Ferdinand Binkofski[2]
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3462 Arousal, attention, brain state to behaviour: The effect of TMS to the frontal cortex
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3463 Fluid Intelligence and Neural Mechanisms of Conflict Adaptation
Tongran Liu[1], Tong Xiao[2]
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3464 It is hard to hold your horses when drunk: Oscillatory dynamics of response inhibition
Ksenija Marinkovic[1,2], Sanja Kovacevic[2], Burke Rosen[1]
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3465 Oscillatory dynamics of stimulus- vs. response-conflict under alcohol: anatomically-constrained MEG
Ksenija Marinkovic[1,2], Sanja Kovacevic[2], Lauren Beaton[1], Sheeva Azma[3]
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3466 Functional Connectivity During Emotion Regulation Predicts Morphometry in the Orbitofrontal Cortex
Farah Naaz[1], Brendan Depue[1]
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3467 Hypertension and the brain - preliminary results from an fMRI study
Patrycja Naumczyk[1], Agnieszka Sabisz[1], Marta Witkowska[1], Krzysztof Jodzio[1], Dariusz Gąsecki[2], Edyta Szurowska[2], Krzysztof Narkiewicz[2]
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3468 Evidence for a Hierarchical Functional Organization of the Lateral Prefrontal Cortex
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3469 Separable roles for performance feedback in the cingulo-opercular task control network
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3470 How Goal-Irrelevant Rewards Influence Neural Systems Underlying Voluntary Task Selection
Joseph Orr[1], Harry Smolker[1], Sharoda Worby-Selim[1], Marie Banich[2]
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3471 Exercise training effects on a flanker task: fMRI, behavior and blood lactate profile curves
Max Pensel[1], Marcel Daamen[1], Lukas Scheef[1], Helge Knigge[2], Sandra Rojas Vega[2], Ahmed Othman[1], Jason Martin[1], Hans Schild[3], Heiko Strüder[2], Henning Boecker[1]
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3472 A cerebellar role in performance monitoring: ERP and VBM evidence in cerebellar degenerative disease
Jutta Peterburs[1], Martina Rustemeier[2], Markus Thuerling[3], Sophia Goericke[4], Boris Suchan[5], Dagmar Timmann[4], Christian Bellebaum[6]
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3473 Resting State Connectivity in Children with Learning Disabilities and the Relationship to Cognition
Sue Peters[1], Jennifer Ferris[2], Jason Neva[2], Katie Wadden[3], Rachel Caulfield[1], Lara Boyd[2]
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3474 Functional connectivity at rest and individual differences in executive function: A network analysis
Andrew Reineberg[1], Marie Banich[2]
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3475 Direct comparison of neural mechanisms elicited by salient and conflicting stimuli in 260 subjects
Anja Richter[1], Sarah Wolter[1], Tobias Melcher[1,2], Esther Diekhof[1,3], Oliver Gruber[1]
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3476 Test–Retest Reliability of the fMRI Stroop Word-Color Task in Healthy Participants
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3477 Alcohol hits you when it's hard: Intoxication, task difficulty, and theta brain oscillations
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3478 How Emotional Valence Impacts Inhibition Brain Processes in Children
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3479 Default Mode Network Connectivity Predicts Reaction Time during the Tower of London Task
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3480 Spatio-temporal pattern of brain oscillations: Go/No-Go task and response hand lateralization
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3481 Increased Neural Gain Improves the Precision of Cortical Representations
Christopher Warren[1], Eran Eldar[2], Rudy van den Brink[3], Klodiana Daphne Tona[3], Robert Wilson[4], Leigh Nystrom[4], Jonathan Cohen[4], Sander Nieuwenhuis[3]
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3482 Neural Dynamics in the Parametric Go/No-Go Task of Subclinical Psychopaths
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3483 A critical role of insular cortex in the integration of top-down and bottom-up attentional control
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3484 Neural representations of cognitive control modulated by strengthened stimulus-response associations
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4463 Phonemic Similarity Effect in Inferior Frontal Cortex: An FMRI Study
Kayoko Okada[1], William Matchin[2], Gregory Hickok[3]

Higher Cognitive Functions

Reasoning and Problem Solving

3485* Investigating Associations between IQ and Functional Connectivity with Sparse Multiresponse Models, (O-TH1)

Bernard Ng[1], Martin Dresler[2], Hugh Garavan[3], Patricia Conrod[4], Arun Bokde[5], Henrik Walter[6], Herta Flor[7], Uli Bromberg[8], Christian Buechel[9], Marie-Laure Paillère Martinot[10], Tomas Paus[11], Penny Gowland[12], Vincent Frouin[13], Robert Whelan[3], Michael Smolka[14], Andreas Heinz[15], Tobias Banaschewski[7], Jürgen Gallinat[15], Jean-Luc Martinot[10], Frauke Nees[16], Gunter Schumann[17], Jean Baptiste Poline[18], Bertrand Thirion[19], Michael Greicius[20], IMAGEN Consortium[21]
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3486 Associations and Dissociations between Aesthetic, Moral, and Economic Judgments: an fMRI Study

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3487 Physics Learning Facilitates Enhanced Resting State Connectivity in Problem Solving Network

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3488 Ability-dependent growth in parietal activation and connectivity during mental arithmetic

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3489 Affective but not Holistic or Inferential Intuitions Are Related to Base Rate Neglect

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3490 Neural correlates of complex multiplication problem solving

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3491 Individual Differences in Verbal Creative Thinking are Reflected in the Precuneus

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3492 Differential prefrontal engagement during exploratory reasoning under stress

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3493 Asymmetrical Causal Representations in Order: ERP Evidence
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3494 Learning During Problem-Solving: an fMRI Study
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3495 Affective influences on internal evaluations during planning
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3496 Neural basis of creativity-modulation effect of contextual color: An fMRI study
Yuya Sakakura[1], Takayuki Nozawa[2], Ryoichi Yokoyama[2], Yukako Sasaki[2], Ryuta Kawashima[2]
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3497 Neurobiological differences in mental rotation and instrument interpretation in pilots
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3498 An illustrated heuristic prototype facilitates scientific inventive problem solving: A fMRI study
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3499 The role of right frontal cortex in early phases of problem solving, as revealed by combined EEG/MEG
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3500 Spatiotemporal dynamics of analogical reasoning in adolescents: evidence from an ERP study
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Informatics

Brain Atlases

3501* Ultrahigh Resolution 3-D Volumetric Atlas of the Human Basal Ganglia, (O-M5)
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3502 Probabilistic maps of the functional pathways on the neonatal DTI atlas
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3503 Providing a pre-surgical planning atlas for expressive and receptive language areas using fMRI
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3504 Identifying diagnostically-relevant RSFC in ventral posterior complex via genetic data mining in ASD
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3505 High-resolution surface and volume-based in vivo atlas of the serotonin system in the healthy brain
Vincent Beliveau[1,2], Melanie Ganz[1], Claus Svarer[1], Gitte Knudsen[1,2], Douglas Greve[3,4]
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3506 FMRI-guided DTI atlases of the default mode, executive control and salience networks
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3507 A gene expression signature for hub connectivity in the mouse brain
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3508 High-resolution diffusion and structural MRI brain atlas of rhesus macaques
Takuya Hayashi[1], Gary Zhang[2], Shin-ichi Urayama[3], Takayuki Ose[1], Hiroshi Watabe[4], Kayo Onoe[1], Nobuyoshi Tanki[1], Yumi Murata[5], Noriyuki Higo[5], Hirotaka Onoe[1]
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3510 Automatic Tractography-based Parcellation Pipeline (ATPP): Towards Brainnetome Atlas
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3511 The Haskins Pediatric Brain Atlas
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3512 Neonatal Brain Injury Detection in MRI: An Atlas-based Fully-Automatic Approach
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3513 Large-scale functional mapping of brain activity using a joint spatial and semantic topic model
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3514 Connectivity-based Parcellation of White Matter in IIT Human Brain Atlas using HARDI Tractography
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3515 Connectivity-based parcellation of macaque BA 46 with diffusion tensor imaging
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Informatics

Databasing and Data Sharing

3516 BIMCV: Synergy between data in population medical imaging, computer aided diagnosis and AVR
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3517 The impact of shared data in neuroimaging: the case of OpenfMRI.org
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3518 NeuroVault.org: new features and a proof of concept analysis

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3519 Developing Terminologies for the INCF Neuroimaging Data Model (NIDM)

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3520 The Three NITRC's: Software, Data and Cloud Computing for Brain Imaging Research

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3521 Standardized reporting of neuroimaging results with NIDM in SPM, FSL and AFNI

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3522 Web-based Imaging Uploader for LORIS

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3523 Application of the Neuroimaging Data Model to Represent and Exchange Primary and Derived Data

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3524 How to make brain imaging research efficient and reproducible: building software and standards

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3525 The Neuroimaging Meta-analysis Database: a data-sharing initiative for neuroimaging meta-analyses

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3526 LORIS neuroinformatics platform for Imaging Genetics

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3527 OpenBrainGraphs: Sharing Matrices for Connectomics across the Human Lifespan

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Informatics

Informatics Other

3528 Testing for Convergence between Asymmetries of Cognitive and Structural Organization within the Huma

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3529 High-Throughput neuroimaging on the Amazon cloud with CBRAIN

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3530 "mICA Toolbox": A toolbox for masked independent component analysis of functional MRI data

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3531 ChRIS: Real-time Web-based Medical Data Management, Visualization, Processing, and Sharing

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3532 Open Web Architectures for the Annotation of fMRI Papers
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3533 Cognitive control of emotion: A meta-analytic network approach to understanding emotion
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Informatics

Workflows

3534 Automatic analysis (aa): newest features for efficient multimodal neuroimaging workflows
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3535 Harnessing cloud computing for high capacity analysis of neuroimaging data from NDAR
Daniel Clark[1], Christian Haselgrove[2], David Kennedy[2], Zhizhong Liu[3], Michael Milham[1], Petros Petrosyan[4], Carinna Torgerson[3], John Van Horn[3], Cameron Craddock[1]
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3536 The Pipeline Environment: A Scalable, Distributed and Service-Oriented Neuroimaging and Genetics
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3537 NIDM-Workflow - The Evolution of Provenance in Neuroimaging
Satrajit Ghosh[1], Tibor Auer[2], Krzysztof Gorgolewski[3], Yaroslav Halchenko[4], Michael Hanke[5], Guillaume Flandin[6], Nolan Nichols[7], Russell Poldrack[8], John Van Horn[9], Daniel Marcus[10], David Keator[11]
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3538 Community Connectomics via Cloud Computing
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3539 A General Cloud Computing Framework for Medical Image Analysis, Part 2: A pipeline for structural co
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3540 Improving the workflow of real-time fMRI Neurofeedback experiments
Michael Lührs[1,2], Florian Krause[2,1], Caroline Benjamins[2,1], Sascha Brunheim[2,1], Judith Eck[2,1], Quentin Noirhomme[1,2], Mona Rosenke[2], Rainer Goebel[1,2]
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3541 Rapid automatic quality assurance and relative threshold for multi-site Neuroimaging studies
Xiaowei Song[1,2,3], Xue Wang[1], Kate Alpert[4], Lejian Huang[5], Yufen Chen[1], Lei Wang[4], Todd Parrish[1]
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3542 Robust web-based parallel-optimized minimal pre-processing and analysis pipeline for fMRI big data
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3543 GRETNA 1.1.1 and BrainNet Viewer 1.43: Graph-Theoretical Network Analysis and Visualization Toolkits
Xindi Wang[1,2], Mingrui Xia[1,2], Jinhui Wang[3,4], Zhengjia Dai[1,2], Xuhong Liao[1,2], Alan Evans[5], Yong He[1,2]
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3544 Optimal Experimental Design for Generating Reference Connectome Datasets
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3545 A General Cloud Computing Framework for Medical Image Analysis, Part 1: Implementing the System
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Lifespan Development

Imaging

3546* Predicting progression outcomes in healthy aging and Alzheimer's disease based on BrainAGE, (O-TH3)
Katja Franke[1], Christian Gaser[2]
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3547* Functional connectivity dynamics in the aging brain, (O-TH3)
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3548* Cognitive Training Modified Age-related Brain Changes in Elderly with Subjective Memory Complaints, (O-TH3)
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3549* Cerebellar gray matter reduction is a neurologic signature for physical frailty, (O-T1)
Chen-Yuan Kuo[1], Kun-Hsien Chou[2], Pei-Lin Lee[1], Wei-Ta Chen[3], Pei-Ning Wang[3], Liang-Kung Chen[4], Ching-Po Lin[5]
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3550* Impact of aging on motor control networks underlying movement selection and initiation, (O-M1)
Jochen Michely[1,2], Lukas Volz[1,3], Felix Hoffstaedter[2,4], Shivakumar Viswanathan[1,2], Simon Eickhoff[2,4], Gereon Fink[1,2], Christian Grefkes[1,2]
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3551 Effects of yoga practice on the brain of elders: a preliminary structural neuroimaging data
Rui Afonso[1], Sara Lazar[2], Joana Balardin[3], João Sato[4], Shirley Lacerda[1], Edson Amaro Junior[5], Elisa Kozasa[6]
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3552 Age Differences in Network Interaction to Regulate Distraction
Tarek Amer[1], John Anderson[1], Karen Campbell[2], Lynn Hasher[1], Cheryl Grady[1]
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3553 Hippocampal integrity in ageing brain at 73 and 76 years of age
Devasuda Anblagan[1], Maria Valdez Hernandez[1], Benjamin Aribisala[1], Natalie Royle[1], Iona Hamilton[1], David Alexander Dickie[1], Susana Maniega[1], Mark Bastin[1], Ian Deary[1], Joanna Wardlaw[1]
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3554 Age effects on cortical thickness asymmetry in the elderly
Joana Balardin[1], João Sato[1], Gilson Vieira[2], Michel Naslavsky[3], Telma Busch[3], Khallil Chaim[3], Edson Amaro Junior[2]
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3555 The Insula of Aging: INSULAR FUNCTIONAL IMAGING CONNECTIVITY IN AGING VS MILD COGNITIVE IMPAIRMENT
Nicoletta Cera[1], Franco Cilli[2], Roberto Esposito[2], Valentina Pieramico[2], Armando Tartaro[2]
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3556 Higher bodyweight is associated with lower cortical thickness in the early 60s
Nicolas Cherbuin[1], Marnie Shaw[1], Perminder Sachdev[2], Kaarin Anstey[1]
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3557 Age-related Microstructural Variation of White Matter in a Large Sample of Healthy Elders
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3558 Adult age differences in functional connectivity in the default mode network
Jessica Damoiseaux[1], Raymond Viviano[1], Peng Yuan[2], Naftali Raz[1]
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3559 Age-related modulations in the early stages of human visual cortical processing
Yulong Ding[1], Wanyi Huang[1], Lei Wang[1], Zhe Qu[1]
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3560 Age-Related Functional Connectivity Changes Found Using Sparse Connectivity Pattern Analysis
Harini Eavani[1], Meng-Kang Hsieh[1], Guray Erus[1], Susan Resnick[2], Christos Davatzikos[1]
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3561 Executive Functioning in Seniors with Fall Risk
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3562 Subcortical Shape Differences across Neurodegenerative Diseases
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3563 Functional Connectivity Changes in Healthy Aging
Stanislau Hrybouski[1], Fraser Olsen[1], Rawle Carter[1], Peter Seres[2], Nikolai Malykhin[2]
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3564 Volumetric Changes of Hippocampal Subfields over Age in a Large Cohort of Healthy Older Adults
Sebastian Huhn[1], Shahrzad Kharabian Masouleh[1], Steffi Riedel-Heller[2], Matthias Schroeter[1], Joachim Thiery[3], Markus Löffler[4], Arno Villringer[1,4,5], Veronica Witte[6,4,5]
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3565 Impact of Increased Brain Iron Concentration on Neural Activity in Younger and Older Adults
Gregoria Kalpouzos[1], Alireza Salami[1], Benjamín Garzón[1], Carmel Heiland[1], Rouslan Sitnikov[2], Lars Bäckman[1], Jonas Persson[1]
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3566 Resting-State Anticorrelations: Association with Working Memory, Aging, and Individual Differences
Joseph Keller[1], Trey Hedden[2], Todd Thompson[3], Sheeba Arnold Anteraper[1], John Gabrieli[4], Susan Whitfield-Gabrieli[5]
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3567 Aging of executive functions is associated with thickness of regional prefrontal and parietal cortex
Kristen Kennedy[1], Elizabeth Reese[2], Asha Unni[2], Karen Rodrigue[3]
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3568 Aerobic fitness is associated with parahippocampal volume in young females
Karl Koschutnig[1], Carmen Fiedler[1], Melanie Schweinzer[1], Christoph Glatz[1], Andreas Fink[1]
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3569 Distinct Aging Effects on DMN, CEN and SN Networks in Successful Agers and Poor Performers
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3570 Atrophy of the bilateral medial temporal areas and motoric cognitive risk syndrome in older adults
Sangyoon Lee[1], Hiroyuki Shimada[1], Seongryu Bae[1], Sungchul Lee[1], Kazuhiro Harada[1], Kenji Harada[1], Hyuma Makizako[2]
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3571 Age-related differences in novelty and relational encoding
Wei Yang Dayton Leow[1], Josephine Archer[1], Yee Ying Yick[1], Chiao-Yi Wu[2], Makoto Miyakoshi[3], Toshiharu Nakai[4], Annabel Chen[1]
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3572 Linking Individual Variability in Functional Brain Connectivity to Cognitive Ability in Older Adults
Rui Li[1], Juan Li[1], Xinyi Zhu[1], Shufei Yin[1], Zhiying Long[2]
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3573 Age-related changes of large-scale networks across the human lifespan
Hui-Jie Li[1], Xiao-Hui Hou[1], Zhi-Xiong Yan[1], Xi-Nian Zuo[1]
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3574 Age-related Changes in functional Networks: A Meta-analysis of 114 fMRI studies on Healthy Aging
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3575 Investigating the relationship between cognition and the structural connectome via PLSC
Franziskus Liem[1,2], Douglas Garrett[3], Ladina Bezzola[1], Susan Merillat[1], Sarah Hirsiger[1], Lutz Jäncke[1]
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3576 Age-related changes of cerebral functional network and white matter integrity
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3577 Cognitive decline is associated with activation differences for an Emotion Regulation task
William Lloyd[1], Carien van Reekum[1]
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3578 Does right superior temporal gyrus play a differential role on complex attention in cognitive aging?
Hanna Lu[1], Sandra S.M. Chan[2], Linda C.W. Lam[2]
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3579 Meditation Effects on Age-Related Gray Matter Decline
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3580 Memory Performance is Associated with Hippocampal 5-HT1A Receptor Density in Subjects at Risk for AD
Laurel Martin-Harris[1], Edward Lau[1], Chelsea Robertson[2], Ritika Gupta[2], Zihui Fan[2], Tara Kappel[2], Ridhi Arun[2], Karen Miller[3], David Merrill[2], Vladimir Kepe[1], Gary Small[3], Jorge Barrio[1], Susan Bookheimer[4]
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3581 Enumeration in the old brain
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3582 Functional Connectivity of the Central Autonomic Network and Pre-Hypertensive Risk in Post-Menopause
Roger McIntosh[1], Stephanie Magoon[1]
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3583 Neural Substrates of Episodic Memory Improvement in Older Adults
Eliane Miotto[1], Joana Balardin[2], Maria da Graça Martin[3], Marcelo Batistuzzo[4], Ricardo Nitrini[5], Edson Amaro Junior[6]
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3584 Age-related effects observed during performance of a delayed match-to-sample task
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3585 Brain activity during observation and motor imagery of balance tasks in the elderly: A fMRI study
Audrey Mouthon[1], Jan Ruffieux[1], Micheal Mouthon[1], Michael Waelchli[1], Martin Keller[1], Henri-Marcel Hoogewoud[2], Jean-Marie Annoni[1], Wolfgang Taube[1]
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3586 How the ageing brain performs verbal fluency: Insights from task-free fMRI based graph analyses
Angela Martina Mueller[1,2], Susan Merillat[1,2], Lutz Jänke[1,2,3]
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3587 Compensation or age-related decline: What can we learn by looking at the functional baseline?
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3588 Functional and effective connectivity for differentiating patients with tremor disorders
Muthuraman Muthuraman[1], Friederike Helmholdt[2], Susanne Schneider[3], Kidist Mideksa[3], Abdul Anwar[3], Günther Deuschl[4]
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3589 Neural structural correlates of personality: what has aging got to do with it?
Persson Ninni[1,2], Jonas Persson[3,1], Håkan Fischer[1,3]
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3590 Effects of predictive information on selective attention and working memory performance in aging
Namita Padgaonkar[1,2], Theodore Zanto[1], Jacob Bollinger[1], Adam Gazzaley[1]
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3591 Physical activity and inflammation in relation to grey-matter integrity and cognitive decline in old
Goran Papenberg[1], Beata Ferencz[1], Francesca Mangialasche[1], Martin Lövdén[1], Grégoria Kalpouzos[1], Laura Fratiglioni[1], Lars Bäckman[2]
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3592 Habitual physical activity and efficiency of cognitive networks during memory task in older adults
Hyuntae Park[1,2], Seongryu Bae[2], Kenji Harada[2], Kazuhiro Harada[2], Sangyoon Lee[2], Sungchul Lee[2], Hiroyuki Shimada[2], Hyuma Makizako[2], Takao Suzuki[2]
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3593 Age-related changes in the responsiveness of human brain regions implicated in mirror systems
Shayna Parker[1,2], Jane Lawrence-Dewar[2,1]
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3594 Neural Underpinnings of Age-related Alterations in Cognitive Domains
Qolamreza Razlighi[1], Dan Liu[1], Deirdre O'Shea[1], Christian Habeck[1], Yaakov Stern[1]
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3595 Effects of 6-month dance vs. fitness training on balance and related neuronal circuits in seniors
Kathrin Rehfeld[1,2], Anita Hoekelmann[2], Angie Lueders[1], Joern Kaufmann[2], Notger Mueller[1,2]
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3596 Aging effects are non-uniform and distinct between cortical and sub-cortical structures
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3597 Age-related alterations in the General Memory Network Underlie Deficiency in Multiple Memory Systems
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3598 Take a break and consolidate: Consolidation of associative memories in older adults during rest
Cristina Saverino[1,2,3], Zainab Fatima[4,5], Cheryl Grady[3,5]
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3599 Brain activation associated with recollection and familiarity in aging individuals
Dorothee Schoemaker[1], Jens Pruessner[2], Serge Gauthier[3]
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3600 Cortical thinning at midlife
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3601 Which types of cognitive function are related to atrophy of the bilateral medial temporal areas?
Hiroyuki Shimada[1], Takehiko Doi[1], Sangyoon Lee[1], Hyuma Makizako[1], Kota Tsutsumimoto[1]
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3602 Lifespan self-control improvement is related to valuation and control network connectivity changes
Nicolette Sullivan[1], Adriana Galvan[2], Mara Mather[3], Antonio Rangel[4]
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3603 A combined DTI and resting state FMRI study of late aging
Paul Taylor[1,2,3], Suril Gohel[4], Dinesh Mital[5], Chu-Chung Huang[6], Shih-Jen Tsai[7], Bharat Biswal[4], Ching-Po Lin[6]
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3604 Age associated iron deposition in basal ganglia increases with physical fitness
Adam Thomas[1], Andrea Dennis[2], Nancy Rawlings[3], Charlotte Stagg[2], Helen Dawes[4], Heidi Johansen-Berg[2], Peter Bandettini[5]
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3605 Behavioural and neural correlates of age-related speech perception deficits
Pascale Tremblay[1], Nancy Meunier[2], Marie-Hélène Tessier[3], Anthony Tremblay[2], Maxime Descoteaux[4], Anthony Dick[5]
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3606 ITBS over left BA10 enhances virtual reality-based prospective memory in healthy aged subjects
Debarnot Ursula[1], Benoit Crépon[2], Eric Orriols[3], Maria Abram[3], Sylvain Charron[2], Stéphanie Lion[2], Catherine Oppenheim[2], Bernard Gueguen[2], Anne-Marie Ergis[4], Jean-Claude Baron[5], Pascale Piolino[6]
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3607 A longitudinal study of normal aging changes of structural brain hubs
Kai Wu[1], Yasuyuki Taki[2,3], Kazunori Sato[4], Xiuyong Wu[5], Junwei Xue[5], Xin Du[5], Ryuta Kawashima[6,7], Hiroshi Fukuda[4]
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3608 Framingham Stroke Risk Score: Biomarker of Biological Brain Aging in Community-Dwelling Older Adults
Eniko Zsoldos[1], Abda Mahmood[1], Nicola Filippini[2], Claire Sexton[3], Mika Kivimaki[4], Archana Singh-Manoux[4], Stephen Smith[5], Clare Mackay[6], Klaus Ebmeier[3]
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Lifespan Development

Lifespan Development Other

3609* ERBB4 Polymorphism and Family History of Psychiatric Disorders on Typical Brain Development, (O-W4)
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3610 Lifespan trajectories of white matter microstructure: Preliminary results - Human Connectome Project
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3611 Subcortical brain volumes across the lifespan based on 10,722 people aged 2 to 92
Danai Dima[1,2], Efstathios Papachristou[3], Jessica Turner[4], David Glahn[5], Derrek Hibar[6], Theo van Erp[7], Sarah Medland[8], Paul Thompson[9], Sophia Frangou[10], ENIGMA Lifespan Working Group[11]
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3612 Functional connectivity of dorsal and ventral attention networks in autism and typical development
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3613 Maturation Trajectory of Cortical Networks Varies with the Mediating Frequency Band
Javeria Hashmi[1], Sheraz Khan[2], Randy Gollub[3], Jian Kong[4], Susan Whitfield-Gabrieli[5], Matti Hämäläinen[6], Steven Stufflebeam[7], Tal Kenet[8]
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3614 Lifespan Development of Human Amygdala Connectivity
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3615 The nonlinear pattern of white matter hyperintensities in non-demented population: a lifespan study
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3616 Pain in Children – an Experimental fMRI Study
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3617 The Morphology of Perirhinal and Entorhinal Cortex Across the Human Lifespan
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3618 Subcortical brain development from very preterm birth through early childhood
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3619 Mapping the topological changes of white matter structural networks across the human lifespan
Tengda Zhao[1,2], Miao Cao[1,2], Xinian Zuo[3,4], Qi Dong[1,2], Yong He[1,2], Ni Shu[1,2]
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Lifespan Development

Normal Brain Development: Fetus to Adolescence

3620* Olfactory perception in newborns using fMRI, (O-W2)
Alexandra Adam-Darque[1], Frédéric Grouiller[2], Russia Ha-Vinh Leuchter[3], cesar Caballero-Gaudes[4], François Lazeyras[5], Petra Huppi[6]
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3621* Emergence of System Roles in Normative Neurodevelopment, (O-W2)
Shi Gu[1], Theodore Satterthwaite[2], John Medaglia[3], Muzhi Yang[1], Raquel Gur[1], Ruben Gur[1], Danielle Bassett[1]
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3622* Predicting school-age cognitive capacities from the connectome at birth, (O-W2)
Kristin Keunen[1], Manon Benders[2], Linda de Vries[2], Petronella Fieret-van Stam[2], Floris Groenendaal[2], Karina Kersbergen[2], Alexander Leemans[3], Lianne Scholtens[4], Max A. Viergever[1], René Kahn[5], Martijn van den Heuvel[6]
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3623 White matter mediates relationship between body mass index and working memory in adolescents
Gabriela Alarcon[1], Alison Gemperle[1], Bonnie Nagel[1]
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3624 Genetic Variants Associated with Network Connectivity and Behavior
Anita Barber[1,2], Christine Ladd-Acosta[2], Martin Lindquist[2], Brian Caffo[2], Natacha Akshoomoff[3], David Amaral[4], BJ Casey[5], Linda Chang[6], Thomas Ernst[6], Jean Frazier[7], Jeffrey Gruen[8], Walter Kaufmann[9], Tal Kenet[10], David Kennedy[7], Elizabeth Sowell[11], Anders Dale[12], Cinnamon Bloss[13], Sarah Murray[13], Terry Jernigan[13], Jim Pekar[1,2], Daniele Fallin[2], Stewart Mostofsky[1,2]
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3625 In utero quantification of T2* relaxation times in cortical tissues in the human fetal brain
Anna Blazejewska[1], Sharmishtaa Seshamani[1], Susan McKown[2], Jason Caucutt[2], Manjiri Dighe[2], Christopher Gatenby[2], Colin Studholme[1]
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3626 Alterations in the Effective Connectivity of Resting State Networks in Preterm Newborns
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3627 Early development of functional connectomes in preterm infants
Miao Cao[1], Zhengjia Dai[1], Xuhong Liao[1], Tina Jeon[2], Minhui Ouyang[2], Lina Chalak[3], Hao Huang[2,4], Yong He[1]
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3628 Connectivity Maturation of the Temporo-mesial Memory Circuit from Childhood to Teenage Age
Roselyne Chauvin[1,2], Ronald Phlypo[3,4], Victor Delattre[1], David Germanaud[1,2], Gael Varoquaux[3], Catherine Chiron[1,2], Lucie Hertz-Pannier[1,2], Marion Noulhiane[1,2]
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3629 Perceived Stress and Working Memory-related Brain Activity in Adolescents
Anita Cservenka[1], Bonnie Nagel[1]
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3630 Longitudinal study of the emerging lateralization of the language network during infancy
Robert Emerson[1], Weili Lin[1], Wei Gao[1]
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3631 Cortical Maturation Accompanying Longitudinal Development of Children's Mathematical Ability
Tanya Evans[1], Marie Schaer[2], john kochalka[1], Tricia Ngoon[1], Christian Battista[1], Vinod Menon[1]
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3632 Developmental Trajectories of Amygdala Functional Connectivity in Infancy and Early Childhood
Laurel Gabard-Durnam[1], Nim Tottenham[1], Sean Deoni[2], Jonathan O'Muircheartaigh[3]
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3633 Revisiting three theories in developmental cognitive neuroscience
Anne-Lise Goddings[1], Kathryn Mills[1], Jay Giedd[2], Sarah-Jayne Blakemore[1]
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3634 Newborn functional brain connectivity as a precursor of infant behavior at 6 months
Alice Graham[1], Claudia Buss[2,3], Marc Rudolph[4], Jerod Rasmussen[2], Pathik Wadhwa[2], Sonja Entringer[2,3], Damien Fair[1]
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3635 Examining cortico-subcortical loops in development using resting-state functional connectivity MRI
Deanna Greene[1], Stephanie Stewart[1], Steven Petersen[1], Kevin Black[1], Bradley Schlaggar[1]
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3636 The effect of emotional cues on reward learning and uncertainty-driven exploration in adolescents
Michael Hallquist[1], Alexandre Dombrovski[2], Michael Frank[3], Kai Hwang[4], Beatriz Luna[1]
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3637 The C-MIND Project: Normative MRI and and Behavioral Data from Children from Birth to 18 Years
Scott Holland[1], Jennifer Vannest[2], Vincent Schmithorst[3], Michael Wagner[4], Gregory Lee[5], Akila Rajagopal[6], Mary Sroka[7], Nick Felicelli[2], Andy Rupert[2], Kristi Clark[8], Arthur Toga[9], Lisa Freund[10]
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3638 Response inhibition of face stimuli linked to inferior frontal gyrus microstructure in adolescents
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3639 Probabilistic Tractography-based Thalamic Parcellation in Neonates with Congenital Heart Disease
Camilo Jaimes[1], Henry Cheng[2], Janet Soul[3], Yogesh Rathi[4], Borjan Gagoski[5], Jane Newburger[2], P. Ellen Grant[5], Lilla Zöllei[6]
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3640 Modeling by entropic methods of information flow between brain regions with rs-fMRI
Jesus Jimenez[1], Roberto Velasco[2], Pablo Padilla[2], Nadia Gonzalez[3]
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3641 Risk taking behaviors relate to resting state functional connectivity in adolescence
Katherine Karlsgodt[1], Angelica Bato[2], Melanie Blair[2], Deepak Sarpal[1], Philip Szeszko[2], Anil Malhotra[1]
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3642 Normative trajectories of cerebello-cerebral functional development using resting-state fMRI
Judy Kipping[1], Michael Meaney[2], Anqi Qiu[1]
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3643 Structural Network Development and IQ During Adolescence
Marinka Koenis[1], Rachel Brouwer[2], Suzanne Swagerman[3], Martijn van den Heuvel[4], René Mandl[5], Inge van Soelen[4], René Kahn[6], Dorret Boomsma[3], Hilleke Hulshoff Pol[6]
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3644 Toward a child white matter bundles atlas for developmental connectivity studies
Sofya Kulikova[1], Jessica Dubois[2], Pamela Guevara[3], Jean-François Mangin[4], Nicole Chemaly[5], Catherine Chiron[6], Cyril Poupon[7], Lucie Hertz-Pannier[8]
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3645 The Development of Corticostriatal Structural Connectivity Patterns During Adolescence
Bart Larsen[1], Timothy Verstynen[2], Fang-Cheng Yeh[3], Kevin Jarbo[4], Beatriz Luna[1]
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.3646 Longitudinal Human Brain Development from 2-5 Years of Age
Deana Li[1], Gregory Young[1], Aaron Lee[1], David Amaral[1], Christine Nordahl[1]
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3647 Prenatal tobacco exposure and gender on subcortical brain volume development in young children
Ahnate Lim[1], Linda Chang[1], Eric Cunningham[1], Daniel Alicata[1], Christine Cloak[1], Thomas Ernst[1]
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3648 Cross-vendor Cross-site Cross-Protocol Evaluation of Premature Neonatal MR Brain Tissue Segmentation
Mengyuan Liu[1], Averi Kitsch[1], Emily Tam[2], Daphne Kamino[2], Steven Miller[2], Vann Chau[2], A Barkovich[3], Duan Xu[3], Colin Studholme[1]
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3649 Dynamic changes of hippocampal subregional functional connectivity patterns in the developing brain
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3650 Development Of The Human Fetal Hippocampal Formation During Early Second Trimester
Shuwei Liu[1], Xinting Ge[1], Yonggang Shi[2], Junning Li[2], Zhonghe Zhang[1], Haiwei Meng[1], Yuchun Tang[1], Arthur Toga[2]
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3651 White matter tract development from infancy through adolescence using NODDI
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3652 Maturational trajectories of subcortical grey matter microstructure: A longitudinal study
Kathrine Skak Madsen[1,2], Terry Jernigan[3], Louise Barüel Johansen[1], Mark Lyksborg[4], Wesley Thompson[3], William Baaré[1]
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3653 Inhomogeneous Magnetization Transfer: Brain developmental changes during childhood
Alyssa Mah[1], R Marc Lebel[1,2], Catherine Lebel[1]
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3654 Decreased Anticorrelation of Long-Range Connections: A General Maladaptive Trait?
Atul Mallik[1], Lubdha Shah[2], Melissa Lopez-Larson[2], Michael Ferguson[3], Jeffrey Anderson[2]
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3655 Altered Motor Network Development in Human Fetuses Subsequently Born Preterm
Janessa Manning[1], Lauren Grove[1], Brittany Olle[1], Pavan Jella[1], Thomason Moriah[1]
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3656 Developmental Increases in Phase Synchrony Between Human Functional Brain Networks
Scott Marek[1], Kai Hwang[2], Avniel Ghuman[1], Beatriz Luna[1]
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3657 Parental praise correlates with the gray matter volume of the primary auditory cortex
Izumi Matsudaira[1], Susumu Yokota[1], Teruo Hashimoto[1], Ryuta Kawashima[1], Yasuyuki Taki[1]
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3658 Functional differentiation of cortex across development
Maarten Mennes[1], Erik van Oort[2,1], Jan Buitelaar[3,1], Christian Beckmann[3,1,4]
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3659 Age-dependence of Emotional Face Processing in Infants as Measured with fNIRS
Katherine Perdue[1,2], Alissa Westerlund[1], Sarah McCormick[1], Miranda Ravicz[3], Charles Nelson[1,2]
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3660 Sex-differences in pubertal development of resting functional connectivity of the amygdala
Katherine Reding[1], Shau-Ming Wei[1], Michael Gregory[1], Tuong-Vi Nguyen[1], Pedro Martinez[2], Deborah Boyle[3], John Reuter[2], Jasmin Czarapata[1], Tiffany Nash[1], Hillary Raab[1], Shanna Murray[1], J. Kippenhan[1], Philip Kohn[1], Lynnette Nieman[4], Jack Yanovski[4], Peter Schmidt[2], Karen Berman[1]
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3661 Fetal testosterone is associated with sex differences in white matter volume in adolescents
Amber Ruigrok[1], Rosemary Holt[1], Meng-Chuan Lai[1,2], Michael Lombardo[1,3], Bonnie Auyeung[1,4], John Suckling[5,6,7], Kevin Taylor[8], Gerald Hackett[9], Edward Bullmore[10], Simon Baron-Cohen[1]
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3662 The Emergence of Differential Dopaminergic Pathways During Infancy
Andrew Salzwedel[1], Feng Shi[1], Weili Lin[1], John Gilmore[1], Wei Gao[1]
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3663 A Novel Growth-based Parcellation of the Fetal Cortex
Ernst Schwartz[1], András Jakab[2], Veronika Schöpf[3], Gregor Kasprian[1], Daniela Prayer[1], Georg Langs[1]
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3664 Brain development in preterm and at term newborns: a TBSS DTI comparison study
Paola Scifo[1], Elisa Marchetta[1], Pasquale Della Rosa[2], Silvia Pontesilli[1], Antonella Poloniato[1], Antonella Iadanza[1], Graziano Barera[1], Andrea Falini[3], Cristina Baldoli[1]
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3665 Pre-existing neuronal factors of posttraumatic growth after the 2011 Japanese Earthquake in children
Atsushi Sekiguchi[1], Yuka Kotozaki[2], Benjamin Thyreau[3], Hikaru Takeuchi[4], Susumu Yokota[2], Hiroshi Hashizume[5], Kohei Asano[6], Asano Michiko[1], Yuko Sassa[7], Rui Nouchi[2], Yasuyuki Taki[7], Ryuta Kawashima[2]
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3666 Overweight is not associated with cortical thickness alterations in children
Rachel Sharkey[1], Alain Dagher[1], Sherif Karama[2]
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3667 Topological lateralization changes of hemispheric brain networks from adolescence to adulthood
Zhong Suyu[1,2], Yong He[1,2], Gaolang Gong[1,2]
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3668 Cortical Surface-based Mapping of Maturation-related MR Tissue Intensity Changes in Preterm Neonates
Sinchai Tsao[1], Averi Kitsch[1], Mengyuan Liu[1], Sharmishtaa Seshamani[1], Steven Miller[2], Vann Chau[3], Ken Poskitt[4], Colin Studholme[1]
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3669 Individual Timing of White Matter Development Determine Cognitive Abilities at School Entry
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3670 Topologically Dissociable Patterns of Development of the Human Cerebral Cortex
Simon Vandekar[1], Taki Shinohara[1], Armin Raznahan[2], David Roalf[1], Michelle Ross[1], Nicholas DeLeo[1], Kosha Ruparel[1], Ragini Verma[1], Daniel Wolf[1], Ruben Gur[1], Raquel Gur[1], Theodore Satterthwaite[1]
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3671 Localized Topological Coupling Evolves During Adolescent Development
Simon Vandekar[1], Russell Shinohara[1], David Roalf[2], Armin Raznahan[3], Kosha Ruparel[1], Daniel Wolf[1], Ruben Gur[1], Raquel Gur[1], Theodore Satterthwaite[1]
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3672 Reliability in adolescent longitudinal fMRI using an emotional and a cognitive task
Nora Vetter[1], Julius Steding[1], Eva Mennigen[1], Sarah Rodehacke[1], Michael Smolka[1]
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3673 Age- and sex- related differences in structural cortical networks in healthy children
Kai Wu[1], Yasuyuki Taki[2], Kazunori Sato[3], Xiuyong Wu[4], Junwei Xue[4], Xin Du[4], Hikaru Takeuchi[5], Benjamin Thyreau[3], Hiroshi Fukuda[3], Ryuta Kawashima[6]
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3674 Age-related changes in the regional properties of structural connectome during early development
Tengda Zhao[1,2], Virendra Mishra[3], Hao Huang[4], Ni Shu[1,2]
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3675 Developmental Patterns of CBF and BOLD Responses to Visual Stimulus
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Modeling and Analysis Methods

Classification and Predictive Modeling

3676* Computer-Vision Neural Networks Map the Architecture of the Human Visual System, (O-W3)
Michael Eickenberg[1], Gaël Varoquaux[2], Alexandre Gramfort[3], Bertrand Thirion[4]
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3677 The impact of temporal drifts and adaption on fMRI response patterns
Arjen Alink[1], Alexander Walther[1], Alexandra Krugliak[2], Jasper van den Bosch[3], Nikolaus Kriegeskorte[1]
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3678 Automatic Classification of FDG-PET imaging data in Disorders of Consciousness
Georgios Antonopoulos[1], Sarah Wannez[2], Aurore Thibaut[3], Mohamed Ali Bahri[4], Roland Hustinx[5], Claire Bernard[6], Christophe Phillips[7], Marie-Aurélie Bruno[8], Andre Luxen[9], Camille Chatelle[2], Pierre Maquet[9], Steven Laureys[10]
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3679 Multivariate decoding in MEG proves more robust that traditional, univariate analysis
Kareem Ayoub[1], Mark Woolrich[2], Ethan Buch[3], Leonardo Cohen[4], Diego Vidaurre[1]
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3680 Cross-language fMRI decoding of sentences in Portuguese and English Bilinguals
Cyntia Bailer[1,2], Ying Yang[1], Vladimir Cherkassky[1], Jing Wang[1], Lêda Maria Braga Tomitch2[3], Marcel Just[1]
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3681 A Bayesian Spatial Model to Predict Disease Status Using Multimodal Imaging Data
DuBois Bowman[1], Wenqiong Xue[2], Jian Kang[3], Daniel Drake[1]
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3682 Comparison of voxel vs. Freesurfer features to predict schizophrenia using SVMs and T1 MRI
Ralph Brecheisen[1,2], Quentin Noirhomme[3], Lars Westlye[4], Nhat Trung Doan[5], Ingrid Agartz[6], Tobias Kaufmann[7], Ole Andreassen[5], Rainer Goebel[8]
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3683 How much Cortical Connectivity can be Explained by Cost-efficiency Trade-off?
Yuhan CHEN[1], Shengjun Wang[2], Changsong Zhou[3], Claus C. Hilgetag[4]
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3684 Using feature extraction methods with support vector machine to classify schizophrenia
Chia-Wei Chieh[1], Yi-Cheng Hsu[2], Yi-Ting Lin[3,2], Ming H. Hsieh[3]
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3685 The influence of HIV on brain age: results from the Co-morBidity in Relation to AIDS (COBRA) project
James Cole[1], Robert Leech[1], Matthan Caan[2], Charles Majoie[2], David Sharp[1]
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3686 Computing EEG bandpower at channel level hinders physiological interpretation of multivariate models
Sven Dähne[1,2], Stefan Haufe[1,3], Klaus-Robert Müller[1,4]
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3687 Variability in Automatic and Manual Classification Methods of Brain Tractography Data
Esha Datta[1], Kesshi Jordan[2], Eduardo Caverzasi[2], Roland Henry[2]
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3688 A region based functional-anatomical atlas of the human brain
Alejandro De La Vega[1], Tal Yarkoni[2]
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3689 Enhanced classification accuracy of Alzheimer's patients using Multiple Anatomical MRI features
Frank de Vos[1,2,3], Tijn Schouten[1,2,3], Anne Hafkemeijer[1,2,3], Elise Dopper[2,4,5], John van Swieten[4,6], Mark de Rooij[1,3], Jeroen van der Grond[2], Serge A. Rombouts[1,2,3]
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3690 Predictability of autism, schizophrenic and obsessive spectra diagnosis. Toward a network approach
Matteo Diano[1], Tommaso Costa[2], Luciano Fava[3], Sara Palermo[4], Francesca Bianco[5], Sergio Duca[6], Jordi Manuello[7], Stefano Moia[7], Ugo Vercelli[3], Diana Torta[3], Giuliano Geminiani[2], Karina Tatu[8], Roberto Keller[5], Franco Cauda[9]
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3691 Discriminating Smokers from Nonsmokers Using a Multivariate Classification Approach on sMRI Data
Xiaoyu Ding[1], Yihong Yang[1], Elliot Stein[1], Thomas Ross[1]
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3692 Predicting Smoking Status Using a Two-Layer SVM-RFE Framework on Multiple RS-fMRI Features
Xiaoyu Ding[1], Yihong Yang[1], Elliot Stein[1], Thomas Ross[1]
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3693 Detection of Parkinson's Disease using Elastic Net on functional and structural MRI
Daniel Drake[1], DuBois Bowman[1], Daniel Huddleston[2]
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3694 A fast multivariate feature selection algorithm for support vector classification and regression
Juergen Dukart[1], Alessandro Bertolino[2], Fabio Sambataro[3]
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3695 The individual brain connectome predicts fluid intelligence
Emily Finn[1], Monica Rosenberg[1], Xilin Shen[1], Jessica Huang[1], Dustin Scheinost[1], Xenophon Papademetris[1], Marvin Chun[1], R. Todd Constable[1]
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3696 Decoding subject performance from patterns of neural activation in a complex virtual environment
Andrew Floren[1], David Ress[2], Bruce Naylor[1], Risto Miikkulainen[1]
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3697 Shape-Attributes of Brain Structures as Biomarkers for Alzheimer's Disease
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3698 Decoding selective auditory attention in real time using MEG
Mainak Jas[1], Dovilė Kurmanavičiūtė[1], Anne Mandel[1], Lauri Parkkonen[1]
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3699 Identification of Infants at Risk for Autism Using Hierarchical White Matter Connectivity Networks
Yan Jin[1], Chong-Yaw Wee[1], Pew-Thian Yap[1], Kim-Han Thung[1], Feng Shi[1], Dinggang Shen[1]
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3700 Prediction of aMCI subjects using local fMRI activation patterns
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3701 Cerebellar regional volume can predict early developmental impairment of preterm neonates
Hosung Kim[1], Mai-Lan Ho[2], Dawn Gano[1], Donna Ferriero[1], A Barkovich[1], Duan Xu[3]
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3702 Clinical predictors of postnatal cerebral and cerebellar growths in preterm neonates
Hosung Kim[1], Alisa Unzueta[2], Dawn Gano[1], Mai-Lan Ho[3], Donna Ferriero[1], A Barkovich[1], Duan Xu[1]
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3703 Sparse representation-based method for Alzheimer's disease classification
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3704 Template-Free structural network approach for classification of Alzheimer's disease
Hunki Kwon[1], Hyuk Jin Yun[1], Sang Won Seo[2], Jong-Min Lee[1]
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3705 A Grassmann Framework for Classification Between Mild Cognitive Impairment and Alzheimer's Disease
Poay Hoon Lim[1,2], Michel Bilello[3], Samuel Kadoury[1,2]
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3706 Classification of naturalistic stimuli by regularized linear discriminant analysis of fMRI data
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3707 Are you normal? Probabilistic normative models for neuroimaging data
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3708 Multi-modal classification with NeuCube-M using fMRI and DTI in treatment-resistant schizophrenia
Carolyn McNabb[1], Neelava Sengupta[2], Valerie Anderson[1], Meghan McIlwain[1], Joanne Lin[3], Nikola Kasabov[2], Rob Kydd[4], Bruce Russell[5]
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3709 Predicting Cognitive Scores of Schizophrenia by 3-Way Multimodal Fusion of MRI data
Xing Meng[1], Vince Calhoun[2], Juan Bustillo[3], Yu Zhang[1], Kaibin Xu[1], Tianzi Jiang[1,4], Jing Sui[1,5]
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3710 A framework for massive searchlight MVPA approach
Marlis Ontivero-Ortega[1], Agustin Lage-Castellanos[2], Mitchell Valdes-Sosa[3]
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3711 Multivariate classification of placebo versus drug in fibromyalgia patients
Scott Peltier[1], Eric Ichesco[1], Richard Harris[1]
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3712 EEG classification reveals the temporal dynamics of multisensory processes
Mike Powell[1], Javier Garcia[2], Chris Bird[3], Michael Tarr[4], Tim Curran[5], Jean Vettel[2]
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3713 Support Vector-Based Multivariate Pattern Analysis of Ethanol Self-Administration in Macaques
Julian Ramirez[1], Megan McClintick[2], Eric Earl[3], Kathy Grant[4], Damien Fair[3]
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3714 Automatic Classification of Schizophrenia and Bipolar Using Static and Dynamic Connectivity Features
Barnaly Rashid[1], Mohammad Arbabshirani[2], Eswar Damaraju[1], Robyn Miller[2], Mustafa Cetin[1], Godfrey Pearlson[3], Vince Calhoun[1]
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3715 Automatic Denoising of Large Functional MRI Datasets Using Semi-supervised Machine Learning
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3716 Combining anatomical MRI, DTI, and fMRI improves classification of Alzheimer's disease
Tijn Schouten[1,2,3], Frank de Vos[1,2,3], Anne Hafkemeijer[1,2,3], Marisa Loitfelder[4], Schmidt Reinhold[4], Jeroen van der Grond[2], Mark de Rooij[1,3], Serge A. Rombouts[1,2,3]
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3717 Accumulating fMRI data across studies: brain activity tells what is in a stimulus
Yannick Schwartz[1], Jean Baptiste Poline[2], Bertrand Thirion[1], Gael Varoquaux[1]
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3718 What is a reliable signal in MR? The subsampled bootstrap as a method of developing diagnostic maps
Frank Skidmore[1], Thomas Anthony[1], Yuliang Liu[1], Jon Marstrander[1], Gary Cutter[1], David Standaert[1]
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3719 Predicting cannabis use in adolescence using multimodal brain and phenotype data
Philip Spechler[1], Emily Jollans[2], Richard Watts[3], Catherine Orr[1], Bader Chaarani[1], Kees-Jan Kan[1], Scott Mackey[1], Robert Whelan[1], Hugh Garavan[1], Consortium IMAGEN[4]
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3720 Predicting subject measures from fMRI connectivity for the HCP: The method
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3721 BrainPrint – A Compact Shape Description of the Brain for Identification and Classification
Christian Wachinger[1], Polina Golland[1], Bruce Fischl[2,1], Martin Reuter[2,1]
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3722 Disease Classification using Subcortical Surface Shape with Guided Regulated Random Forests
Benjamin Wade[1], Shantanu Joshi[2], Boris Gutman[1], Katherine Narr[2], Paul Thompson[1]
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3723 Predicting brain activation of sentences from a neurosemantic theory of concept representations
Jing Wang[1], Vladimir Cherkassky[1], Nicholas Diana[1], Marcel Just[1]
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3724 Multi-modality Classification Methods based SRC for the Classification of AD and MCI Patients
Lele Xu[1], Xia Wu[1,2,3,4], Kewei Chen[5], Li Yao[1,2,3,4]
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3725 Graph Guided Joint Prediction of Class Label and Clinical Scores for the Alzheimer's Disease
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3726 An integrative segmentation method of multiple sclerosis lesions in multimodal MRI
Fengqing Zhang[1,2], Wenxin Jiang[2], Ji-Ping Wang[2]
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3727 Modelling MCI-to-AD conversion using combinations of Cox regression and SVMs
Paul Zhutovsky[1,2], Kerstin Ritter geb. Hackmack[1,2], Carsten Allefeld[1,2], Martin Weygandt[1,2], Ralph Buchert[3], John-Dylan Haynes[1,2], The ADNI[4]
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Modeling and Analysis Methods

Exploratory Modeling and Artifact Removal

3728* De-Noising of fMRI Time Series using NMR Field Probes for Physiology Recording, (O-W5)
Simon Gross[1], Lars Kasper[1,2], Laetitia Vionnet[1], Martin Buehrer[1], Klaas Pruessmann[1]
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3729 Using models to design fMRI experiments – not just fit data
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3730 A software toolbox to automatically de-noise task-based fMRI using a SOCK
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3731 Evaluation of several methods for addressing motion artifact in HCP resting state fMRI data
Gregory Burgess[1], Daniel Nolan[1], Sridhar Kandala[1], Michael Harms[1], Timothy Laumann[2], Jonathan Power[3], Matthew Glasser[2], Steven Petersen[4], David Van Essen[5], Deanna Barch[6]
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3732 Importance of physiological noise correction for PLACE Distortion Correction in EPI-based fMRI
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3733 Low-frequency physiological modulations effect on the specificity of the resting-state connectivity
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3734 ME-ICA denoising of cardiac gated data (Block Design): feasibility study
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3735 ICA-based denoising of population receptive field maps
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3736 The PhysIO Toolbox for Preprocessing and Noise Modeling of Physiological Data in fMRI
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3737 GLMdenoise improves multivariate pattern analysis of fMRI data
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3738 Investigation of ERD/ERS of motor imagery and EEG band-specific hemodynamic couplings via EEG-fMRI
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3739 Induction of Hemodynamic Shocks by Moving Stimuli in the Primary Visual Cortex
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3740 Intrinsic Default Mode Network Reliability: Head Motion and fMRI Slice Acquisition Effects
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3741 Voxelwise quantification of the effect of EPI distortion correction on 7T
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3742 Characterization of physiological noise across brain regions in resting-state fMRI at 7T
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3743 Incorporating Second-Order Statistics in Multidataset Independent Subspace Analysis
Rogers Silva[1], Sergey Plis[2], Marios Pattichis[3], Tulay Adali[4], Vince Calhoun[1]
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3744 Automated Quality Control of Ten Thousand Structural MRI
Romain Valabregue[1], Daniel García-Lorenzo[1], vincent guillemot[2], arthur tenenhaus[3], Vincent Perlbarg[2], Eric Bardinet[1], Stéphane Lehéricy[1]
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3745 Learning Brain Structure-Function Association from Big Neuroimaging Data with gRAICAR
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Modeling and Analysis Methods

fMRI Connectivity and Network Modeling

3746* Early meta-level: deeper understanding of connectivity-states and consequences for state definition, (O-W1)
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3747* Resting-state disentangled by innovation-driven coactivation patterns overlapping in space and time, (O-W1)
Fikret Isik Karahanoglu[1,2,3], Dimitri Van De Ville[2,3]
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3748* Genetic bases of functional brain networks, (O-W4)
Jonas Richiardi[1,2], Andre Altmann[2], Anna-Clare Milazzo[3], Catie Chang[4], Mallar Chakravarty[5], Tobias Banaschewski[6], Gareth Barker[7], Arun Bokde[8], Uli Bromberg[9], Christian Büchel[10], Patricia Conrod[11], Mira Fauth-Bühler[6], Herta Flor[6], Vincent Frouin[12], Jürgen Gallinat[13], Hugh Garavan[14], Penny Gowland[15], Andreas Heinz[13], Herve Lemaitre[16], Karl Mann[6], Jean-Luc Martinot[17], Frauke Nees[18], Tomas Paus[19], Zdenka Pausova[20], Marcella Rietschel[6], Trevor Robbins[21], Michael Smolka[22], Rainer Spanagel[6], Andreas Ströhle[23], Gunter Schumann[7], Michael Hawrylycz[24], Jean Baptiste Poline[25], Michael Greicius[26], Consortium IMAGEN[27]
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3749* A variational Bayes hidden Markov model for discovering dynamical functional brain networks, (O-W1)
Srikanth Ryali[1], Kaustubh Supekar[1], Tianwen Chen[1], Weidong Cai[1], Vinod Menon[1]
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3750* Frequency-Specific ECoG Correlations Underlie fMRI Resting State Networks, (O-M4)
Carl Hacker[1], David Bundy[1], Mrinal Pahwa[2], Abraham Snyder[3], Nicholas Szrama[4], Gordon Shulman[5], Maurizio Corbetta[6], Eric Leuthardt[1]
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3751 Graph metrics show similar patterns in functional subband networks of epileptic and healthy brains
Farras Abdelnour[1], Ashish Raj[1], Orrin Devinsky[2], Thomas Thesen[3]
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3752 Exponential relationship between functional and structural networks is preserved in epileptics
Farras Abdelnour[1], Ashish Raj[1], Michael Dayan[1], Orrin Devinsky[2], Thomas Thesen[3]
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3753 True function and structure networks' eigenvectors and eigenvalues are predicted by graph diffusion
Farras Abdelnour[1], Michael Dayan[1], Orrin Devinsky[2], Thomas Thesen[3], Ashish Raj[1]
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3754 Rich Block: Rich Club Analysis with the Erdos-Renyi Mixture Model
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3755 Connectivity Differences between Cerebral Hemispheres at Rest
Oktay Agcaoglu[1,2], Robyn Miller[1], Mustafa Sinan Cetin[1,3], Vince Calhoun[1,2]
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3756 Dynamic coupling of brain functional connectivity and dual-task behavior: A complex network analysis
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3757 A new toolbox for accelerated hierarchical dynamic causal modeling: mpdcm
Eduardo Aponte Perez[1], Klaas Enno Stephan[2], Jakob Heinzle[3]
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3758 Autoconnectivity: A New Perspective on Human Brain Function
Mohammad Arbabshirani[1], Adrian Preda[2], Jatin Vaidya[3], Steven Potkin[4], Godfrey Pearlson[5], James Voyvodic[6], Kent Kiehl[7], Jessica Turner[8], Vince Calhoun[9]
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3759 MultiPiles: Visualizing States in Dynamic Functional Connectivity
Benjamin Bach[1], Tim Dwyer[2], Tara Madhyastha[3], Thomas Grabowski[4], Jean-Daniel Fekete[5], Nathalie Henry Riche[6]
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3760 The After-Effect of Meditation: Increased rsFC after a single meditation epoch
Clemens Bauer[1,2,3], Susan Whitfield-Gabrieli[2], José-Luis Díaz[4], Erick Humberto Pasaye Alcaraz[1], Fernando Barrios[1]
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3761 A Posteriori Validation of Temporal Lags Used in Directed Functional Connectivity Maps
Adriene Beltz[1], Peter Molenaar[1]
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3762 Mapping Intra-Individual Time-Varying Connectivity with Group Iterative Multiple Model Estimation
Adriene Beltz[1], Peter Molenaar[1]
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3763 Generative models of the human connectome
Richard Betzel[1], Andrea Avena-Koenigsberger[1], Marcel de Reus[2], Ye He[3], Joaquín Goñi Cortes[1], Alessandra Griffa[4], Petra Vertes[5], Bratislav Misic[6], Jean-Philippe Thiran[4], Patric Hagmann[7], Martijn van den Heuvel[8], Xi-Nian Zuo[9], Edward Bullmore[10], Olaf Sporns[11]
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3764 An Information Theoretic View on Causal Modeling in fMRI
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3765 Optimal Spectral Domains in Functional Connectivity Analysis
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3766 Dismissive attachment style leads to prolonged dynamic recruitment of a fronto-temporal network
Viola Borchardt[1], Anna Buchheim[2], Meng Li[3], Anna Krause[4], Marie-Jose van Tol[5], Liliana Demenescu[6], Coraline Metzger[4], Tobias Nolte[7], Anton Lord[8], Walter Martin[9]
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3767 Connectivity of the human hypothalamus using ultra-high field, high-resolution imaging at 7T
Katherine Bottenhorn[1], Jennifer Robinson[1]
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3768 A standard graph of the lateral frontal cortex: functional organization across tasks and subjects
Rodrigo Braga[1], Robert Leech[1], Adam Hampshire[1]
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3769 Partial covariance based functional connectivity computation using covariance matrix conditioning
Matthew Brier[1], Anish Mitra[2], John McCarthy[1], Beau Ances[3], Abraham Snyder[4]
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3770 Altered dynamics of spontaneous functional connectivity in multiple sclerosis: An fMRI and MEG study
Sarah Buetof[1], Arne Ewald[1], Thomas Pfeffer[1], Christoph Heesen[2], Stefan Gold[3], Guido Nolte[1], Andreas Engel[1]
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3771 A network-analysis of the amygdala reveals its main sub-structures
Elisabeth Caparelli[1], Hong Gu[1], Xia Liang[1], Yihong Yang[1]
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3772 DISCOH: Functional Connectivity via Persistent Homology in the Frequency Domain
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3773 Reverse inference via connectivity fingerprinting: task sensitivity, specificity, and potency
Roselyne Chauvin[1,2], Maarten Mennes[1], Jan Buitelaar[1,2], Christian Beckmann[3,1,4]
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3774 Alteration of Brain Functional Connectivity in Older Women with Breast Cancer Receiving Chemotherapy
Bihong Chen[1], Sunita Patel[1], Yongquan Ye[2], David Utriainen[3], Mark Haacke[2], Arti Hurria[1]
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3775 Investigating Functional Connectivity Using a Sparse High Dimensional State-space Model
Shaojie Chen[1], Brian Caffo[1], Seonjoo Lee[2], Martin Lindquist[1], Joshua Vogelstein[3]
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3776 Differential Brain Connectivity Network Biomarkers for Parkinson's Disease
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3777 Temporal dynamics of interactions between large-scale brain networks
Tianwen Chen[1], Weidong Cai[2], Srikanth Ryali[3], Kaustubh Supekar[3], Vinod Menon[4]
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3778 A Group Approach to Functional Cortical Parcellation from Resting-State fMRI
Minqi Chong[1], Anand Joshi[1], Justin Haldar[1], Elizabeth DuPre[2], Wen-Ming Luh[2], David Shattuck[3], R. Nathan Spreng[2], Richard Leahy[1]
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3779 The restructured connectivity of the proprioceptive brain network through adolescence
Fabien Cignetti[1], Marianne Vaugoyeau[1], Aurélie Fontan[1], Bruno Nazarian[2], Jean-Luc Anton[2], Christine Assaiante[1]
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3780 Estimating whole brain connectivity dynamics using spectral clustering
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3781 The Changing State of Rest: Time Varying Connectivity in Resting State Networks in Preterm Infants
Harriet Cullen[1], Ricardo Pio Monti[2], Gareth Ball[3], Paul Aljabar[3], Giovanni Montana[4], Nora Tusor[5], Tomoki Arichi[3], Phumza Nongena[6], A. David Edwards[1]*
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3782 Dynamic functional network connectivity from rest to sleep
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3783 High pain burden is associated with altered brain network connectivity in sickle cell disease
Deepika Darbari[1], Johnson Hampson[2], Eric Ichesco[2], Nadia Kadom[3], Gilbert Vezina[4], Iordanis Evangelou[5], Daniel Clauw[6], James Taylor[7], Richard Harris[2]
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3784 Performances of functional network models: Identification of direct anatomical connections
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3785 Modular Organization of Reward Networks in the human brain
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3786 Memory training affects resting state functional connectivity in the aging brain
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3787 Functional connectivity correlates of NEO-FFI personality questionnaire: an atlas-based analysis
Filip Děchtěrenko[1], Renata Androvičová[2], Jiří Horáček[2], Jiří Lukavský[3,2], Marie Prochazkova[4], Jan Rydlo[5,2], Kamila Rasova[6], Jaroslav Tintera[7,2], Martin Vejmelka[1,2], Jaroslav Hlinka[1,2]
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3788 Which connections contribute mostly to the relationship between fMRI and EEG across bands in rest
Fani Deligianni[1], Maria Centeno[1], David Carmichael[1], Chris Clark[1], Jonathan Clayden[1]
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3789 Does state matter? Brain Function in Children with Autism While Awake and Asleep
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3790 Distinguish Schizophrenia, Bipolar and Schizoaffective Disorder via Dynamic Functional Network State
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3791 An enhanced functional connectivity assessment for interpreting network dynamics
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3792 Multivariate network patterns relate behavior to resting-state functional connectivity MRI
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3793 Common processing practices in resting-state functional connectivity analyses
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3794 Low Functional Robustness in Mesial Temporal Lobe Epilepsy: A Graph Theory Study
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3795 Graph theoretical analysis of whole-brain psychophysiological interactions in task fMRI
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3796 Distinct patterns of functional brain network integration support different facets of working memory
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3797 Spatial variability differences in fMRI networks of healthy controls versus schizophrenic patients
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3798 Individual variability and consistency of the systems-level organization of the human brain
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3799 Enhanced Putamen-thalamic Connectivity in Tremor-dominant Patients with Parkinson's Disease
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3800 A hierarchical ICA method for modeling covariate effects on brain functional networks
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3801 Dynamic Effective Connectivity Modelling of Pain with Multiregression Dynamic Models
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3802 Networks for the perception of dynamic facial expressions
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3803 Brain networks before and after graph theory: a philosophical analysis
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3804 Uncovering distinct neural networks through community detection in children with Autism
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3805 Effective connectivity and dynamic FNC provide marker for relapse in recently abstinent patients
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3806 Local inhibitory plasticity tunes brain dynamics and enables emergence of functional brain networks
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3807 ConnectoScope: Interactive Data Visualization to Explore Functional Brain Connectivity
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3808 Decreased rsfcMRI in the fronto-parietal network in children with emotional disorders
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3809 Higher-order interactions in macroscopic functional networks of the brain
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3810 Investigating Possible Center Gender and Age Effects on R-fMRI Graph Properties in MAPP Network Data
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3811 Disrupted Integration of Neuronal Systems During Emotional Film Viewing in Melancholic Depression
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3812 Changes of Resting State Functional Connectivity After Passive Viewing of A Humorous Movie
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3813 Transferring from Time Space to Connectivity Space: Extracting Brain Networks
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3814 Voxel-based Graph-theoretical Analysis (VGA) of Brain Networks Modulated by External Vocal Emotional
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3815 Measuring Asymmetric Connectivity in the Default Mode Network
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3816 Transcranial Direct Current Stimulation Modulates Effective Connectivity within Default Mode Network
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3817 A Depression Network of Functional Connectivity Regions Discovered via Multi-Attribute Graphs
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3818 Brain Networks in the Transition from the Resting State to Goal Directed Activity
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3819 Dynamic Brain Functional Connectivity with Change-Point Estimation
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3820 Functional connectivity changes in syntax-related networks among patients with a glioma
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3821 The link between corticolimbic networks and trait aggression depends on MAOA gene alleles
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3822 Network-based Brain-Behavior Associations Studies with Functionally Meaningful Nodes
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3823 Age associations with Anatomic and Local Peak Activity Correlation Analysis (ALPACA)
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3824 Spatial and Temporal Replication of Functional Networks Derived from Multiple Experiment Versions
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3825 State-dependent changes in modular organization of brain functional networks
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3826 Joint Diagonalization of 1-Laplacians for Group-wise Brain Network Topology Extraction
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3827 Voxel-Based Analysis of Functional Connectivity Networks from Ultra-High Resolution fMRI
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3828 Interaction of CYP2A6 × smoking in striatal-cortical brain circuits
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3829 Classification of PCA on brain network and application for juvenile myoclonic epilepsy
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3830 Reward susceptibility mediates salience on functional connectivity during expectancy and perception
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3831 Identification of functional brain networks with multi-view non-negative matrix factorization
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3832 A dynamic measure of functional global connectivity for resting state fMRI
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3833 Total connectivity: a marker of dynamical functional connectivity applied to consciousness
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3834 Multisite Reliability of Resting State Functional Connectivity in the Same Traveling Participants
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3835 Brainnetome fMRI Tooklit: A GUI toolbox for analysing fMRI data
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3836 Aging Patterns of Functional Connectivity in Japanese Auditory Semantic Processing: a fMRI Study
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3837 Structure-Function Relations revealed by Multivariate Conditional Mutual Information
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3838 Defining functional areas in globus pallidus using resting-state fMRI
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3839 Group Comparison of Spatiotemporal Dynamics of Intrinsic Networks In Parkinson Disease
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3840 Test-retest reliability of spectral coherence-based graph metrics in fMRI networks
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3841 Progression of atrophy in nonfluent/agrammatic follows the anatomy of the speech production network
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3842 The functional association between DMN and Frontal Task-Positive areas in preterm newborns
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3843 Natural vision task partially reorganizes resting state networks
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3844 Stress And Alcohol Abstinence In Daily Social Drinkers: Effects On Default Mode Community Structure
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3845 Systematic differences between affine registration methods: implications for functional connectivity
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3846 Improving the Sensitivity of gPPI Connectivity-Behavior Relationships in Alzheimer's Disease
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3847 Abnormal resting-state inter-network coupling in patients with non-neurogenic overactive bladder
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3848 New measure to capture dynamic features of brain functional connectivity
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3849 Functional inter-network dynamics from childhood to adulthood using fMRI
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3850 Short term opioid use alters functional connectivity from the amygdala in the human brain
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3851 Directional fMRI Network Connectivity Analysis Reveals Asymmetric Information Flows in Schizophrenia
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3852 The change of brain functional connectivity in spinal cord injury: graph theory based approach
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3853 Cooperative and competitive spreading dynamics on the human connectome
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3854 Real time estimation of Functional Connectivity Networks
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3855 Improved individual functional connectivity networks via discriminative population leveraging
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3856 Time varying effective connectivity longitudinal changes in MS patients
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3858 Functional parcellation and connectivity of the striatum in children, adolescents, and adults
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3859 Blind Functional Clustering of Resting State fMRI using Non-Negative Matrix Factorization
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3860 Different brain connectivity for Attention-Deficit/ Hyperactivity Disorder subtypes
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3861 Stochastic Block Mixture Models for Modeling Multi-Subject Brain Networks
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3862 Amygdala Connectivity after Real-Time fMRI Neurofeedback Emotional Training in Combat-Related PTSD
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3863 Identification of functional moduli in brain networks during development using rs-fMRI
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3864 Global and system-specific effects of motion on fMRI signals
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3865 Analyses of motion artifact before and after multi-echo ICA denoising
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3866 Riding the phase of dynamic functional connectivity:consistent phase-dependent multivariate patterns
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3867 Functional network properties of episodic memory
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3868 Functional specificity of rest and task based modules: A graph theoretical analysis
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3869 On large spectral DCMs
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3870 Neural Field Theory of Resting State Modes of Brain Activity
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3871 Sex differences in amygdalar connectivity in Veterans
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3872 Resting state functional connectivity in orbitofrontal cortex in marijuana using adolescents
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3873 Augmented Reality rsfc-MRI Visualization Application: ARIBraiN3T, iBraiN, iBraiNEEG New versions
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3874 Resting-state brain connectivity predicts ADHD symptom severity in individual children
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3875 Combining optogenetics and fMRI to evaluate causal estimation methods
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3876 Local and Global Thalamic Functional Connectivity Affected by Acute and Chronic Alcohol Exposure
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3877 An HCP "MegaTrawl" – Relating connectivity to behaviour and other subject measures
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3878 A mode of connectivity-demographic-behavioural population-covariation from HCP rfMRI
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3879 Organizational Skills Intervention and Brain Functional Reorganization in ADHD: Proof of Concept
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3880 Atypical Network Integration and Differentiation in Autism: An ICA study Using Resting State fcMRI
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3881 Default-network functional connectivity changes within individuals across tasks
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3882 Graph-based parameters for differentiating brain states
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3883 Damage propagation network in chronic pain: A meta-analytic study
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3884 Node Cohesion: Understanding Changes in Community Structure in Temporal fMRI Networks
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3885 Mapping Variability in Dynamic Functional Connectivity Density Patterns
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3886 Effective and functional connectivity in the motor cortex are sensitive to disability in MS
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3887 Analysis of High Frequency Resting State Networks in the Human Brain
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3888 Investigation of connectivity-variability interaction during engaging motor task and resting state
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3889 Which part of the brain of hemispheric cortical dysplasia controls his or her fine finger movement?
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3890 Single-Subject Whole-Brain Functional Connectome Fingerprint
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3891 Automated Seed Optimization Method for improved Detection of Resting-state Connectivity
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3892 Structural and Functional Connectivity of the Human Cerebellum Using Anatomical Cerebellar Priors
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3893 The contribution of midbrain and brainstem nuclei to the fMRI resting state networks
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3894 Brain network Abnormalities in Primary Open Angle Glaucoma Patients
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3895 Integration and segregation of the face-selective network predict face recognition ability
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3896 Structural Basis of Intrinsic Modular Organization of the Human Brain Functional Networks
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3897 ACC GABA levels are related to brain connectivity during interference inhibition in BPD patients
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3898 Brain network eigenvector centrality differences between risk groups for Alzheimer's Disease
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3899 Voxelwise eigenvector centrality mapping for fMRI: when to do masking and standard space mapping
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3900 Effective Connectivity of Brain Regions Related to Visual Word Recognition: an fMRI Study of Chinese
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3901 Dynamic coherence analysis of rest fMRI with state specific phase, frequency and temporal profile
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3902 Brain-based Lifespan Trajectory of Social Cognition
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3903 Dissociable Intrinsic Functional Networks Support Nouns and Verbs Processing
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3904 Evaluation of dynamicity network properties in the brain network
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3905 Concurrent EEG-fMRI multi-modal brain graph
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3906 The effect of delta-9-tetrahydrocannabinol on the whole-brain functional connectivity
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3907 Longitudinal study of impaired intra- and inter-networks in subjects at high risk for AD
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3908 Searching for optimal language mapping paradigm: is "state-related" fMRI a promising way?
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3909 Interactions between the Internal and External Networks Predict Anxiety Level
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Modeling and Analysis Methods

Image Registration and Computational Anatomy

3910 Landmark-based cross-modal registration of very high-resolution volumes
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3911 A Computational Pipeline for Full Brain Histology to MRI Registration
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3912 Registration of the BigBrain Basal Ganglia Atlas to MNI Space with Surgical Applications
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3913 Statistical shape analysis of large datasets using diffeomorphic iterative centroids
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3914 Methodological preliminary to the analysis of gyrogenesis in the ferret brain
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3915 Measuring the thickness of the hippocampal pyramidal layer using in vivo 7T MRI
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3916 Unified analysis of shape and structural connectivity of neural pathways
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3917 A modular multi-scale model to build atlases of shapes
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3918 3D Surface Analysis of the Basal Ganglia in Children Exposed to Manganese from Drinking Water
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3919 Effects of intensity normalization in Voxel Based Morphometry
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3920 Nonlinear registration between EPI and T1 MRI for network analysis
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3921 COMA: A registration approach specifically for subcortical structures
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3922 Beyond Cartesian coordinates: a framework for whole-brain neuroimaging in a standard 1D space
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3923 Deformetrica: a software for statistical analysis of anatomical shapes
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3924 Surface based analysis of the ventricles in premature newborns
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Modeling and Analysis Methods

Methods Development

3925 A technique for detecting nonlinear interaction in the brain: neural correlates of inhibitory skill
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3926 Use of a cognitive battery to control for phMRI investigation of pain responses
Julius Bourke[1], Georgina Lyons[2], Theresa Wodehouse[3], Elena Constantinou[4], Mathilde Antoniades[5], Jonathan Howard[6], Richard Langford[7], Eugenii Rabiner[6], Matthew Wall[6]
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3927 Is AR(1) noise sufficient for modelling fMRI data?
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3928 Detecting Subtle Shape Differences in the Hemodynamic Responses
Gang Chen[1], Ziad Saad[1], Nancy Adleman[2], Ellen Leibenluft[1], Robert Cox[1]
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3929 An Optimization Framework for ASL CBF Estimation
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3930 Leveraging Sparsity: A Sampling Method for Characterizing Hemodynamic Variability
PK Douglas[1]
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3931 Effects of multi-echo based denoising on reliability of a massively repeated block design task
Benjamin Gutierrez[1], Daniel Handwerker[1], Javier Gonzalez-Castillo[1], Vinai Roopchansingh[1], Laura Buchanan[1], Peter Bandettini[1,2]
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3932 Effect of multi-echo based denoising on the amount of data required to get wide-spread activity
Daniel Handwerker[1], Benjamin Gutierrez[1], Javier Gonzalez-Castillo[1], Vinai Roopchansingh[2], Laura Buchanan[1], Peter Bandettini[1,2]
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3933 Model-free estimation of time-varying functional connectivity and its uncertainty in fMRI studies
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3934 Event-related potential measures in moving subjects. Results from pilot studies in ergometer rowing
Holger Hill[1]
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3935 Spatial-temporal Gaussian Predictive Process Models for Neuroimaging Data
Jung Won Hyun[1], Yimei Li[1], Chao Huang[2], Hongtu Zhu[2]
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3936 Deep Learning for Neuroimage Classification
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3937 White Matter Hyperintensity Segmentation and Cortical Surface Reconstruction in Vascular Dementia
Seun Jeon[1,2], Sang Won Seo[3], Alan Evans[1], Jong-Min Lee[2]
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3938 Extraction of Fiber Pathway Using Probabilistic Fiber-Tracking
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3939 A method for the Optimisation of feature selection with Imaging data
Emily Jollans[1], Richard Watts[2], Daniel Duffy[1], Philip Spechler[3], Hugh Garavan[3], Robert Whelan[1], Consortium IMAGEN[4]
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3940 Single-Map Dual Regression Compared with Seed-Based Analysis of fMRI Functional Connectivity
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3941 TRACULA versus TBSS: Comparing DTI Analysis Approaches in Patients with Temporal Lobe Epilepsy
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3942 Single-subject metabolic network analysis in Alzheimer's disease
Oh-Hun Kwon[1], Yong-Ho Choi[1], Sun-Il Kim[1], J ong-Min Lee[2]
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3943 Age-specific Template Head Models for EEG Source Analysis
Benjamin Lanfer[1], Robert Spangler[1], Isabella Paul-Jordanov[1]
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3944 Reciprocal coupling modes in eye contact
Ray Lee[1]
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3945 A Voxelation-corrected Non-stationary 3D Cluster-size Test Based on Random Field Theory
Huanjie Li[1], Lisa Nickerson[2], Thomas Nichols[3], Jia-Hong Gao[1]
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3946 Robust Granger causality analysis to construct directed EEG network
Peiyang Li[1], Xurui Wang[1], Weiwei Zhou[1], Rui Zhang[1], Teng Ma[1], Fali Li[1], Tiejun Liu[1,2], Dezhong Yao[1,2], Daqing Guo[1,2], Peng Xu[1,2]
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3947 Explore dynamic functional networks using independent component analysis and temporal decomposition
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3948 Gaussian / Inverse Gamma mixture models of ICA maps
Alberto Llera[1], Christian Beckmann[2]
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3949 FMRI-based Letter Decoding using Real-time ICA
Michael Lührs[1,2], Bettina Sorger[1], Rainer Goebel[1,2], Fabrizio Esposito[3,1]
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3950 MRI Cloud: Web-based fully automated pipelines for brain MRI analysis based on cloud computation
Susumu Mori[1], Can Ceritoglu[1], Hangyi Jiang[1], Kwame Kutten[1], Yue Li[2], Zifei Liang[3], Marc Vaillant[4], Xiaoying Tang[5], Michael Miller[6]
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3951 Is it OK to pool MRI-based morphometric measurements? A statistical equivalence approach
Heath Pardoe[1], Gary Cutter[2], Rachel Alter[1], Rebecca Kucharsky Hiess[1], Mira Semmelroch[3], Donna Parker[4], Shawna Farquharson[4], Graeme Jackson[4], Ruben Kuzniecky[5]
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3952 Automatic evaluation of high resolution fMRI S1 Fingertip Maps
Jörg Pfannmöller[1], Marvin Greiner[1], Renate Schweizer[2], Martin Lotze[3]
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3953 Distributions of Brain Surface Curvature and Gray Matter Thickness in Dyslexia
Rudolph Pienaar[1], Danielle Sliva[2], Nadine Gaab[3], P Ellen Grant[3]
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3954 A novel unsupervised clustering method for fMRI time-series
Fabrizio Pizzagalli[1], Alessandro Laio[2], Fahimeh Baftizadeh[3], Marta Maieron[4], Daniele Amati[2]
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3955 In vivo, automated segmentation and statistical evaluation of the human thalamus
Francesca Pizzorni Ferrarese[1], Franco Pestilli[2]
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3956 Local Semi-Supervised Approach to Brain Tissue Classification in Early Infant Brain Development
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3957 Coupling of frequency-specific functional connectivity and anatomical distance in Parkinson's disease
Long Qian[1], Lili Guan[2], Xuemei Fu[1], Li Zheng[1], Yijun Liu[2]
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3958 Multi-sequence longitudinal multiple sclerosis lesion intensity profiles and clinical covariates
Elizabeth Sweeney[1], Russell Shinohara[2], Blake Dewey[3], Matthew Schindler[3], Daniel Reich[4], Ciprian Crainiceanu[5], Ani Eloyan[6]
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3959 Noninvasive hippocampal and cortical cerebral blood volume evaluation using iVASO MRI
Pratik Talati[1], Swati Rane[1], Manus Donahue[1], Stephan Heckers[1]
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3960 Detecting Focal Cortical Dysplasia using Population-Based Models of Cortical Thickness
Divya Varadarajan[1], Z. Irene Wang[2], Anand Joshi[3], David Shattuck[4], Stephen Jones[2], Richard Leahy[1]
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3961 Individual Reliability Analysis for BOLD Activation using Intra-Class Correlation
Xue Wang[1], Xiaowei Song[1,2,3], Jennifer Mack[4], James Kloet[4], Cynthia Thompson[4], Todd Parrish[1]
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3962 FLAIR/T1 z-scores are a promising simple, informative metric for researching multiple sclerosis
Alyssa Zhu[1], Esha Datta[1], Bruce Cree[1], Stephen Hauser[1], Roland Henry[1]
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Modeling and Analysis Methods

Motion Correction and Preprocessing

3963 Reducing artifact in simultaneous EEG-fMRI using carbon fibre loops and iterative analysis
David Abbott[1], Aaron Warren[1], John Archer[2], Graeme Jackson[1]
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3964 Spin history motion artifact modeling for BOLD MRI using SLOMOCO slice motion parameters
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3965 Correcting diffusion weight image distortions using anisotropy power maps, a comparative study
David Qixiang Chen[1], Dave Hayes[2], Karen Davis[3], Mojgan Hodaie[4]
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3966 FMRI Signal Degradation from Head Motion Interacting with Multi-channel Coil Sensitivity
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3967 Artifacts in Accelerated fMRI caused by Head Motion Interacting with Multi-channel Coil Sensitivity
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3968 A New Quality Control Pipeline for Diffusion Tensor Imaging
Xiaofu He[1], Feng Liu[1], Lawrence Amsel[1], Alayar Kangarlu[1], Andrew Gerber[1], Zhishun Wang[1], George Musa[1], Lupo Geronazzo[1], Cristiane Duarte[1], Yunsuo Duan[1], Thao Doan[1], Joy Hirsch[2], Christina W. Hoven[1]
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3969 Prospective motion correction and rejection for DWI using intrinsic volumetric information
Michael Herbst[1], Tamara Andres[1], Aditya Singh[1], Kenichi Oishi[2], Linda Chang[1], Thomas Ernst[1]
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3970 Structural analyses of motion-prone subjects using slice intersection-based motion correction
Wayne Lee[1], Colin Studholme[2], Evdokia Anagnostou[3,4], Margot Taylor[1,4], Jason Lerch[1,4]
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3971 Effects of preprocessing pipeline on GLM and pattern recognition analysis of task-based fMRI data
Anna Nigri[1,2], Nicola Bertolino[3], Stefania Ferraro[4], Maria Grazia Bruzzone[4], Filippo Molinari[2]
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3972 Combined slicewise and voxelwise outlier detection in diffusion MRI data of preterm born infants
Kerstin Pannek[1], Joanne George[2], Roslyn Boyd[3], Paul Colditz[2], Stephen Rose[4], Daniel Rueckert[1]
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3973 The effect of motion on morphometric estimates in clinical populations
Heath Pardoe[1], Rebecca Kucharsky Hiess[1], Ruben Kuzniecky[2]
[1]NYU School of Medicine, New York, NY, [2]New York University, New York, NY

3974 Alternative Group Analysis Methods May Provide Alternative to Smoothing of fMRI Data
Nicolette Schwarz[1], Adam Jaeger[1], Lingxi Chi[1], Jennifer McDowell[1], Lawrence Sweet[1], Nicole Lazar[1]
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3975 Mapping single subject human fetal DMNs in utero using 4D iterative time series reconstruction
Sharmishtaa Seshamani[1], Anna Blazejewska[1], Christopher Gatenby[1], Susan McKown[1], Jason Caucutt[1], Manjiri Dighe[1], Colin Studholme[1]
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3976 A comparison of combined acquisition and processing methods for DTI: a pediatric study
Paul Taylor[1,2,3], Alkathafi Alhamud[1,2], Andre Van der Kouwe[4], Muhammad G. Saleh[1,2], Barbara Laughton[5], Ernesta M. Meintjes[1,2]
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3977 Improved Automatic Retrospective Noise Control in fMRI using A Biophysical Model
Tim Tierney[1], Louise Croft[1], Maria Centeno[1], Elhum Shamshiri[1], Suejen Perani[1], Torsten Baldeweg[1], Chris Clark[1], David Carmichael[1]
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3978 An automatic EEG-assisted retrospective motion correction for fMRI (aE-REMCOR)
Chung Ki Wong[1], Vadim Zotev[1], Han Yuan[1], Masaya Misaki[1], Raquel Phillips[1], Qingfei Luo[1], Jerzy Bodurka[1,2]
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3979 Pseudo-continuous Arterial Spin Labeling with EEG-assisted retrospective motion correction
Chung Ki Wong[1], Qingfei Luo[1], Vadim Zotev[1], Wen-Ming Luh[2], Jerzy Bodurka[1]
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Modeling and Analysis Methods

Multivariate Modeling

3980* SpaceNet: Multivariate brain decoding and segmentation, (O-TH5)
Elvis DOHMATOB[1], Michael Eickenberg[2], Alexandre Gramfort[3], Bertrand Thirion[4], Gael Varoquaux[5]
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3981* Inverse Probability Weighting for Confounding Adjustment, (O-TH5)
Kristin Linn[1], Bilwaj Gaonkar[1], Jimit Doshi[1], Christos Davatzikos[1], Russell Shinohara[1]
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3982* Finding associations between neuroimaging and clinical variables using orthogonal Sparse PLS, (O-TH5)
Joao Monteiro[1], Anil Rao[1], A.A.T. Simone Reinders[2], J Lappin[3], Craig Morgan[3], Kevin Morgan[3], Paul Fearon[3], Peter Jones[4], Gill Doody[5], Robin Murray[6], Shitij Kapur[3], Paola Dazzan[6], John Shawe-Taylor[1], Janaina Mourao-Miranda[1]
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3983* Clustering cortical searchlights based on shared representational geometry, (O-TH5)
Samuel Nastase[1], Matteo Visconti di Oleggio Castello[1], James Haxby[1,2], M. Ida Gobbini[1,3], Yaroslav Halchenko[1]
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3984 Structural constraints and information flow in the brain: a TMS/EEG-DTI study
Enrico Amico[1], Olivier Bodart[1], Daniele Marinazzo[2], Steven Laureys[1]
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3985 Multivariate Brain Networks Underlying Neurocognitive Consequences of Traumatic Brain Injury
Jeffrey Duda[1], Junghoon Kim[2,3], Brian Avants[4]
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3986 Gini contrast detects differences in the cognitive processing of physically identical stimuli
Eva-Maria Fink[1], Georg Langs[1], Karl-Heinz Nenning[1], Mauricio Martins[2], Florian Fischmeister[1], Tecumseh Fitch[2], Roland Beisteiner[3]
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3987 CHAMP: Clustering for Heterogeneity Analysis and Mapping of imaging Patterns
Bilwaj Gaonkar[1], Kristin Linn[1], Erdem Varol[1], Aristeidis Sotiras[2], Taki Shinohara[3], Christos Davatzikos[1]
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3988 Random Projection for efficient dimensionality reduction in neuroimaging-genetics studies
Claudia Grellmann[1,2], Jane Neumann[1,2,3], Sebastian Bitzer[1], Peter Kovacs[2], Anke Tönjes[4], Arno Villringer[1,2,5], Annette Horstmann[1,2,3]
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3989 Structural equation modeling and PLS elucidates cortical substrates of trail making test performance
Timothy Herron[1], John Wyma[1], E Yund[1], Xiaojian Kang[2], David Woods[3]
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3990 Nonlinear ICA of structural MRI data: A deep learning approach
R Devon Hjelm[1], Eduardo Castro[2], Sergey Plis[2], Vince Calhoun[3]
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3991 Statistical Method for Association Study between PiB and MRI in Alzheimer's Disease
Atsushi Kawaguchi[1], Fumio Yamashita[2]
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3992 Estimating the intrinsic dimension of fMRI data using ICA
Rajesh Nandy[1]
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3993 Classifying Treatment-Resistant Schizophrenia using EEG Tractography and Machine Learning Algorithms
Bruce Russell[1], Carolyn McNabb[2], Reggio Hartono[3], Neelava Sengupta[3], Nathan Scott[3], Valerie Anderson[2], Meghan McIlwain[2], Joanne Lin[4], Nikola Kasabov[3], Rob Kydd[5]
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3994 Optimal Resolution and Filtering for Orientation Decoding in V1 at 7T
Ayan Sengupta[1], Renat Yakupov[2], Oliver Speck[2,3], Stefan Pollmann[1,3], Michael Hanke[4,3]
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3995 Multiple Testing for Neuroimaging via Hidden Markov Random Field
Hai Shu[1], Bin Nan[1], Robert Koeppe[1]
[1]University of Michigan, Ann Arbor, United States

3996 Fundamental Problems in Granger Causality Analysis of Neuroscience Data
Patrick Stokes[1], Patrick Purdon[2]
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3997 Searching MRI Biomarkers of Cognitive Deficits in Schizophrenia By Three-way Multimodal Fusion
Jing Sui[1,2], Thomas Jones[3], Qingbao Yu[4], Jiayu Chen[4], Yuhui Du[4], Hao He[5], Lingzhong Fan[1], Tianzi Jiang[1,6], Juan Bustillo[7], Vince Calhoun[8]
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3998 MVPA evinces attentional control of tolerance to physical variations in letter recognition
Mitchell Valdés[1], Marlis Ontivero-Ortega[1], Jorge Iglesias-Fuster[1], Agustin Lage-Castellanos[1], Yao Dezhong[2], Jinnan Gong[2]
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Modeling and Analysis Methods

Segmentation and Parcellation

3999* BigBrain: Automated Cortical Parcellation and Comparison with Brodmann Atlas, (O-TH5)
Marc Fournier[1], Claude Lepage[1], Lindsay Lewis[1], Karl Zilles[2], Katrin Amunts[2], Alan Evans[1]
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4000* Large-scale Probabilistic Functional Modes from resting state fMRI, (O-W1)
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4001 Supervertex Clustering of the Human Cerebral Cortex using Resting-state fMRI
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4002 How to Represent Sub-regions in a Parcellated Brain for fMRI Analyses?
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4003 LIB-59 Template: spinal cord template of the cervical spinal cord from 3T T2-weighted 3T MR images
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4004 Fast and accurate semi-automated segmentation method of spinal cord MR images at 3T
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4005 Multi-template approaches for segmenting the hippocampus: the case of the SACHA software
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4006 Stability of AAL representative BOLD signal in task data
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4007 An Unsupervised Group Average Cortical Parcellation using HARDI data
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4008 Automated Rhesus Macaque Brain Extraction and Tissue Probability Map Creation
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4009 A connectivity-based parcellation of the left dorsal premotor cortex
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4010 Automated segmentation of WM hyperintensities in people at risk of vascular cognitive impairment
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4011 A Multi-Atlas Approach for Defining Subject-Specific Functional Regions of Interest
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4012 Segmenting tissue types in high resolution EPI images, what information is available?
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4013 Connectivity-based identification and functional characterization of amygdala subnuclei
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4014 In Vivo Human Habenula Segmentation Using Subcortical Myelin Content
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4015 High Resolution Tractography Based Parcellation of the Human Insula in vivo
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4016 Intra-regional Organization of the Human Amygdala Determined by Voxel-wise Functional Connectivity
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4017 VolBrain: An online MRI brain volumetry system
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4018 Validated Automatic Brain Extraction of Head CT Images
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4020 SnapBase/SnapCheck: Assisting Quality Control of Post-processing Results over Large Cohorts
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4021 Multi-Scale Spectral Parcellation of the Cortex Based on Structural Connectivity
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4022 Evaluation Methods for Diffusion-driven Cortex Parcellation
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4023 Framework for Generating Class Priors From Multi-Contrast Images Without Group Volume Templates
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4024 Clinical application of a template-free framework for analysis of multi-contrast anatomical images
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4025 Hierarchical parcellation of the human subcortex using internal network dynamics
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4026 Functional parcellation of the human cerebellum using internal network dynamics
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4027 Automated Corpus Callosum segmentation applied on the OASIS database
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4028 Flexible subcortical segmentation using multimodal imaging data
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4029 Characterization of cortical surface reconstruction for sub-millimeter 7T MPRAGE using FreeSurfer
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4030 Convergent Organization of Bilateral Fusiform Gyrus under Handedness and Language Lateralization
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4031 Optimal label fusion for multiatlas image segmentation by local similarity metric learning
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Modeling and Analysis Methods

Univariate Modeling

4032 A Unified Kernel Regression for Diffusion Wavelets Detects Aging-Related Changes in the Hippocampus
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4033 Prospective power estimation for peak inference with the toolbox neuropower
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4034 Threshold-Free Cluster Enhancement revisited: Increasing Power and Spatial specificity of TFCE
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4035 Non-parametric Inference for Longitudinal Neuroimaging Data with the Wild Bootstrap
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4036 Do the units matter? Validity of Intensity Based Meta-Analysis in the presence of unit mismatches
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4037 Comparison of regression models to evaluate changes in hemodynamic responses through motor training
Yumie Ono[1], Jack Noah[2], Xian Zhang[2], Yasunori Nomoto[1], Tatsuya Suzuki[1], Shimada Sotaro[1], Atsumichi Tachibana[3], Shaw Bronner[2], Joy Hirsch[2]
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4038 Estimating the prevalence of 'file drawer' studies
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4039 Estimating profiles of disease progression using mixed-effects model with time reparametrization
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Neuroanatomy

Anatomy and Functional Systems

4040 Functional regions in human ventral temporal cortex are cytoarchitectonically dissociable
Michael Barnett[1], Kevin Weiner[1], Simon Lorenz[2], Julian Caspers[3], Anthony Stigliani[1], Katrin Amunts[2], Karl Zilles[2], Bruce Fischl[4], Kalanit Grill-Spector[1,5]
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4041 Changes in brain activity associated with stomach distention during gastric emptying
Guido Camps[1], Maartje Spetter[2], Cees de Graaf[3], Paul Smeets[4]
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4042 Structural variability in the human brain reflects functional architecture
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4043 The dual loop system in imitation of transitive and intransitive gestures - a VLSM approach
Andrea Dressing[1,2], Lena Beume[1,2], Dorothee Kümmerer[1,2], Schmidt Charlotte[1,2], Tobias Bormann[1,2], Irina Mader[3,2], Michel Rijntjes[1,2], Christoph Kaller[1,4,2], Cornelius Weiller[1,4,2], Markus Hoeren[1,4,2]
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4044 Optimising alignment of local macroanatomy improves spatial correspondence of face selective areas
Martin Frost[1], Kevin Weiner[2], Michael Barnett[2], Anthony Stigliani[2], Kalanit Grill-Spector[2,3], Rainer Goebel[1,4]
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4046 Obesity associated changes in specific brain tissue microstructure
Stephanie Kullmann[1], Ralf Veit[2], Martin Heni[3], Martina Callaghan[4], Nikolaus Weiskopf[5], Hans-Ulrich Häring[6], Klaus Scheffler[7], Andreas Fritsche[8], Hubert Preissl[9]
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4047 Human pregenual anterior cingulate cortex: structural, functional and connectivity heterogeneity
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4048 Functional segregation and integration within fronto-parietal networks
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4049 Laminar Differences in Retinotopic Maps: Measured and Modeled
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4050 Size Matters: Intrinsic Functional Activity Correlates with Brain Volume across Healthy Individuals
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4051 Functional segmentation of the human hippocampus: A meta-analytic approach with 7T validation
Jennifer Robinson[1], Daniel Barron[2], Lauren Kirby[1], Ashley Hill[1], Jerry Murphy[1], Katherine Bottenhorn[1], Jeffrey Katz[1], Nouha Salibi[3], Simon Eickhoff[4], Peter Fox[5]
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4052 Highlighting the dynamic interactions between the cerebral cortex and the cerebellum
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4053 The functional and structural asymmetry of the Superior Temporal Sulcus
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Neuroanatomy

Cortical Anatomy and Brain Mapping

4054* A Dynamically Growing Domain Model of Cortical Folding Pattern Formation, (O-W2)
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4055 Disrupted Small-World Organization of Structural Networks in Conduct Disorder: A Preliminary Study
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4056 Abnormal sulcal geometry in Broca's area in children with Autism
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4057 Is species-specific visual input processing different in humans & monkeys. A 7T fMRI mapping study
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4058 Neuronal electrical activity as fingerprint of brain cortical areas
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4059 Effective connectivity within a semantic network: A transfer entropy analysis of EEG source data
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4060 Segregation of early visual processes utilising ultra-high resolution fMRI at high field
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4061 On the relationship between gray matter and behavioral data: lessons learned
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4062 Qualitative analysis of atypical sulcal folding in polymicrogyric fetal brain using cortical surface
Alexandre Guimaraes[1,2], Borjan Gagoski[1], Caitlin Rollins[1], Edward Yang[1], P. Grant[1], Kiho Im[1]
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4063 Automatic labeling and pattern analysis of early cortical folding in polymicrogyria fetal brains
Kiho Im[1], Alexandre Guimaraes[1,2], Borjan Gagoski[1], Caitlin Rollins[1], Edward Yang[1], P. Grant[1]
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4064 Automated sub-parcellation of Broca's region based on resting-state functional connectivity
Estrid Jakobsen[1], Manousos Klados[1], Jan Zelmer[1], Alexandros Goulas[1], Daniel Margulies[1]
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4065 Probabilistic ROIs are better than binary ones for finding regional and connectivity abnormality
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4066 Inter-Method Inconsistencies of Brain Volume Estimation and Inter-site Variability in Autism
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4067 Pattern of neonatal cerebellar growth associated with prematurity-related brain injury
Hosung Kim[1], Mai-Lan Ho[2], Dawn Gano[1], Xiaoyue Guo[3], Seth Vigneron[1], Donna Ferriero[1], A Barkovich[1], Duan Xu[1]
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4068 The progression of regional cortical folding in preterm brains without MRI visible injury
Averi Kitsch[1], Sinchai Tsao[1], Mengyuan Liu[1], Steven Miller[2], Vann Chau[3], Ruth Grunau[4], Anne Synnes[5], Colin Studholme[1]
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4069 Detailed shape analysis of healthy brains and brains with Alzheimer's disease
Arno Klein[1], Elias Chaibub-Neto[1]
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4070 Neurodevelopmental trajectories of structural covariance networks in the human cerebral cortex
Mark Krongold[1], Cassandra Cooper[1], Signe Bray[1]
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4071 Tracing cortical functional connectivity of histological defined thalamic nuclei
vinod kumar[1,2], Christian Beckmann[3], Klaus Scheffler[2], Wolfgang Grodd[1]
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4072 Resting state functional connectivity of the locus coeruleus in humans and the effects of age
Chiang-shan Li[1], Sheng Zhang[1]
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4073 Assessment of the Lateralization of Cortical Brain Areas Using High Resolution Inversion Recovery MR
Eyal Lotan[1], Daniel Barazany[2], Ido Tavor[3], Shani Ben Amitay[2], David Tanne[4], Yaniv Assaf[2]
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4074 Distance from the default-mode network: An organizing principle of brain structure and function
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4075 Comparison of Cortical Gyrification in Deaf Signers, Hearing Signers, and Hearing Nonsigners
Stephen McCullough[1], Karen Emmorey[1]
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4076 Cortical surface area reduced between 15 and 20 years in adolescents born with very low birth weight
Lars Morten Rimol[1], Knut Jørgen Bjuland[1], Gro Løhaugen[1], Marit Indredavik[2], Marit Martinussen[3], Ann-Mari Brubakk[4], Asta K. Håberg[1], Jon Skranes[1]
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4077 Functional mapping of Broca's region by transcranial magnetic stimulation
Katrin Sakreida[1,2], Inga Lange[1,2], Stefan Heim[3,4], Ferdinand Binkofski[2,5], Klaus Willmes[6], Hans Clusmann[1], Georg Neuloh[1]
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4078 ICA Allows Rapid Identification of Functional ROIs in Task-Based fMRI Data at 3T and 7T
Sanne Schoenmakers[1], Marcel Gerven[1]
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4079 Comparing High Resolution MRI Cortical Thickness Measurements with the von Economo Atlas
Lianne Scholtens[1], Marcel de Reus[1], Martijn van den Heuvel[1]
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4080 The birth weights even within normal levels impact on the left inferior frontal gyrus volumes
Aya Sogame[1], Atsushi Sekiguchi[1], Hikaru Takeuchi[2], Susumu Yokota[3], Hiroshi Hashizume[4], Kohei Asano[5], Asano Michiko[1], Yuko Sassa[6], Ryuta Kawashima[3], Yasuyuki Taki[6]
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4081 Relationship between White Matter Microstructure and Brain Morphology in Deep Sulcal Landmarks
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4082 Mapping cortical thickness as an in-vivo marker for primary auditory cortex in humans
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Neuroanatomy

Cortical Cyto- and Myeloarchitecture

4083* Cortical Maturation and Myelination in Healthy Toddlers and Young Children, (O-W2)
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4084 Variation in cortical depth of the stria of Gennari seen in high-resolution ex-vivo MRI of human V1
Oliver Hinds[1], MUKUND BALASUBRAMANIAN[2], Jean Augustinack[3], Eric Schwartz[4], Bruce Fischl[5], Jonathan Polimeni[6]
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4085 T1-weighted/T2-weighted MRI myelin mapping does not map myelin in the human corpus callosum
Stefano Sandrone[1], Michel Thiebaut de Schotten[2], Katja Reimann[3], Declan Murphy[4], Stefan Geyer[3], Marco Catani[5], Flavio Dell'Acqua[6]
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Neuroanatomy

Neuroanatomy Other

4086 Brain and Cognitive Longitudinal Development in Benign Epilepsy with Centrotemporal Spikes
Camille Garcia-Ramos[1], Daren Jackson[1], Jack Lin[2], Kevin Dabbs[1], Jana Jones[1], David Hsu[1], Carl Stafstrom[3], Lucyna Zawadski[1], Michael Seidenberg[4], Vivek Prabhakaran[1], Bruce Hermann[1]
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4087 Dejerine and BigBrain
Odile Plaisant[1], Pierre-Alexis Tozzi[2], Anne Potier[2], Paule Toussaint[3], Vincent Delmas[2], Alan Evans[4]
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Neuroanatomy

Normal Development

4088 Characterization of Incomplete Hippocampal Inversions in a large dataset of young healthy subjects
Claire Cury[1,2], Roberto Toro[3], Fanny Cohen[1], Amel Mhaya[1], Marie CHUPIN[1,2], Dominique Hasboun[4], Gunter Schumann[5], Vincent Frouin[6], Jean Baptiste Poline[7], Joan GLAUNES[8], Olivier COLLIOT[1,2], Consortium IMAGEN[9]
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4089 Differential age-related effects on human gray matter density & volume in the periadolescent period
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4090 Refining the structural connectome to classify sex differences
Gautam Prasad[1], Neda Jahanshad[2], Greig de Zubicaray[3], Katie McMahon[3], Nicholas Martin[4], Margaret Wright[4], Paul Thompson[5]
[1]USC, Marina del Rey, CA, [2]Imaging Genetics Center, Institute for Neuroimaging & Informatics, University of Southern California, Los Angeles, CA, [3]University of Queensland, Brisbane St. Lucia, Queensland, [4]QIMR Berghofer Medical Research Institute, Brisbane, Australia, [5]Keck School of Medicine of USC, Los Angeles, CA

4091 Mapping Developmental Topography Of Brain Morphology Through Non-Negative Matrix Factorization
Aristeidis Sotiras[1], Theodore Satterthwaite[2], Raquel Gur[2], Ruben Gur[2], Christos Davatzikos[1]
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4092 Sex differences in cerebral blood flow
Kirsten Tillisch[1], Michelle Chen[2], Paul Macey[2], Jennifer Labus[3], Emeran Mayer[2]
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4093 A posterior to anterior pattern in the development of Brain Connectivity
Lara Wierenga[1], Yvonne Rijks[2], Sarai van Dijk[2], Martijn van den Heuvel[3], Marcel de Reus[3], Sarah Durston[4]
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Neuroanatomy

Subcortical Structures

4095 Genetic influences on longitudinal changes in subcortical volumes - from the ENIGMA Plasticity Group
Rachel Brouwer[1], David Glahn[2], Derrek Hibar[3], Xue Hua[3], Neda Jahanshad[3], Lucija Abramovic[1], Carol Franz[4], Narelle Hansell[5], Marinka Koenis[1], Karen Mather[6], Matthew Panizzon[4], Lachlan Strike[5], Suzanne Swagerman[7], Anbupalam Thalamuthu[6], Wei Wen[6], Dorret Boomsma[7], John Gilmore[8], Nitin Gogtay[9], René Kahn[1], William Kremen[4], Perminder Sachdev[6], Margaret Wright[5], Paul Thompson[3], Hilleke Hulshoff Pol[1]
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4096 Identification of task-related brainstem nuclei in HCP data using masked ICA
Anja Gieseler[1], Tawfik Moher Alsady[1], Florian Beissner[1]
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4097 Meta-analysis of sex and handedness effects on human subcortical asymmetries: ENIGMA-Lateralization

Tulio Guadalupe[1], Vatche Baboyan[2], Fabrice Crivello[3], Barbara Franke[4], Hans Jörgen Grabe[5], Derrek Hibar[6], Neda Jahanshad[2], Sophie Maingault[3], Nicholas Martin[7], Katie McMahon[8], Sarah Medland[7], Miguel Renteria[7], Sanjay Sisodiya[9], Nathalie Tzourio-Mazoyer[10], Christopher Whelan[2], Katharina Wittfeld[11], Margaret Wright[7], Greig de Zubicaray[8], Paul Thompson[2], Bernard Mazoyer[3], Simon Fisher[1], Clyde Francks[1]
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4098 Meta-Analysis of Subcortical Shape Reveals Differences Between Schizophrenia Patients and Controls

Boris Gutman[1], Christopher Ching[1], Sinead Kelly[2], Kate Alpert[3], Aiden Corvin[4], Theo van Erp[5], Jessica Turner[6], Gary Donohoe[7], Paul Thompson[8], Lei Wang[9]
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4099 Sex differences in neuroanatomical structures varies with intracranial volume correction methods

Tor Ivar Hansen[1,2], Carl Pintzka[1], Hallvard Røe Evensmoen[1,2], Asta K. Håberg[1,2]
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4100 Localization of deformations within the amygdala associated with early peer victimization

Yaling Yang[1], Eric Kan[2], Alina Arakelian[3], Yi Lao[4], Natasha Lepore[5], Laura Baker[6], Shantanu Joshi[7]
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Neuroanatomy

Transmitter Systems

4101 Dopamine Synthesis and Receptor Profile Vary as a Function of Body Mass Index in Humans

Angela Ianni[1,2], Daniel Eisenberg[1], Catherine Hegarty[1,3], Joseph Masdeu[1,4], Michael Gregory[1], Philip Kohn[1], Karen Berman[1]
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Neuroanatomy

NorWhite Matter Anatomy, Fiber Pathways and Connectivity

4102* Population maps of axonal MRI g-ratio, (O-M5)

Siawoosh Mohammadi[1], Daniel Carey[2], Fred Dick[3], Joern Diedrichsen[4], Marty Sereno[3], Marco Reisert[5], Martina Callaghan[6], Nikolaus Weiskopf[6]
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4103* Fiber dispersion in the corpus callosum revealed with postmortem diffusion weighted imaging and PLI, (O-T4)

Jeroen Mollink[1], Michiel Kleinnijenhuis[1], Saad Jbabdi[1], Stamatios Sotiropoulos[1], Olaf Ansorge[2], Karla Miller[1]
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4104 Tractography reveals disproportionately more frontal lobe connections in humans than in monkeys
Rachel Barrett[1], Flavio Dell'Acqua[1], Maurice Ptito[2], Tim Dyrby[3], Marco Catani[4]
[1]NatBrainLab, Department of Neuroimaging, King's College London, London, United Kingdom, [2]Danish Research Centre for Magnetic Resonance, Copenhagen University Hospital Hvidovre, Copenhagen, Denmark, [3]Danish Research Centre for Magnetic Resonance, Copenhagen University Hospital Hvidovre, Hvidovre, Denmark, [4]NatBrainLab, Sackler Institute of Translational Neurodevelopment, King's College London, London, United Kingdom

4105 Functional connectivity and structural coherence between nucleus accumbens and insula in children
Sara Bergman[1], Josiah Leong[1], Brian Knutson[1], Ian Gotlib[1]
[1]Stanford University, Stanford, CA

4106 Microstructure of the Default Mode Network in the Preterm Infants
Jiaolong Cui[1], Hosung Kim[1], Trevor Flynn[1], Olga Tymofiyeva[1], Yiran Chen[1], James Barkovich[1], Donna Ferriero[1], Duan Xu[1]
[1]University of California San Francisco, San Francisco, CA

4107 Diffusion-based parcellation of the precuneus within the default-mode network
Samantha Cunningham[1], Dardo Tomasi[1], Nora Volkow[1]
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4108 Automatic segmentation of the optic radiation
Michael Dayan[1], Chris Clark[1]
[1]UCL Institute of Child Health, London, United Kingdom

4109 Towards an ENIGMA connectome atlas: comparing connection prevalence across sites
Marcel de Reus[1], Martijn van den Heuvel[1], Tim Reess[2,3], Kathrin Koch[2], Paul Thompson[4], Neda Jahanshad[4]
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4110 Diffusion tensor tractography of white matter fiber tracts in neonates with congenital heart disease
Marie Drottar[1], Janet Soul[2], Henry Cheng[3], Borjan Gagoski[4], P Ellen Grant[5]
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4111 CD56+ Natural Killer Cell Counts Associate with Reductions in White Matter Fractional Anisotropy
Joshua Faskowitz[1], Neda Jahanshad[1], Narelle Hansell[2], Greig de Zubicaray[3], Katie McMahon[4], Nicholas Martin[2], Margaret Wright[2], Paul Thompson[1]
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4112 FAAH genotypic differences in frontolimbic circuitry emerge in adolescence
Robert Fetcho[1], Andrew Drysdale[1], Charles Glatt[1], Francis Lee[1], Alisa Powers[1], Danielle Dellarco[1], Natacha Akshoomoff[2], David Amaral[3], Cinnamon Bloss[2], Linda Chang[4], Thomas Ernst[5], Jean Frazier[6], Jeffrey Gruen[7], Walter Kaufmann[8], Brian Keating[9], Tal Kenet[10], Joshua Kuperman[2], David Kennedy[6], Stewart Mostofsky[11], Elizabeth Sowell[12], Sarah Murray[13], Anders Dale[2], Terry Jernigan[2], B.J. Casey[1]
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4113 Tractotron: a new toolbox to estimate white matter disconnection in stroke patients
Chris Foulon[1], Richard Levy[1], Emmanuelle Volle[2], Marika Urbanski[3], Michel Thiebaut de Schotten[4]
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4114 The subcortical structural connectivity of the human insula
Jimmy Ghaziri[1], Alan Tucholka[2], Gabriel Girard[3], Jean-Christophe Houde[4], Guillaume Gilbert[5], Maxime Descoteaux[6], Pierre Rainville[7], Dang Khoa Nguyen[8]
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4115 Structural connectivity reproducibility through multiple acquisitions
Gabriel Girard[1], Kevin Whittingstall[1], Rachid Deriche[2], Maxime Descoteaux[1]
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4116 Damage to the inferior fronto-occipital fasciculus in a case of Capgras delusion
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4117 Short association fibres of the insula-temporoparietal junction in early psychosis
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4118 Unfolding brain tractography
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4119 Lateralisation of fronto-parietal networks correlate with hand preference and precision grasping
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4120 Scale dependence of graph-theoretic measures in network representations of human brain connectivity
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4121 White matter macro- & micro-structure alterations in the corticospinal tract of preterm born adults
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4122 Atlas of White Matter Tracts in Normal Iranian Population: A Template for Pre-surgical Planning
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4123 Stability of global connectivity in adults who were born very preterm
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4124 Chronic spatial working memory deficit caused by disconnection of the dorsal fronto-parietal network
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4125 Dendato-Thalamo-Cortical Pathways in Association with Otolith Dysfunction
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4126 The relationship between myelin and cognitive performance in children with learning disabilities
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4127* Motor skill acquisition promotes human brain myelin plasticity, (O-M1)
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4128 Identification and statistical validation of white matter pathways involved in affect and motivation
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4129 Altered topological organization of white matter structural networks in primary open angle glaucoma
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4130 Heavy prenatal alcohol exposure related to smaller corpus callosum in newborn structural MRI scans
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4131 Streamlets: Preventing Over-Interpretation of Streamlines
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4132 Surface Based Parcellation for Combination of Structural and Functional Connectivity of Brain
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4133 Impact of EPI distortion correction in diffusion tractography of small tracts
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4134 Anatomical Connectivity of Temporal Voice Areas
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4135 Diffusion tensor imaging evidence for deafness-induced changes in the uncinate fasciculus
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4136 Reduced integrity within limbic connections associated with present state delusions in schizophrenia
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4137 Cognitive Mapping of White Matter: A Data-Driven Categorisation of Tractography using Neurosynth
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4138 Computation of diffusion-based pathway connectivity maps: a study of subthalamic nucleus connections
Anne-Charlotte PHILIPPE[1], Sophie SEBILLE[1], Chantal FRANCOIS[2], Carine KARACHI[2], Romain Valabregue[1], Stéphane Lehéricy[1], Eric Bardinet[3]
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4139 Anatomical connectivity mapping and DTI provide complementary information on the blind's brain
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4140 Anatomical connectivity atlas of the macaque brain in 3D navigational format
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4141 Double-Dissociation between the mechanism leading to impulsivity and inattention in ADHD
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4142 Diffusion tensor tractography in congenital hemispheric cerebral anomaly
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4143 Brain tractography: Definition of new anatomical rules
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4144 A Novel Threshold-Free Network-Based Statistics Method: Demonstration using Simulated Pathology
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4145 Neuroplasticity of structural connectivity after long-term dancing training revealed by DSI
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4146 Topologically Centralized White-Matter Pathways of the Human Connectome
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4147 White matter fascicles predict the locations of function regions in ventral occipitotemporal cortex
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4148 The left arcuate fasciculus connects with the superior temporal gyrus: new evidence from FIBRASCAN
Ilyess Zemmoura[1,2,3], Barthélémy Serres[4], Daniel Bourry[5], Frederic Andersson[1], Laurent Barantin[1], Gilles Venturini[4], Christophe Destrieux[1,3,2]
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4149 Wiring Optimization in the Human Brain: Estimated Path Length versus Shortest Possible Path Length
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Perception and Attention

Attention: Visual

4150* How bottom-up and top-down factors shape representation in word- and face-selective cortex, (O-W3)
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4151 The Role of Dopamine in Value-Based Attention as Revealed by Positron Emission Tomography
Brian Anderson[1], Hiroto Kuwabara[1], Emily Gean[1], Arman Rahmim[1], James Brasic[1], Noble George[1], Boris Frolov[1], Susan Courtney[1], Dean Wong[1], Steven Yantis[1]
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4152 Reward modulation of goal-directed and stimulus driven shifts in spatial attention: an fMRI study
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4153 Task differentially modulates the spatial extent of category-selective regions across the cortex
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4154 A cognitive function of the posterior default mode network: shifting of selective attention?
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4155 Temporal activity patterns underlying causal posterior parietal contributions to visual performance
Lorena Chanes[1], Romain Quentin[2], Marine Vernet[3], Seth Elkin-Frankston[4], Dimitri Bayle[5], Federica Rastelli[6], Antoni Valero-Cabre[7]
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4156 Anterior-posterior shift in aging within ventral attention network: a Functional connectivity study
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4158 Neural systems for attention in survivors of childhood Acute Lymphoblastic Leukemia
Slim Fellah[1], Yin Ting Cheung[2], Matthew Scoggins[1], Ping Zou[1], Melissa Hudson[2], Ching-Hon Pui[3], Robert Ogg[1], Kevin Krull[2]
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4159 Selective spatial and feature-based attention - integrating fMRI data from two studies
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4160 Neural generators selectively linked to global or local letter recognition are gated by attention
Jorge Iglesias-Fuster[1], Yusniel Santos-Rodríguez[1], Nelson Trujillo-Barreto[2], Mitchell Valdes-Sosa[3]
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4161 Investigation of microscopic functional specificity for attention in peripheral visual field
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4162 Neural Source Models of Early Novelty Processing: Evidence for Frontopolar-Occipital Connectivity
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4163 Brain Modulation under Acute Stress in the Translational Scenario of Stop-Signal Inhibition
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4164 The pulvinar as the neural substrate of neuroticism enhanced attentional capture
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4165 The spatiotemporal dynamics of top-down and bottom-up attention in humans – and MEG study
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4166 Neural bases of cognitive state which changes with own past behavior: an fMRI study
Naoki Miura[1], Takayuki Nozawa[2], Makoto Takahashi[3], Ryoichi Yokoyama[4], Yukako Sasaki[4], Kohei Sakaki[4], Ryuta Kawashima[4]
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4167 Attention controls transitions between states of distinct stability in neural dynamics
Yuka Okazaki[1], Yuji Mizuno[1,2,3], Keiichi Kitajo[1,2]
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4168 Brain Plasticity in Healthy Aging During Multiple Object Perception
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4169 Pleasant Emotional Induction Affects only Global Processing during Global/Local Task: an ERP Study
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4170 Decoding Sustained Attention: Underlying Functional Connections Predict Performance
Victoria Poole[1,2,3], Francesca Fortenbaugh[2,3], Meghan Robinson[2,4], William Milberg[2,3], Regina McGlinchey[2,3], David Salat[2,4], Michael Esterman[2,5]
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4171 Distinctive roles of feature attention and spatial attention on attentional capture
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4172 Is the improvement of visual detection by high-beta frontal activity exquisitely frequency-specific?
Romain Quentin[1], Marine Vernet[1], Antoni Valero-Cabre[1,2]
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4173 Real-Time fMRI Neurofeedback-Mediated Self-Regulation Of Right Visual Cortex in Hemineglect Patients
Fabien Robineau[1], Arnaud Saj[2], Frank Scharnowski[3], Patrik Vuilleumier[4]
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4174 Spatio-temporal activity patterns of flanker processing show early modulations induced by attention
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4175 Entrainment of behaviorally relevant oscillations in the right FEF linked to conscious detection
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4176 Thalamus relays corticocortical communication in visual spatial attention: an fMRI study
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4177 The Role of High and Low Frequency Oscillations During Preparatory Attention
Theresa Wildegger[1], Glyn Humphreys[2], Nicholas Myers[3], Gustavo Rohenkohl[3], Celine Gillebert[4], Anna Nobre[4]
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4178 The Interactive Activation of Attentional Networks
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4179 Dissociation of attentional 'spotlight' and task difficulty in parietal cortex
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4180 Attentional Capture is Modulated by Top-down Attentional Fluctuations through the Gateway System
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Perception and Attention

Chemical Senses: Olfaction, Taste

4181 Unconscious olfactory perception
Kallia Apazoglou[1], Aline Pichon[1], Kristoffer Aberg[1], Patrik Vuilleumier[1]
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4182 Age-related changes in functional connectivity during taste processing – an fMRI study
Heleen Hoogeveen[1,2], Jelle Dalenberg[1,2], Remco Renken[1,2], Gert ter Horst[1,2], Monicque Lorist[2,3]
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4183 Brain Activation and Functional Connectivity: Study of olfactory perception in sommeliers
Karthik Sreenivasan[1], Xiaowei Zhuang[1], Deanna Baldock[1], David Weintraub[2], Meghan Pierce[2], Johannes Frasnelli[3], Erik Beall[4], Gabriel Leger[1], Sarah Banks[1], Dietmar Cordes[1,5]
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4184 Effective Connectivity Analysis of Olfactory Perception in Sommeliers
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4185 Functional Connectivity and Insula Partition Analysis in Sommeliers
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Perception and Attention

Consciousness and Awareness

4186* Modulating Conscious Movement Intention with Noninvasive Brain Stimulation, (O-TH4)
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4187 Changes of thalamus-neocortex connectivity induced by the psychedelic Ayahuasca
Katia Andrade[1], Fernanda Palhano-Fontes[1], Sidarta Ribeiro[1], Draulio de Araujo[1]
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4188 Default mode network structure (DWI) and metabolism (PET) in patients with altered consciousness
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4189 Activity and Activity Pattern in Human Visual Cortex Could Reveal The Contents of Visual Awareness
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4190 Neural correlates of the LSD state
Robin Carhart-Harris[1], Leor Roseman[1], Mendel Kaelen[1], Csaba Orban[1], Robert Leech[1], Peter Hellyer[2], John McGonigle[1], Amanda Feilding[3], David Nutt[1]
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4191 Bridging the gap: The intact hemisphere mediates visuo-motor blindsight
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4192 Impaired subcortico-cortical connectivity in disorders of consciousness
Nicholas Lant[1], Adrian M Owen[1], Davinia Fernandez-Espejo[1]
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4193 Neural substrates underlying access to consciousness of visual inputs in Parkinson's disease
Stephanie Lefebvre[1], Guillaume Baille[2], Lucie Plomhause[2], Sébastien Szaffarczyk[1], christine delmaire[3], Luc Defebvre[2], Kathy Dujardin[2], Renaud Jardri[1], Delphine Pins[1]
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4194 Neural Correlates of Needling Credibility in Acupuncture on Low Back Pain
Meena Makary[1], Jeungchan Lee[2], Jun-Hwan Lee[3], Eunyoung Lee[3], Seulgi Eun[1], Jae-Young Shin[3], Geonho Jahng[4], Vitaly Napadow[2], Kyungmo Park[1]
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4195 Shared right inferior fronto-parietal substrates for corporeal awareness and self-identification
Tomoyo Morita[1,2], Daisuke Saito[3,4], Midori Ban[1], Koji Shimada[3], Yuko Okamoto[3], Hirotaka Kosaka[3,4,5], Hidehiko Okazawa[3,4], Minoru Asada[1], Eiichi Naito[2]
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4196 Decoding the contents of conscious awareness from brain activity
Lorina Naci[1], Mimma Anello[1], Rhodri Cusack[1], Adrian M Owen[1]
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4197 Assessing the level of consciousness within non-REM sleep using TMS–EEG and serial awakenings
Jaakko Nieminen[1], Francesca Siclari[2], Olivia Gosseries[3], Melanie Boly[4], Marcello Massimini[5], Bradley Postle[6], Giulio Tononi[7]
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4198 Neural correlates of lexical priming effect in patients with severe disorders of consciousness
Anna Nigri[1,2], Eleonora Catricalà[3], Stefania Ferraro[1], Ludovico D'Incerti[1], Matilde Leonardi[1], Davide Sattin[1], Maria Grazia Bruzzone[1], Stefano Cappa[3]
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4199 How are different neural networks related to consciousness?
Pengmin Qin[1], xuehai wu[2], Ying Mao[2], Georg Northoff[1]
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4200 Precuneus & frontal gyrus–are they really active when we rest? An EEG-fMRI study of Berger rhythm
Mateusz Rusiniak[1], Monika Lewandowska[1], Tomasz Wolak[1], Katarzyna Ciesla[1], Agnieszka Pluta[1], Henryk Skarżyński[1]
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4201 Disruption of posteromedial large-scale neural communication predicts recovery from coma
Stein Silva[1,2], Francesco de Pasquale[3], Corine Vuillaume[2], Lionel Kerhuel[2], Mylene Terrade[2], Jean Ruiz[2], Beatrice Riu[2], Isabelle Loubinoux[1], Jean Francois Demonet[4], Patrice Peran[1]
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4202 Signature of consciousness in the dynamics of resting-state brain activity
Jacobo Sitt[1], Pablo Barttfeld[1], Lynn Uhrig[1], Mariano Sigman[2], Bechir Jarraya[1], Stanislas Dehaene[1]
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4203 Dissociating the neural substrates of self-awareness and perceptual-awareness using fMRI BOLD-A
Pawel Tacikowski[1], Christopher Berger[1], H. Henrik Ehrsson[1]
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4204 Fluctuation of Network Activity During Resting State Reflects Subjective Cognitive Experiences
Laurens Van Calster[1], Arnaud D'Argembeau[1], Eric Salmon[2], Frédéric Peters[1], Steve Majerus[1]
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4205 EEG source-localized neurofeedback for effortless awareness meditation
Remko van Lutterveld[1], Sean Houlihan[1], Prasanta Pal[1], Matthew Sacchet[2], Cinque McFarlane-Blake[1], Payal Patel[1], Danny Gleason[1], Clemens Bauer[1], Judson Brewer[1]
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Perception and Attention

Perception and Attention Other

4206 Hypothalamus activity predicts performance fluctuations in a vigilance task
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4207 Topographical distribution of heart cycle-related effects in human ECoG
Markus Kern[1,2,3], Andreas Schulze-Bonhage[1,3], Tonio Ball[1,2,3]
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4208 Neural basis of the dynamic decoupling and re-coupling of attention to internal and external targets
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4209 Changes in dynamics of vigilance-related functional connectivity in taxi drivers
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4210 Default Mode Network Resting Activity Predicts Performance Decline during Prolonged Workload
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4211 Brain-to-brain communication: Evaluating the macro-entanglement hypothesis using fMRI technology
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4212 Supraspinal response to bladder filling and cooling in healthy subjects - An fMRI study
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Perception and Attention

Perception: Auditory/ Vestibular

4213 Magnetic vestibular stimulation (MVS) influences default-mode network fluctuations
Rainer Boegle[1,2], Thomas Stephan[3,2,4,5], Matthias Ertl[6,4,2], Stefan Glasauer[7,2,4,8], Marianne Dieterich[9,1,2,10]
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4214 Cortical Encoding of Pitch: a 7 Telsa fMRI Study with Natural Sounds
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4215 The representation of sound location (azimuth) in the auditory cortex of early blind humans
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4216 Neural correlates of otolith stimulation: results of an EEG study
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4217 Modulation of cortical vestibular processing by somatosensory inputs in the posterior insula
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4218 Examining Selective Attention Mechanisms Using Naturalistic Auditory Scenes and 7T Functional MRI
Lars Hausfeld[1], Lars Riecke[1], Federico De Martino[1], Elia Formisano[1]
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4219 Altered vestibular cortex functional connectivity at rest in vestibular neuritis
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4220 Activation study on the perception of auditory illusion by functional magnetic resonance imaging
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4221 Cortical control of vocal pitch feedback
Hui Li[1], Psyche Loui[2], Gus Halwani[1], Frank Guenther[3], Gottfried Schlaug[1]
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4222 Neuroplasticity of neuromagnetic responses to human voice after long-term musical training
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4223 Functional mapping of the human vestibular cortex: meta-analysis and intracranial stimulation
Christophe Lopez[1,2], Laure Mazzola[3,4,5], Isabelle Faillenot[3,4,5], Florian Chouchou[4], Fred Mast[6], Olaf Blanke[7,8], François Mauguière[4,9,10], Jean Isnard[11,9,10]
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4224 Cortical depth-dependent processing of natural sound features in human auditory cortex
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4225 Organization of Human Auditory Cortex: Low Vs. High Frequency ECoG
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4226 Pitch Perception as Pattern Recognition: Evidence from Individual Differences in Brain Oscillations
Barbara Piber[1], Richard Parncutt[2], Peter Schneider[3], Annemarie Seither-Preisler[4]
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4227 Can amusia be induced in the normal brain with transcranial magnetic stimulation?
Isabelle Royal[1,2,3], Marie-Eve Desjardins[1], Nicolas Robitaille[2], Isabelle Peretz[1,2,3]
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4228 Effects of Binaural and Monaural Noise on the Human Auditory Evoked Neuromagnetic Field
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4229 The Amplitude of AEP N1 Correlates with BOLD Functional Connectivity of Bilateral Heschl's Gyri
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4230 Mapping of the primary auditory cortex in subjective tinnitus
Tomasz Wolak[1], Monika Lewandowska[1], Katarzyna Ciesla[1], Mateusz Rusiniak[1], Agnieszka Pluta[1], Henryk Skarżyński[1]
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4231 Decoding sound locations in three-dimensional space from fMRI data
Xiaolu Zhang[1], Qingtian Zhang[1], Xiaolin Hu[1], Bo Zhang[1], Xiaoqin Wang[2]
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4232 Aging-related changes in the cortical processing of otolith information in humans
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Perception and Attention

Perception: Multisensory and Crossmodal

4233 Tracking dynamic network re-configurations during viewing of complex naturalistic stimuli
Cécile Bordier[1], Emiliano Macaluso[1]
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4234 Development of Audio-visual Multisensory Integration in Children: An Event-Related Potential Study
Emmanuelle Dionne-Dostie[1,2], Anne Gallagher[3,2], Maryse Lassonde[2,4], Julie Tremblay[5], Phetsamone Vannasing[2], Olivier Collignon[6,7]
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4235 Self-specific multisensory prediction error signals in the human brain
Giovanni Gentile[1], Arvid Guterstam[2], H. Henrik Ehrsson[2]
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4236 The spatial organization of the multisensory STS at multiple spatial scales: an fMRI study at 3 & 7T
Francesco Gentile[1], Nienke van Atteveldt[2], Federico De Martino[3], Rainer Goebel[3]
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4237 The functional relevance of neural oscillations for temporal encoding
Laetitia Grabot[1], Anne Kösem[2], Virginie van Wassenhove[1]
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4238 The neural interplay between the senses of body ownership and self-location
Arvid Guterstam[1], Malin Björnsdotter[2], Giovanni Gentile[3], H. Henrik Ehrsson[4]
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4239 Neural mechanisms of gaze patterns during face-to-face communication
Jing Jiang[1,2], Kamila Borowiak[1,2], Luke Tudge[2], Katharina von Kriegstein[1,3]
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4240 Central representation of hand motion across multiple senses: an fMRI study
Anne KAVOUNOUDIAS[1], Caroline Blanchard[2,3], Bruno Nazarian[4], Jean-Luc Anton[4]
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4241 Modality-specific Patterns of Neural Activities within Multimodal brain areas
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4242 Altered visual-vestibular interaction during visual stimulation in phobic postural vertigo patients
Pauline Popp[1,2,3], Regina Feuerecker[1,4], Rainer Boegle[4,2], Thomas Stephan[4,2,1], Marianne Dieterich[1,2,3,5,4]
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4243 Neural basis of body dissatisfaction evoked by illusory obesity: implications for eating disorders
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4244 Task-dependent reliability-weighted integration of audiovisual spatial signals in parietal cortex
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4245 Common and disparate neural mechanisms of letter perception in blind and sighted readers
Santani Teng[1], Radoslaw Cichy[1], Dimitrios Pantazis[2], Aude Oliva[3]
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4246 Probing bimodal neural mechanisms in human ventral visual cortex
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4247 Brain Networks during Multisensory Integration of Real-world Audiovisual Events
Jean Vettel[1,2], Javier Garcia[1,3], Tim Mullen[3], Scott Kerick[1], Chris Bird[4], Kaleb McDowell[1], Michael Tarr[5], Tim Curran[4]
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4248 Age-related cross-modal effects in voice and face perception areas
Dirk Wildgruber[1], Kathrin Karle[1], Heike Jacob[1], Thomas Ethofer[1], Carolin Brück[1], Martin Lotze[2], Benjamin Kreifelts[1]
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4249 Linking visual mouth movements and auditory speech in the superior temporal sulcus
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Perception and Attention

Perception: Pain and Visceral

4250 Increased activation of the left insula at encoding is related to accurate long term memory for pain
Vincent Auclair[1], Michael Bernier[1], Kathya Daigle[1], Kevin Whittingstall[1], Guillaume Léonard[1], Philippe Goffaux[1]
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4251 Opioid and dopamine transmission in chronic pain and health are diametrically opposed: A phMRI study
Julius Bourke[1], Mathilde Antoniades[2], Elena Constantinou[3], Jonathan Howard[4], Richard Langford[5], Georgina Lyons[6], Eugenii Rabiner[4], Matthew Wall[4], Theresa Wodehouse[7], Peter White[1]
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4252 Enhanced Cooperation between Insula and Prelimbic Cortices in Initiation Phase of Neuropathic Pain
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4253 Unaltered Functional Brain Architecture in Primary Dysmenorrhea
Yueh-Hua Chen[1,2], Chia-Shu Lin[3,2], Lin-Chien Lee[1,4], Cheng-Hao Tu[1,2], Wei-Chi Li[1], Li-Fen Chen[1,2], Hsiang-Tai Chao[5,6], Jen-Chuen Hsieh[1,2]
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4254 Exploring the influences of matched and unmatched encoding on placebo and nocebo effects
Luana Colloca[1], Dominic Nathan[2], Tom Liang[3], Simmons Kanesha[3], Oliver Robinson[4], Christian Grillon[5]
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4255 Cortical representation in upper limb complex regional pain syndrome is unrelated to hand use
Flavia Di Pietro[1,2], Tasha Stanton[3,2], G.L. Moseley[3,2], Martin Lotze[4], James McAuley[2]
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4256 Neurofunctional correlates of noxious heat and placebo responses to original vs. generic ASA brand
Kai Fehse[1], Lea Maikowski[2], Fabian Simmank[3], Evgeny Gutyrchik[4], Karin Meißner[2]
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4257 Music-Induced Analgesia in Fibromyalgia shown in the Angular Gyrus: A fALFF study
Eduardo Garza-Villarreal[1], Peter Vuust[2], Fernando Barrios[3], Lene Vase[2], Elvira Brattico[4], Erick Humberto Pasaye Alcaraz[5], Troels Jensen[6], Zhiguo Jiang[7]
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4258 Salience and DMN Inter-network Connectivity Track Ankylosing Spondylitis Pain, Function and Mobility
Kasey Hemington[1,2], Qi Wu[2], Aaron Kucyi[1,2], Robert Inman[3,4], Karen Davis[5,6]
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4259 Immediate change of default functional brain connectivity after dental pain in a clinical setting
Xiaosu Hu[1,2], Andrew Racek[3,4], Thiago Nascimento[2,3], Mary Bender[2], Leen Khatib[3], Roger Ellwood[5], Alexandre DaSilva[1,2,3,6]
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4260 Milnacipran Modifies Resting Brain Functional Connectivity in Fibromyalgia
Eric Ichesco[1], Johnson Hampson[1], Daniel Harper[1], Steven Harte[1], Daniel Clauw[2], Richard Harris[1], Tobias Schmidt-Wilcke[3]
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4261 Uncertainty of Incoming Stimulus Modulates Brain Activity during Rectal Distension in IBS subjects
Michiko Kano[1], Tomohiko Muratsubaki[2], Joe Morishita[2], Huynh Giao Ly[3], Patrick Dupont[4], Lukas Van Oudenhove[4], Shin Fukudo[1]
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4262 Neurobiology of psychological resilience in patients with gastrointestinal pain
Lisa Kilpatrick[1], Aubrey Love[1], Arpana Gupta[2], Jennifer Labus[3], Mher Alaverdyan[2], Kirsten Tillisch[4], Bruce Naliboff[5], Emeran Mayer[5]
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4263 Common and distinct neural patterns across multiple types of negative affect
Anjali Krishnan[1], Luka Ruzic[2], Guido Frank[3], Tor Wager[1]
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4264 Supraspinal lower urinary tract control in patients with spinal cord injury: An fMRI study
Lorenz Leitner[1], Matthias Walter[1], Martina Liechti[2], Patrick Freund[3], Ulrich Mehnert[1], Lars Michels[4], Spyros Kollias[4], Thomas Kessler[5]
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4265 Nociceptive local field potentials recorded from the human insula are not specific for nociception
Giulia Liberati[1], Anne Klöcker[1], Marta Maia Safronova[1], Susana Ferrão Santos[1], André Mouraux[2]
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4266 Pain-specific gamma-band oscillations recorded from the human insula
Giulia Liberati[1], Anne Klöcker[1], Marta Maia Safronova[1], Susana Ferrão Santos[1], André Mouraux[2]
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4267 Thalamocortical dysrhythmia in patients with fibromyalgia
Manyoel Lim[1], June Sic Kim[1], Dajung Kim[1], Chun Kee Chung[1]
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4268 While relieving your pain, I relieve my own. Effects of altruism on pain processing
Marina Lopez-Sola[1], Luka Ruzic[1], Tor Wager[1]
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4269 Shared and Unique Neural Signatures of Physically and Emotionally Aversive Experiences
Elizabeth Losin[1], Anjali Krishnan[2], Elizabeth Delk[2], Hedwig Eisenbarth[2], Jessica Andrews-Hanna[2], Tor Wager[2]
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4270 Increased cortical separation distance predicts long-term symptom relief in carpal tunnel syndrome
Yumi Maeda[1,2], Norman Kettner[2], Jieun Kim[1], Stephen Cina[1], Cristina Malatesta[3], Jessica Gerber[1], Claire McManus[3], Rebecca Ong-Sutherland[3], Alexandra Libby[1], Pia Mezzacappa[1], Leslie Morse[4], Joseph Audette[5], Vitaly Napadow[1,2]
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4271 Default mode and sensorimotor network connectivity in chronic tension type headache
David Meier Niddam[1], Wei-Ta Chen[2], Jong-Ling Fuh[2], Lin-Cho Liu[1], Shuu-Jiun Wang[2]
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4272 Placebo-induced decreases in the neurologic pain signature do not always correspond with pain relief
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4273 Developing Real-time fMRI Neurofeedback for Pain: ROIs for Attention Regulation
Amy Sentis[1], Christine Law[1], Kevin Johnson[1], Epifanio Bagarinao[2], Sean Mackey[1]
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4274 Does Pain Smell Bad? Cross-modal expectancy effects between Nociception and Olfaction
Gil Sharvit[1,2], Corrado Corradi-Dell'Acqua[1,2], Patrik Vuilleumier[1,2]
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4275 The neural correlates of patients with chronic pain and opioid addiction
Rachel Smallwood[1], Jennifer Potter[1], Donald Robin[2]
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4276 Chronic low back pain is associated with disintegration of the sensory and affective systems
Li Tianjiao[1], Zhang Shuo[2], Eri Ikeda[2], Hiroyuki Kobinata[2], Koshi Makita[2], Yoshitaka Kobayashi[3], Miho Sekiguchi[3], Shinichi Konno[3], Jiro Kurata[2]
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4277 Predicting Perception of Pain from Baseline fMRI using Multivoxel Pattern Analysis
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4278 Shared and distinct neural codes in anterior insula for pain, disgust and unfair economic offers
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4279 Dynamics of Pain Modulatory Systems Differ Among BDNF Val66Met Polymorphisms in Primary Dysmenorrhea
Shyh-Yuh Wei[1,2], Cheng-Hao Tu[1,2], Wei-Chi Li[1], Ming-Wei Lin[3], Li-Fen Chen[1,2], Hsiang-Tai Chao[4,5], Jen-Chuen Hsieh[1,2]
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4280 Cerebral contributions to pain independent of nociceptive stimulus intensity
Choong-Wan Woo[1], Martin Lindquist[2], Mathieu Roy[3], Liane Schmidt[4], Lauren Atlas[5], Anjali Krishnan[1], Marieke Jepma[1], Leonie Koban[1], Luka Ruzic[6], Tor Wager[6]
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4281 Altered Intra- and Inter-regional Functional Connectivity in Primary Dysmenorrhea
Ting-Hsuan Wu[1,2], Cheng-Hao Tu[1,2], Wei-Chi Li[1], Li-Fen Chen[1,2], Hsiang-Tai Chao[3,4], Jen-Chuen Hsieh[1,2]
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4282 Brain activation during adrenergic interoceptive stimulation using concurrent BOLD and ASL fMRI
Lirong Yan[1], Danny Wang[1], Rachel Lapidus[2], Jamie Feusner[2], Sahib Khalsa[2]
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4283 Correlated Cortical Thickness and Functional Connectivity Changes in Chronic Headache Patients
Qing Yang[1], Zewei Wang[1,2], Li Min Chen[3,1]
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4284 Mindfulness meditation-induced analgesia engages different neural mechanisms than placebo
Fadel Zeidan[1], Nichole Emerson[1], Suzan Farris[1], Jenna Ray[2], Youngkyoo Jung[1], John McHaffie[1], Robert Coghill[3]
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Perception and Attention

Perception: Tactile/Somatosensory

4285 The insula communicates somatosensory oddballs throughout a hierarchy of sensory and prefrontal area
Micah Allen[1], Francesca Fardo[2], Geraint Rees[3]
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4286 Primary sensory cortex responds to intensity but not pleasantness of physical touch
Laura Case[1], Claire Laubacher[1], Binquan Wang[1], Håkan Olausson[2], Catherine Bushnell[1]
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4287 Difference of the activated voxel by high-frequency vibration stimulations in somatosensory area
Mi Hyun Choi[1], Jung-Chul Lee[1], Sung-Jun Park[1], Ji-Hye Baek[1], Ul-Ho Jeong[1], Seon-Young Gim[1], Hyung-Sik Kim[1], Soon-Cheol Chung[1]
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4288 Prestimulus alpha oscillations over contralateral somatosensory cortex predict tactile misperception
Matt Craddock[1], Wael El-Deredy[2], Ekaterini Klepousniotou[1], Ellen Poliakoff[2], Donna Lloyd[1]
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4289 White matter neuroplastic changes induced by tactile learning in sighted –DTI study
Weronika Debowska[1], Malgorzata Kossut[1]
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4290 Modulation of the Sensorimotor System Induced by Sustained Pressure Stimulation
Pavel Hok[1], Petr Hlustik[1], Miroslav Kutín[2], Jaroslav Opavský[3], Zbynek Tudos[1], Petr Kanovsky[1]
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4291 Somatotopic finger representation studied with high density EEG
Konstantina Kalogianni[1], Edwin Rotgans[2], Alfred Schouten[3], Frans van der Helm[3], Jan De Munck[4]
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4292 Multi-voxel patterns in the human brain associated with perceptual grouping of tactile frequencies
Junsuk Kim[1], Yoon Gi Chung[2], Soon-Cheol Chung[3], Jang-Yeon Park[2], Heinrich Buelthoff[4], Sung-Phil Kim[5]
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4293 The Brain Networks Underlying the Velvet Hand Illusion: An fMRI Study
Nader Rajaei[1], Ryo Kitada[2], Naoya Aoki[2], Haruka Takahashi[2], Tetus Miyaoka[3], Masahiro Ohka[1], Norihiro Sadato[2]
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4294 Pacinian-specific ECoG High-gamma activities in Primary/Secondary Somatosensory Cortices
Seokyun Ryun[1], June Sic Kim[2], Chun Kee Chung[2]
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4295 Comparing digit representations in the left and right primary somatosensory cortex using fMRI
Renate Schweizer[1], Meike Annika Schweisfurth[1,2], Jens Frahm[3]
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4296 Perception of Affective Touch: From Adolescence to Late Adulthood
Isac Sehlstedt[1,2], Hanna Ignell[2], Helena Backlund Wasling[2], Rochelle Ackerley[2], Håkan Olausson[1,3], Malin Bjornsdotter[1], Ilona Croy[4]
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4297 A time-efficient tactile fMRI paradigm for fingertip representation suitable for pathological pain
Audrey P Wang[1,2], Flavia Mancini[3], Mark Schira[4], James McAuley[1], Giandominico Iannetti[5], Caroline Rae[6], G.L. Moseley[7]
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4298 Tactile vibratory stimuli encoded in multi-voxel activity patterns of frontal and parietal cortex
Alexandra Woolgar[1], Regine Zopf[1]
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Perception and Attention

Perception: Visual

4299* Decoding the time course of visual perception in humans using MEG: beyond evidence accumulation?, (O-W3)
Jean-Rémi KING[1]
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4300* Retinotopy not hierarchy underlies the large-scale organization of human occipitotemporal cortex, (O-W3)
Edward Silson[1], Annie Chan[2], Richard Reynolds[3], Dwight Kravitz[4], Chris Baker[1]
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4301 Characterising visual population receptive fields in human albinism
Ivan Alvarez[1,2], C. Rebecca Lyness[3,1], Sian Handley[4,1], Alki Liasis[4,1], Dietrich Samuel Schwarzkopf[3,1], Marty Sereno[5], Chris Clark[1]
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4302 Neuroplastic changes in visual cortex of the early blind characterized by whole brain connectivity
Corinna Bauer[1], Bang-Bon Koo[2], Lotfi Merabet[1]
[1]Massachusetts Eye and Ear Infirmary, Boston, United States, [2]Boston University School of Medicine, Boston, United States

4303 Investigating scene feedback to foveal and peripheral V1 using fMRI
Matthew Bennett[1], Lucy Petro[1], Lars Muckli[1]
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4304 Neural Basis Behind Radiological Expertise
Merim Bilalic[1]
[1]Alps Adria University Klagenfurt, Klagenfurt, Austria

4305 Right Occipital Face Area (OFA) is causally involved in holistic processing of both faces and object
Silvia Bona[1], Zaira Cattaneo[2], Juha Silvanto[3]
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4306 Testing the predictive brain hypothesis in object perception
Laurent Caplette[1], Martial Mermillod[2], Frédéric Gosselin[1], Bruno Wicker[3]
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4307 Decoding stimulus orientation from noninvasive electrophysiological data in humans
Radoslaw Cichy[1], Dimitrios Pantazis[2]
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4308 An ERP Study on 2D- vs. 3D-presented Mental Rotation Stimuli: A Modern Spin on a Classic Paradigm
Filomeno Cortese[1], Ford Burles[1], James Lu[1], Ted Slone[1], Giuseppe Iaria[1], Andrea Protzner[1]
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4309 FMRI of human face perception by dogs
Laura Cuaya[1], Raúl Hernández-Pérez[2], Luis Concha[2]
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4310 Visual stimuli induce retinal high-frequency oscillations that couple with visual cortex
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4311 Disrupting binocular rivalry leads to lasting suppression: psychophysics and computational modeling
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4312 Neural correlates of spatial heterogeneity in size perception
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4313 Brain Activity underlying Perceptual Decision in Direction of Rotations-in-depth and Individual Bias
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4314 Decoding natural scene categories from functional connectivity
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4315 Spatial and Temporal Frequency Tuning to Visual Motion in human MT+ Measured with ECoG
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4316 Eccentricity bias develops in tandem with face and place selectivity in the ventral temporal cortex
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4317 State-dependent TMS effects in the visual cortex after visual adaptation: a combined TMS-EEG study
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4318 Functional connectivity in visual, somatosensory and language areas in congenital blindness
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4319 Eyetracker-based gaze correction for robust mapping of population receptive fields
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4320 Pushing the Boundaries of Fine-Grained Object Classification Using fMRI Decoding in Visual Cortex
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4321 Spatial Frequency Processing within Scene-Selective Cortical Regions
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4322 Decoding Task and Stimulus Representation in Face-responsive Cortex
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4323 Motion perception learning is associated with increased activity in visual area V5/MT+
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4324 Population receptive field mapping of the visual word form area
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4325 FMRI of Human Brain at 3 T and 7 T: Comparison of Classification Accuracies during Visual Perception
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4326 Dynamic Representation of Texture and Spatial Layout in Human Scene-Selective Cortex
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4327 The neural signature for "baby schema" and its change with face age
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4328 Alpha Activity in the Posterior Regions Distinguishes Visual False Memories and Other Memory Errors
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4329 Spatio-temporal stages of recognition memory for words and faces: Anatomically-constrained MEG
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4330 Cortical Thickness in Fusiform Face Area Predicts Face and Object Recognition Performance
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4331 Predictive coding of auditory and contextual information in early visual cortex- high-res layer 7T
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4332 Developmental Changes in Cortical Thickness in Visual Areas and their Relation to Face Memory
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4333 The role of stereo disparity in local and global processing for 3D object recognition: an ERP study
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4334 Cortical thickness and spatial frequency processing during natural scenes perception in children
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4335 Coarse and fine-grained contextual feedback to V1
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4336 Neural mechanisms of dynamic object perception
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4337 Age-Related Differences in Spatial Frequency Processing During Scene Categorization
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4338 Neural Correlates of Holistic and Configural Visual Object Processing
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4339 The VWFA and FFA have sharply contrasting functional selectivities and patterns of connectivity
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4340 Effects of Visual Deprivation on the Corpus Callosum Shape Morphometry
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4341 The Development of Visual Motion Perception in Infancy with High-Density EEG
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4342 Intersession reliability of population receptive field estimates
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4343 Different electrophysiological correlates underlying fragile and robust Visual Short-Term Memory
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4344 Laminar communication at ultra-high field fMRI
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4345 Development of wide-view stereoscopic visual presentation system for fMRI
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4346 The transformation of representational geometry along ventral-stream stages of visual processing
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4347 Comparing connectional and functional fingerprints of the visual cortex between blind and sighted
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4348 Looking inside the MVPA 'black box': What is the source of orientation decoding in visual cortex?
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4349 Functional connectivity of left and right STS in the context of eye gaze observation
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Perception and Attention

Sleep and Wakefulness

4350 Continuous monitoring of resting state networks during natural sleep with diffuse optical tomography
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4351 Transcranial electric stimulation during sleep enhances motor sequence learning
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4352 Rest-Stimulus Interactions Reveal Functional Recovering along Sleep Inertia
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4353 Spectral Transitions in Thalamo-Cortical Interactions from Sleep to Awakening
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4354 Functional Connectivity During Rested Baseline Is Associated With Vulnerability To Sleep Deprivation
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4355 Effects of Gentle Rocking on Sleep and Declarative Memory
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4356 Neuronal excitation/inhibition balance is set by the need for sleep and the biological clock
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4357 Bistability breaks-off deterministic responses to intracortical stimulation during non-REM sleep
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4358 Functional MRI (fMRI) reveals Chronotype-specific Alterations in Semantic Priming Performance
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4359 Dynamic coupling between functional connectivity and eye closure following sleep deprivation
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Social Neuroscience

Self Process

4360 Neural representations of self- and other-evaluation: An ALE meta-analysis
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4361 Parsing the default mode: separable processes for self-relatedness and monitoring of the environment
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4362 Altered network connectivity and own body perception in gender dysphoria
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4363 How did you lose the self-face advantage? Priming threatening faces modulates other-face processing
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4364 Self-Recognition of One's Own Fall Recruits the Genuine Bodily Crisis-Related Brain Activity
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4365 When Own Thoughts are Externally Generated: Neural Correlates of an Altered Feeling of Authorship
Leonie Klock[1,2,3], Martin Voss[4], Markus Weichenberger[4], Norbert Kathmann[2], Simone Kühn[5]
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4366 Inferior frontal gyrus moderates relationship between conflict strength and self-control failures
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4367 Subjective emotional effects on neural correlates of evaluation in interpersonal relationships
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4368 Present self, past self and close-other: event-related potential study of face and name detection
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4369 Electrophysiological evidence of Self-specific prediction errors in the brain
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4370 The neural correlates of attitudinal ambivalence toward self
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4371 An Examination of Wisdom in the form of Nonattachment in relation to Compassion meditation
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4372 Neural systems related to appearance appraisal and to characteristic appraisal predict self-esteem
Juan Yang[1]
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4373 The role of sensory sensitivity and its relation to depression: Clues from the default mode network
Vera Zamoscik[1], Silke Huffziger[1], Christine Kuehner[1], Peter Kirsch[1]
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4374 Oxytocin influences default network and self and other trait memory in high self-esteem subjects
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Social Neuroscience

Social Cognition

4375* Deficits in the neural mechanisms underpinning social prediction errors in Autism Spectrum Disorder, (O-TH2)
Joshua Balsters[1], Matthew Apps[2], Dimitris Bolis[1], Rea Lehner[1], Louise Gallagher[3], Nicole Wenderoth[1]
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4376 The neural basis of economic decisions guided by a social norm
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4377 Seed-based functional connectivity MRI maps from individual versus group-level functional localizers
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4378 Effective Connectivity Underpinning Theory of Mind Processes
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4379 Impaired attention allocation to names in Autism Spectrum Disorder: EEG evidence
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4380 Functional Organization of the Superior Temporal Sulcus
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4381 Neuronal processing of complex social scenes in healthy men and women: The Social Detection Task
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4382 Neural and Affective Correlates of Decision Making in the Ultimatum Game
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4383 Neural Response to Newborns' Pain in Pediatric Nurses
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4384 The structural bases of the cognitive and affective dimensions of alexithymia and empathy
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4385 Are there alexithymia subtypes? A voxel-based morphometry study on gray and white matter volumes
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4386 Impaired Appraisals of Trustworthiness in Previously Institutionalized Youth
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4387 Relationship between Brain Regions Associated with Self and Moral Functioning in Moral Judgment
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4388 Activation During a Facial Emotion Observe/Imitate Task and Social Cognitive Performance
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4389 Distinct neural correlates of preference of supraliminally and subliminally presented faces
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4390 Empathy for pain in a cyberspace: effects of human-robot body appearance and visual perspective
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4391 Mentalizing regions contain distributed, continuous, and abstract dimensions of others' beliefs
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4392 Using tDCS to Explore the Role of the Right Temporo-Parietal Junction in Theory of Mind and Empathy
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4393 Mother's Brain Activity and Its Correlation with the Mother-to-Infant Bonding
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4394 Empathic Social Pain in Female Adolescents with Autism Spectrum Disorders
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4395 Resting State Brain Circuits Underpinning a Neurobiological Model of Theory of Mind and Mentalizing
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4396 Implicit National Flag Modulates Brain Activation when Processing Empathy for Others in Pain
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4397 Lesion sites associated with Theory of Mind problems in stroke patients: A VLSM analysis
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4398 DYNAMICS OF MEG RESPONSE TO BIOLOGICAL MOTION IN ADOLESCENCE
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4399 ERN component is more negative for in-group than out-group errors after a minimal group manipulation
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4400 Real but not line-drawn faces show early perceptual neural sensitivity to eye gaze direction
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4401 Social perception abilities correlates with rest STS functioning: ASL-MRI and eye-tracking study
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4402 Inter- and Intra-Subject Variability of Face-Responsive Areas in fMRI
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4403 Functional similarity – Pain and empathy for pain are modulated by placebo analgesia
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4404 The fusiform gyrus represents emotional facial expressions of familiar people
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4405 Decoding emotions: Using MVPA to explore neural overlap in emotion experience and understanding
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4406 Cerebro-cerebellar Circuitry for Recognition of Emotional Body Language
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4407 Imaging the social stereotype and socioeconomic status effects in the human brain: a meta-analysis
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4408 Multimodal fMRI and EEG Investigation of Delivering Advice and Risk Propensity
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4409 Emotional Narratives Processing in Adolescents and Young Adults with Anxiety Disorders
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4410 Predictive coding as a mechanism for Uncanny valley:Event-related potentials and source localization
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4411 Executive Control and Default-Mode Network Connectivity Reflect Effect of Prior Stimulus on behavior
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4412 Perceptual and cognitive metacognition have divergent structural substrates: a multi-modal MRI study
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4413 Divergent network substrates of individual differences in empathy and mentalizing
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4414 Abnormal structural network properties in late-life depression relates to loneliness
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4415 The impact of olfactory cues signaling anxiety on perception of fearful faces - an fMRI study
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4416 Voluntary Control over Anterior Insula Activity Increases Pain Empathy: A Real-Time fMRI Study
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4417 Punishment's effect on norm enforcement is modulated by the intention: An fMRI study
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4418 Affective processes influence the evaluation of social norms
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Social Neuroscience

Social Interaction

4419 Being able to Understand another's Emotion Leads to Intrinsic Reward and Interpersonal Attraction
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4420 Oscillatory brain activity reveals social interaction impairment in schizophrenia
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4421 Neurobiological and Behavioral Responses to Social Violations of Expectations in Adolescents
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4422 Oxytocin and Vasopressin Effects on Social Cooperation among Women: a within-subject fMRI Study
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4423 Neural Correlates of Self Reported Empathy in a Large (n~80) Dataset
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4424 Neural correlates of information exchange in joint tapping: a pilot fNIRS-hyperscanning study
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4425 Hierarchical inference and its temporal dynamics in social learning
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4426 Oxytocin makes men, but not women, show an enhanced amygdala response to people who criticize others
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4427 The neural correlates of the subjective experience of social interaction in high-functioning autism
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4428 Player-Observer hyperscanning in a competitive game using functional near-infrared spectroscopy
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4429 The cerebellar-thalamic area represents the shared perceptual activity during real-time eye contact
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4430 Are Humans Selfish, Fair, or Altruistic?
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4431 Hyperscan Real-Time fMRI Neurofeedback for Studying Interacting Individuals
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4432 Neural correlates of biased social fear learning and interaction in an intergroup context
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4433 Overcoming moral inhibition associated with killing another human being: An fMRI study
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4434 Neural mechanisms of interpersonal synchrony behavior
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4435 The Neural Network of Aggression
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4436 Maternal Brain Response to Child Feeding
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4437 Neural correlates of strategic counteraction against the opponent's mind-reading in competitive game
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4438 Neural basis of Intimacy and Hierarchy in Cross-cultural Perspective
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4439 Gender Differences in Empathy for Positive and Negative Situations in Social Context
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4440 Neurofunctional correlates of social interaction understanding during development
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4441 The role of rDLPFC for norm-abiding behavior in advantageous context: A tDCS study
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4442 Inter-brain-connectivity in BPD Patients playing a trust game: An fMRI Hyperscanning-Study
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4443 No pain without gain; a common neural substrate for social rejection and social acceptance
Jason Stretton[1], Tim Dalgleish[1], Nick Walsh[2], dean Mobbs[3], Susanne Schweizer[1], Anne-Laura van Harmelen[4], Barnaby Dunn[5], Valerie Dunn[4], Ian Goodyer[4]
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4444 Eye Gaze and Social Decision Making: Behavioral and fMRI Studies
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4445 Teams 'on the same wavelength' perform better: EEG phase synchronization indicates team performance
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4446 Two agent's minds in our brain -an fMRI study-
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4447 Common and cue-specific neural substrates of joint attention: a hyperscanning functional MRI study
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4448 Investigation of brain activity during overlapping speech in natural turn-taking behavior
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4449 Sense of being with another person impacts specifically functional connectivity at rest in salience
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Social Neuroscience

Social Neuroscience Other

4450 Severe stress in the social defeat mouse model: a magnetic resonance study in the dentate gyrus
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Wijeakumar, Sobanawartiny - 1929 MT

Wildegger, Theresa - 4177 WTh
Wildgruber, Dirk - 4248 WTh
Wilke, Circe - 1532 MT
Williams, Lynne - 3353 WTh
Williams, Owen - 2226 MT
Wilson, Stephen - 2001 MT
Wilson, Tony W - 3383 WTh
Win, Khaing - 2119 MT
Windel, Anne-Sophie - 2416 MT
Wink, Alle Meije - 3205, 3898, 3899 WTh
Winkler, Anderson - 3428 WTh
Wise, Jessica - 3056 WTh
Wise, Richard - 2002 MT
Witt, Suzanne - 3384, 3385 WTh
Wittmann, André - 1022 MT
Wolak, Tomasz - 4230 WTh
Woletz, Michael - 1591 MT
Wolf, Varina - 3354 WTh
Wolter, Sarah - 1238 MT
Wong, Chi Wah - 2350 MT
Wong, Chung Ki - 3978, 3979 WTh
Wong, Nichol M.L. - 4414 WTh
Wong, Savio - 1475 MT
Woo, Choong-Wan - 4280 WTh
Woodman, Marmaduke - 2271 MT
Woolgar, Alexandra - 4298 WTh
Wrobel, Nathalie - 3616 WTh
Wu, Changwei - 2444 MT
Wu, Chiao-Yi - 1978 MT
Wu, Hong Yi - 2437 MT
Wu, Hua - 1592 MT
Wu, Jia-Yang - 2351 MT
Wu, Kai - 3607 WTh
Wu, Kai - 3673 WTh
Wu, Lei - 2227 MT
Wu, Qiong - 3483 WTh
Wu, Ting-Hsuan - 4281 WTh
Wudarczyk, Olga - 4415 WTh

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Xia, Mingrui - 4146 WTh
Xia, Tiansheng - 3484 WTh
Xiao, Ena - 3429 WTh
Xiao, Xiang - 1950 MT
Xiao, Xiaoqian - 2120 MT
Xiao, Yaqiong - 1732 MT
Xiao, Yuan - 1239 MT
Xiao-Hui, Hou - 3255 WTh
Xie, Sangma - 2228 MT
Xie, Xiyao - 4449 WTh
Xu, Jingping - 1951 MT
Xu, Lele - 3724 WTh
Xu, Miao - 1533 MT
Xu, Min - 3900 WTh
Xu, Mingze - 1593 MT
Xu, Pengfei - 1476 MT
Xu, Ting - 2352 MT
Xu, Yangwen - 2003 MT
Xuan, Bin - 4178 WTh
Xue, Feng - 1477 MT
Xueyan, Jiang - 1089 MT

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Yaesoubi, Maziar - 3901 WTh
Yagle, Kevin - 2044 MT
Yan, Chang - 2177 MT
YAN, Chao-Gan - 2353 MT
Yan, Lirong - 4282 WTh
Yan, Zhi-Xiong - 3902 WTh
Yanes, Julio - 3533 WTh
Yang, Chia-Yen - 1851 MT
Yang, Ching-Ju - 2149 MT
Yang, Fan-pei Gloria - 3207 WTh
Yang, Huichao - 3903 WTh
Yang, Jie - 3256 WTh
Yang, Jing - 1979 MT
Yang, Jin-Ju - 1930 MT
Yang, Jin-Ju - 3206 WTh
Yang, Juan - 4372 WTh
Yang, Li-Zhuang - 3057 WTh
Yang, Ning - 3617 WTh
Yang, Qing - 4283 WTh
Yang, Shang-Yi - 3545 WTh
Yang, Shaolin - 1910 MT
Yang, Yaling - 1121 MT
Yang, Yaling - 4100 WTh
Yang, Yuan - 1852 MT
Yang, Zhen - 2354 MT
Yang, Zhi - 3745 WTh
Yao, Bing - 3298 WTh
Yao, Li - 1240 MT
Yao, Shuxia - 4416 WTh
Yao, Ye - 1241 MT
Yasuda, Clarissa - 2229 MT
Ye, Allen - 1802, 1803 MT
Ye, Annette - 3355 WTh
Yeatman, Jason - 4147 WTh
Yee, Evangeline - 2272 MT
Yeh, Ping-Hong - 1348, 1349 MT
Yi, Jinyao - 1122 MT
Yin, Li-Jun - 1734 MT
Yin, Shufei - 3548 WTh
Yin, Yayan - 2004 MT
Yokota, Susumu - 1594 MT
Yokoyama, Chika - 1023 MT
Yoo, Jae Jun - 2273 MT
Yoo, Kwangsun - 2277 MT
Yoo, Woo-Kyoung - 3433 WTh
Yoon, Eun Jin - 1251 MT
Yoon, Hyo Woon - 1411 MT
Yoon, Misun - 3904 WTh
Yoon, Shin-ae - 2005 MT
Yoshihara, Yujiro - 1242 MT
You, Xiaozhen - 1192 MT
Youn, Soyoung - 1090 MT
Young, Julia - 3618 WTh
Young, Kymberly - 1091 MT
Yu, Guan - 3725 WTh
Yu, Ping - 1735 MT
Yu, Qingbao - 3905 WTh
Yuan, Han - 1024 MT
Yuan, Han - 1931 MT
Yuan, Han - 3073 WTh
Yuan, Weihong - 1350 MT
Yucel, Murat - 3132 WTh
Yue, Qiuhai - 2178 MT
Yum, Yen Na - 2045 MT
Yun, Hyuk Jin - 4081 WTh
Yun, SungJae - 1736 MT

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Zakiniaeiz, Yasmin - 3133 WTh
Zamboni, Giovanna - 1300 MT
Zamoscik, Vera - 4373 WTh
Zaretskaya, Natalia - 4029 WTh
Žarić, Gojko - 2046 MT
Zavaliangos-Petropulu, Artemis - 3134 WTh
Zaytseva, Yuliya - 3906 WTh
Zeestraten, Eva - 1804 MT
Zeidan, Fadel - 4284 WTh
Zeidman, Peter - 2194 MT
Zeighami, Yashar - 1184 MT
Zeiller, Monika - 1549 MT
Zemmoura, Ilyess - 4148 WTh
Zeng, Hang - 4179 WTh
Zeng, Ke - 3356 WTh
Zeng, Ling-Li - 1243 MT
Zerbi, Valerio - 2355 MT
Zhan, Liang - 1805, 1806 MT
Zhan, Minye - 1412 MT
Zhan, Yafeng - 3907 WTh
Zhang, Bin - 1093 MT
Zhang, Fengqing - 3726 WTh
Zhang, Han - 3908 WTh
Zhang, Huawei - 1092 MT
Zhang, Kai - 1185 MT
Zhang, Li - 1435 MT
ZHANG, Liwen - 1036 MT
Zhang, Meng - 1413 MT
Zhang, Meng - 3500 WTh
Zhang, Mingjun - 3357 WTh
Zhang, Ruibin - 2179 MT
Zhang, Ruibin - 2230 MT
Zhang, Wenjing - 1244 MT
Zhang, Xiaolu - 4231 WTh
Zhang, Xin - 1932 MT
Zhang, Xue - 3909 WTh
Zhang, Ye - 1302 MT
Zhang, Yu - 4030 WTh
Zhang, Yuan - 4417 WTh
Zhang, Zhe - 2356 MT
Zhang, Zhifang - 1737 MT
Zhao, Jia - 1952 MT
Zhao, Ling - 1807 MT
Zhao, Lu - 4149 WTh
Zhao, T. Christina - 2064 MT
Zhao, Tengda - 3619, 3674 WTh
Zhao, Weihua - 4374 WTh
Zhao, Zhiying - 2357 MT
Zhen, Shanshan - 1414 MT
Zheng, Jie - 1853 MT
Zheng, Li - 1595 MT
zheng, xin - 1303 MT
Zhiwei, Zuo - 1304 MT
Zhong, Jidan - 3299 WTh
Zhong, Miao - 1186 MT
Zhou, Dongming - 3300 WTh
Zhou, Guangyu - 1901 MT
Zhou, Ming - 1738 MT
ZHou, Peng - 1808 MT
Zhou, Shu - 4180 WTh
Zhou, Shuqin - 1187 MT
Zhou, Wei - 2047 MT
Zhu, Alyssa – 3962 WTh
Zhu, Dajiang – 1739 – MT
Zhu, Dajiang – 3430 WTh
Zhu, Hancan – 4031 WTh
Zhu, Li – 1854 – MT
Zhu, Lin – 4249 WTh
Zhu, Xiongzhao – 3396 WTh
Zhu, Yajing – 3397 WTh
Zhuang, Xiaowei – 2180 – MT
Zhuang, Xiaowei – 4185 WTh
Zhutovsky, Paul – 3727 WTh
Zich, Catharina – 2375 – MT
Ziegler, Erik – 2274 – MT
Zielinski, Brandon – 3257 WTh
Zimmermann, Kristin – 4349 WTh
Zito, Giancarlo – 1596 – MT
Zoellner, Simeon – 4082 WTh
Zotev, Vadim – 1025, 1094, 1933 – MT
Zou, Ping – 3675 WTh
Zsoldos, Eniko – 3608 WTh
Zu Eulenburg, Peter – 4232 WTh
Zucchelli, Micaela – 4418 WTh
Zuo, Xi-Nian – 3527 WTh

NOTES

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