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0003 Clinical validation of patient-specific STN parcellation using 7T MRI: a DBS lead revision case
Remi Patriat1, Lauren Schrock1, Jerrold Vitex1, Noam Harel8
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0010 Acute Fornix Deep Brain Stimulation Remodels Brain and Improves Memory in Alzheimer's
Daniel Gallino1, Gabriel Devenyi2, Mallar Chakravarty2
1Douglas Mental Health Institute, Montreal, Quebec, 2Douglas University Mental Health Institute, McGill University, Verdun, Quebec, 3McGill University, Montreal, Quebec

0016 DBS Modeling with Boundary Element Fast Multipole Method: Formulation, Test, and a Numerical Example
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0018 Changes in brain volume following subcallosal cingulate deep brain stimulation for depression
Gavin Elia1, Jürgen Germann1, Alexandre Boutet1, Aditya Pancholi1, Michelle Beyn1, Clemens Neudorfer7, Aaron Loh1, Peter Giacobbe6, Andres Lozano3
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0034 Patient-Specific Parcellations of DBS target structures at 7Tesla
Remi Patriat1, Tara Palnitkar1, Henry Braun1, Jinyoung Kim1, Oren Rosenberg1, Noam Harel8
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0043 Assessment of beta dynamical characteristics between OFF and ON medication conditions in Parkinson's
Saed Khawaldet1,2, Gerd Tinkhauser1,2,4, Andrew Quinn3, Catharina Zich1, Thomas Foltynie3,5, Patricia Limousin1,2, Ludovic Ziniol5, Flavie Torrecillas1, Diego Vidourdre1, Huiling Tan2, Vladimir Litvak2, Andrea Kühn1, Peter Brown3, Mark Woolrich3
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0046 Subthalamic nucleus activity dynamics and limb movement prediction in Parkinson's disease
Saeed Khawaldet1,2, Gerd Tinkhauser1,2,4, Syed Ahmar Shah1,2,5, Katrin Peterman1, Ines Debove1, T.A. Khoo Nguyen6, Andreas Nowack7, Lenard Lachenmayer1, Michael Schuepbach1, Claudio Pollo8, Paul Krack1, Mark Woolrich3,2, Peter Brown1
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0048 Automated functional mapping of the thalamus and DBS lead localization in essential tremor
James Geel1, Tara Palnitkar1, Henry Braun1, Jinyoung Kim1, Remi Patriat1, Noam Harel8
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0044 Electroconvulsive therapy treatment responsive multimodal brain networks
Shite Qi1, Christopher C. Abbott2, Katherine Narry1, Rongguo Jiang1, Joel Upston1, Shawn McClintock2, Randall Espinoza1, Tom Jones1, Dongmei Zhi2, Katherine Narr1, Ines Debove1, Jing Sui1, Vince Calhoun1
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0011 Unified approach in TES and IES optimization applied to realistic head models
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0012 Concurrent fMRI-TACS: subject safety and the data quality evaluation
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0014 The Role of Continuous Theta Burst TMS on the Neurophysiology of Stroke: a Multimodal Study
Ana Dionisio1, João Castelhano1, Rita Gouveia2, Carolina Xavier3, Felix Deckers1,1, Isabel Catarina Duarte4, Gustavo Cordeiro4, João Sorgento-Freitas4, Jorge Lains5, Filipe Carvalho6, Antero Abrunhosa7, Miguel Castelo-Branco7,8
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0016 Correlation of fMRI with direct electrical stimulation in patients with left side brain gliomas
Steren Chabert1,2, Alejandro Veloz1,2, Gisella Tapia1, Francisco Torres1,2, Rodrigo Riveros1,2, Begona Gongora1,2, Matios Gonzalez1,2, Carlos Bennett1
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0018 Assessing the integrity and reorganization of the visual system after stroke by means of TMS-EEG
Connor Phipps1,2, Santiago Collavini1,3, Abi Heller1,3, Dana Brooks4,5, Jerzy Bodurka4,6
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0020 Non-invasive Electrical/tDCS/TACS/TRNS

0022 TACS-induced phase-specific modulation of striatal activity in bimanual visuomotor force tracking
Kirstin-Friederike Heise1, Genevieve Albouy1, Ronald Peeters2, Dante Martini1, Stephan Patrick Swinnen
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0024 Non-Invasive Magnetic/TMS

0026 Simulated electric field during prefrontal tDCS in mood disorders and schizophrenia
Shun Takahashi1,2, Shinya Uenishi1, Atsushi Tamaki1, Kasumi Yasuda1, Daniel Keesser1, Yuki Mizutani-Tiebel2, Frank Padberg1, Satoshi Uki1
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0028 Optimal Rotation Angles of Permanent Magnets for Transcranial Static Magnetic Stimulation
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0030 Concurrent TMS/fMRI demonstrates direct sgACC target engagement
Martin Tiz1,2, Matic Princič1, Michael Wotzal1, Anna-Lisa Schuler1, Christian Windischberger1
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0032 Multimodal Language Mapping in Pre-Surgical Planning
Anna-Lisa Schuler1, Georg Widhalm1, Martin Tik1, Michael Wotzal2, Roland Fischer1, Karl Rösler1, Christian Windischberger1
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0034 Probing the brain state with EEG phase-driven transcranial magnetic stimulation
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0036 Transcranial Magnetic Stimulation Modulates Glutamate/Glutamine Levels in Young Adults with Autism
Iskag Muxon-Emre1, Zafiris Daskalakis2, Daniel Blumberger2, Paul Croarkin1, Natalie Fordel1, Hideaki Tan1, Peter Truong1, Meng-Chuan Lai1, Pushpal Desarkar1, Nappyon Saisasit2, Peter Szatmari1, Stephanie Ames1
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0038 Assessing the integrity and reorganization of the visual system after stroke by means of TMS-EEG
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0040 Transcranial Magnetic Stimulation Modulates Glutamate/Glutamine Levels in Young Adults with Autism

0042 Measuring change in memory networks after targeted repetitive transcranial magnetic stimulation
Connor Philips1, Anthony Range1, Abi Heller1, Sara Carr1, Liam Townsey1, Vaishali Potak2, Daniel Murnan1, David Warren1
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0061 The impacts of theta-burst stimulation on structural connectome in autism spectrum disorder

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0063 Inverse Mapping of Muscles and Synergies using TMS and Neural Networks

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0065 Pre-stimulus high and low beta phase coherence modulates the impact of TMS entrainment

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0068 Inducing Plasticity in the PPC-M1 Network with Corticocortical Paired-Associative Stimulation

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0006 Transcranial direct-current stimulation enhances dopamine release and attentiveness

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0013 Transcranial direct-current stimulation induced changes in neural activity: an fNIRS pilot study

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0017 Network-targeting in transcranial direct current stimulation: Inter and intra individual variability

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0026 Validating target engagement in transcranial direct current stimulation (tDCS) using multimodal MRI

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0031 Modulating Operator Vigilance with Transcranial Direct Current Stimulation (tDCS)

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0033 Effects of bifrontal tDCS on brain metabolites in patients with MDD and healthy controls

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ABSTRACTS

0035 Associations of grey matter volume and acute tDCS effects, shown by metabolite concentration changes
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0038 Effect of Transcranial Direct Current Stimulation in the first weeks after stroke: preliminary study
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0052 Modulation of aggression by prefrontal transcranial direct current stimulation
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0053 Does tDCS induced GABA change depend on the participant specific electric field in M1?
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0064 Assessing Brain Network Effects of Targeted Transcranial Direct Current Stimulation
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0066 Value of MRI based biophysical models of cortical tDCS fields in primary progressive aphasia
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0005 Multi-band accelerated TMS/fMRI for continuous EPI during stimulation shows acute 10Hz TMS effects
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0020 Inputs at the optimum phase of beta cortical oscillations accelerate cortical synaptic transmission
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0024 TMS Focality Optimization at the Inner Cerebral Surface with Boundary Directed Fast Multipole Method
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0029 Functional Connectivity Alterations with the Target: A Combined Resting-state fMRI-TMS study
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0032 The effects of rTMS on resting-state function connectivity in obese adults
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0039 Cognitive Training with Information Based Neuromodulation to Enhance Working Memory
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0045 MRS and MTS Measurements Predicting Responses Following Non-Invasive Brain Stimulation of M1
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0047 Toward State-of-the-Art Connectivity-Guided TMS: Personalization, Precision & Clinical Response
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0051 Improving cortical mapping language by means of paired-pulse and high-frequency repetitive TMS
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Impact of sham TMS periodical auditory stimulation on cortical oscillations and visual detection
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The effect of short-term arm immobilization on intracortical inhibition and motor skill learning
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An optimization approach to TMS targeting of functional ROIs informed by field modelling
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TMS Mapping using Active Inference for Spatial Sampling via User Guidance and Gaussian Processes
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Hypoxia-induced changes in EEG connectivity: effects of somatosensory entrainment
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Somatosensory evoked potentials in post-stroke spasticity and their modulation by botulinum toxin
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Neurofeedback Training for Optimizing Archer’s Performance
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Entrainment of theta oscillations with visual rhythmic stimulation boosts auditory working memory
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Voxel-Based Quantitative MRI reveals spatial patterns of grey matter alteration in MultipleSclerosis
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Mechanisms underlying speech production in patients with cerebellar stroke damage
Sharon Gev1, Lelita Schneider1, Thomas Hope1, Shamima Khan1, Andrea Gajardo-Vidal2, Diego Lorca-Puls1, Ori Parker Jones1, Susan Prejwala1, Marion Oberhuber1, David Green1, Cathy Price1

Association between Cerebral Blood Flow and White Matter Signal Abnormalities in MCI
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Dynamic functional connectivity and dopaminergic treatment in Parkinson’s disease
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Mild Traumatic Brain Injury Patients Exhibit Alterations in Cortical Lamination Patterns
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Effect of initial concentrations on a computational model of tau aggregation in tauopathies
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Dynamic fMRI gives insight into neuromodulatory basis of fluctuating cognition in Lewy body dementia
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Progression of Cortical Thinning in Parkinson's Disease
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0100 A multimodal computational model of Parkinson's disease progression enriched for dementia risk
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0104 A DTI Study in Subcortical Vascular Mild Cognitive Impairment with or without Depressive Symptoms
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0105 Reduced Microstructural Integrity and Altered Structural Network in Cerebral Small Vessel Disease Minxing Zhang1, Nan Yang1, Sina Chen1, Jinhui Li1, Haishan Yuan1, Yu Guo1, Qinyuan Chen1, Yichen Zhang1, Ruiwui Huang1,2
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0106 Degeneration of Structural Brain Networks is Associated with Cognitive Decline after Ischemic Stroke Hsiao-ju Cheng1, Michele Veldsman2,3, Fang Ji1, Emilio Werden3, Mohamed Khilf1, Kwun Kei Ng1, Joseph Lim1, Xing Qian1, Haoqiong Yu1, Juan Zhou1, Amy Brodtmann1
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0107 Genetic, Cellular and Topological Characterization of Human Brain Regions Commonly Plagued by Gioma Ayan Mandaf1, Rafael Romero-Garcia1, Michael Hart1, John Suckling1
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0109 Improved Memory-related Gamma Rhythms in Origami but not Reading Intervention among Older Adults Yang Jiang1, Tyler Hammond1, Tharunika Venkatases1, Sylvia Cerel-Suh1, Shoshana Bardach1, Xiaopeng Zhao1, Jing Xiang1, Gregory Jicha1
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0113 Quantitative susceptibility mapping in the motor cortex in limb-onset Amyotrophic Lateral Sclerosis Anjan Bhattacharyya1,2,3, Zhaoxin Chen4, Phillip Ward5, Paul Talmam6, Susan Mathers7, Than Phan8, Caron Chapman1, James Howe1, Sarah Lee9, Yennie Lie10, Gary Egan11, Phyllis Chu11
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0114 Diagnosis of Parkinson's disease with convolutional neural network Jie Mei1, Cécilia Tremblay2, Jason Steffener3, Johannis Frasnelli4
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0115 Structural connectivity loss & regional gene expression explain dementia risk in Parkinson's disease Angeliki Zarkali1, Peter McCollgan2, Mina Ryten3, Regina Reynolds4, Louise-Anne Leyland5, Andrew Lees6, Geraint Rees7, Rimona Weil8
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0116 Network controllability and regional gene expression explain visual hallucinations in Parkinson's Angeliki Zarkali1, Peter McCollgan2, Mina Ryten3, Regina Reynolds4, Louise-Anne Leyland5, Andrew Lees6, Geraint Rees7, Rimona Weil8
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0121 Quantitative susceptibility mapping in the motor cortex in limb-onset Amyotrophic Lateral Sclerosis Anjan Bhattacharyya1,2, Zhaoxin Chen4, Phillip Ward5, Paul Talmam6, Susan Mathers7, Than Phan8, Caron Chapman1, James Howe1, Sarah Lee9, Yennie Lie10, Gary Egan11, Phyllis Chu11
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0129 Redundant and Complementary Information in Visual Ratings and Volumetric Measures of Atrophy
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0130 Resting state functional connectivity of cerebellar networks in Parkinson’s disease
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0131 Functional brain networks are associated with blood neurofilament light chain in Alzheimer disease
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0132 Graph theory analysis of dopamine D2 network in Parkinson’s disease patients with cognitive decline
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0133 Applying CARE index Model for Identifying Individual Patient Progressing to Alzheimer’s Disease
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0134 Impact of Brain Injury on Dementia: Preliminary Results from a Pakistani Cohort
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0135 Modeling Cognitive Scores from Normal Aging to Alzheimer’s Disease Based on structural MRI and PET
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0136 The geometric microstructural damage of white matter with functional compensation in stroke patients
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0137 Patterns of default mode network co-activation in young APOE ε4-carriers: an HCP replication study
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0139 Cortical atrophy and cerebral metabolite concentrations in individuals with chronic stroke
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0141 Cortical atrophy and cerebral metabolite concentrations in individuals with chronic stroke
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0142 Dopaminergic medication alters brain connectivity in Parkinson’s disease with freezing of gait
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0178 Hippocampal Subfield Volumes in Post-Stroke Dementia
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0179 Harmonization of the multi-center imaging protocol on cerebral small vessel disease in China
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0180 Effects of combination antiretroviral therapy on gray matter volume and cortical thickness of HIV
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0181 Generalizable, reproducible, and interpretable biomarkers for Alzheimer’s disease
Dan Jin, Bo Zhou, Ying Han, Jiay Ren, Tong Han, Bing Liu, Lu Jie, Chengyuan Song, Pan Wang, Dawei Wang, Jian Xu, Zhengyi Yang, Hongxiang Yao, Chunshui Yu, Kun Zhao, Max Winkler, Nanning Zhu, Xingqiu Zhang, Yuying Zhou, Xi Zhang, Tianti Jiang, Qiong Wang, Yong Liu
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0182 Cerebral hemodynamic responses of subjective cognitive decline evoked by loaded N-back tasks
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0183 Alpha power and functional connectivity in mild cognitive impairment
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0184 Iron overload in Substantia Nigra of REM Sleep Behavior Disorder and Parkinson's dDiseases
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0185 Deep learning-based biomarkers for early detection of Parkinson’s dDiseases (PD)
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0186 Effects of Traumatic Brain Injury on motor imagery of BA4a and BA4p
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0211 Large-scale functional connectivity alterations in Amyotrophic Lateral Sclerosis: A multicenter study
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0213 Network-level functional connectivity correlates of everyday memory in Parkinson disease
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0275 Sensorimotor network control in Parkinson’s disease, a dynamic functional connectivity study
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0276 A Diffusion Tensor Imaging Study on Assessing the Recovery of Spinal Cord After Injury
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0295 Imbalanced Dual Systems of Decision Making in Stroke
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0318 Hippocampal dynamic functional brain networks in Alzheimer’s disease
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0322 Hippocampal subfield volumes distinguish ischemic stroke patients from healthy individuals better
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0333 Cardiovascular Brain Impulse in Alzheimer’s Disease
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0343 Vascular disruptions in the tau pathology model of Alzheimer disease (rTg4510 mouse)
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0345 Radiomic feature as new biomarker for Alzheimer’s disease: a study based on amyloid PET
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0346 Altered topological organization of morphological brain networks in individuals with SCD
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0348 Interceptive prediction in behavioural variant frontotemporal dementia using SCR
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0352 Tracking cortical reorganization during motor recovery after stroke
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0353 Association between functional connectivity and sleep quality and fatigue in multiple sclerosis
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<td>Cerebral regional perfusion patterns associated with antidepressants in REM sleep behavior disorder</td>
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<td>Ervin Ersal, Boris-Stephan Rauchmann, Oliver Peters, Josef Priller, Anja Schneider, Jens Wiltfang, Frank Jessen, Emrah Duzel, Katharina Buergel, Stefan Teipel, Christoph Laske, Annika Spottek, Alfredo Ramirez, Michel Wagner, Robert Penzeczyk</td>
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<td>Emily Olsafson, Keith Jamison, Hesheng Liu, Joel Bruss, Aaron Boes, Amy Kuceyeski</td>
<td>Weil Cornell Medical College, New York, NY, Weil Cornell Medicine, New York, NY, Harvard Medical School, Cambridge, MA, University of Iowa, Iowa City</td>
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<td>Mahsa Doda, Richard Camicioli, Simon Duchesne, Louis Collins</td>
<td>McGill University, Montreal, Canada, Laval University, Quebec, Canada, University of Alberta, Edmonton, Alberta, Laval University, Quebec, Quebec, McConnell Brain Imaging Center, Montreal Neurological Institute, Montreal, Quebec</td>
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<td>McConnell Brain Imaging Centre, Montreal Neurological Institute, McGill University, Montreal, Quebec, Department of Human Genetics, McGill University, Montreal, Quebec, University of Tartu, Tartu</td>
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<td>University of Rochester, Rochester, NY</td>
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<td>Montreal Neurological Institute, McGill University, Montreal, Quebec, McGill Centre for Integrative Neuroscience, Montreal Neurological Institute, McGill University, Montreal, Quebec, Integral Neuroscience Center, Madrid, Spain, Biospective Inc., Montreal, Quebec</td>
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<td>Matthias Schroeter, Franziska Albrecht, Tommaso Ballarin, Markus Otto</td>
<td>Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Department of Neurology, University Hospital ULM, Ulm, Germany</td>
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<td>M Ethan MacDonald, Sarah Scott, Wei-Qiao Liu, Yunyan Zhang, Luanne Metz, G. Bruce Pike</td>
<td>University of Calgary, Calgary, Alberta, University of Calgary, Calgary, AB, Radiology &amp; Clinical Neurosciences, University of Calgary, Calgary, AB, University of Calgary, Calgary, Alberta, Division of Neurology, University of Calgary, Calgary, AB, Hotchkiss Brain Institute and Department of Radiology, University of Calgary, Calgary, Alberta</td>
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<td>The Royal Ottawa Institute of Mental Health Research, Ottawa, ON, The Royal Ottawa Institute of Mental Health, Ottawa, ON, Douglas Research Institute, McGill University, Montreal, Quebec, Douglas Research Institute, McGill University, Montreal, QC, MNI, McGill University, Montreal, QC</td>
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1University of Arkansas Medical Center, Little Rock, AR, 2University of Miami Miller School of Medicine, Miami, FL, 3University of Arkansas for Medical Sciences, Little Rock, AR

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1Imaging Genetics Center, Keck School of Medicine, University of Southern California, Marina Del Rey, CA, 2Washington University, St Louis, MO, 3The University of Pittsburgh, Pittsburgh, PA, 4University of Pittsburgh, Pittsburgh, PA, 5University of Washington, St Louis, MO, 6University of Washington, Seattle, WA, 7Pennington Biomedical Research Center, Baton Rouge, LA, 8Imaging Genetics Center, Keck School of Medicine, University of Southern California, Marina Del Rey, CA

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Defu Yang1, Di Hu2, Martin Styner3, Guorong Wu3
1Hangzhou Dianzi University, Hangzhou, Zhejiang, 2University of North Carolina at Chapel Hill, Chapel Hill, NC

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0469 Serum matrix metalloproteinase-9 is related to grey matter atrophy in REM sleep behavior disorder
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Joanna Skapampati1, Raymond Pomponio2, Mohammad Habes3, Erus Guroy4, Monica Hill-Truelove5, Haochang Shou1,2, Jimit Doshi1, Elizabeth Mamourian1, Ilya Nasrallah1, Lenore Joy Launer1, Tanweer Rashid1, Murat Bilge2, Yang Fan3, Kristine Yaffe4, Aristidis Satrass4, Divya Srinivasan2, Mark Espeland4, Colin Masters5, Paul Maruff6, Jurgen Frijters6, Henry Volz7, Sterling Johnson7, John Morris8, Marilyn Albert9, Nick Bryan9, Hans Grobe9, Susan Resnick10, David Wolk10, Konstantina Nikita11, Christos Davatzikos12
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Linda Mati1, Geetanjali Murari2, Darren Liang3, Nathan Herrmann4, J. Jean Chen5, Nicolas Paul6, LG Verhoeven1,2
1Rotman Research Institute, Baycrest, University of Toronto, Toronto, ON, 2Sunnybrook Health Sciences Centre, Toronto, ON, 3Rotman Research Institute, Toronto, ON

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Daniel Tao1, Qijas Srivastava1, Abdullah Ishaque1, Chris Hanstock1, Peter Seres2, Sneha Chenji3, Dean Euri4, Collin Luk5, Agessandra Abrahao6, Hannah Briemberg7, Richard Fryane8, Angela Genge9, Simon J. Graham10, Lawrence Korngut11, Lorne Zinman12, Sanjay Kalra12
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0487 Multimodal Imaging Hippocampal Neurodegeneration and Functional Connectivity in AD
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0491 Shape analysis of hippocampal subfields in patients with mild cognitive impairment
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Kenneth Rostowski1, Nikhil Choudhari2, Maria Calvillo3, Andrei Irimia1
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Wesley Richerson1, Down Wolfgram1, Brian Schmit2
1 Medical College of Wisconsin, Milwaukee, WI; 2 Marquette University, Milwaukee, WI

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Anna Vasilevskaya1, Foad Taghdiri2,3, Charles Burke1, Apameh Tarazi1,2, Pablo Rusjan4, Seyed Ali Naeimi1, Mazghan Khodadadi5, Ruma Goswami6, Richard Wennberg7,2, David Mikulis1,2,5,6, Robin Green1,7, Brenda Colella1, Karen Davis1,8, Sylvain Houle1, Charles Tato1,2,9, Maria Carmela Tartaglina1,2,10
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0498 Amygdala-related functional connectivity change in idiopathic REM sleep behavior disorder
Heejung Kim1, Jee-Young Lee1, Yu Kyeong Kim2, Hyunwoo Nam1, Sang Jeong Kim2, Beomseok Jeon2
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Wasim Khan1, Mohamed Salah Khli5, Remika Mito1, Thijs Dhillon1, Amy Brodmann1
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Felipe Almeida Picon1, João Ricardo Sato2, Giovanni Abrâaho Salum1, Maurício Anés1, Marco Del Aquilla1, Mario Pedro Pani1, André Zupman1, Luciana de Moura1, Ary Gadelha1, Euryipedes Constantino Miguel1, Andrea Parolin Jackowski4, Rodrigo Affonseca Bressan1, Luís Augusto Paim Rohde1
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Li-Ying Fan1,2,3, Susan Gau1,2,4,5, Tai-Li Chou2,4,5
1 Department of Education, National Taiwan University of Education, Taipei, Taiwan; 2 Department of Psychiatry, National Taiwan University Hospital and College of Medicine, Taipei, Taiwan; 3 Department of Psychology, National Taiwan University, Taipei, Taiwan; 4 Graduate Institute of Brain and Mind Sciences, National Taiwan University, Taipei, Taiwan; 5 Neurobiology and Cognitive Science Center, National Taiwan University, Taipei, Taiwan

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Arthur Spencer1, Jonathan Brooks1, Hollie Byrne1, Richard Lee-Kelland1, Sally Jary1, James Tomks1, Naoki Masuda1, Ela Chakkarapani1
1 University of Bristol, Bristol, UK; 2 University at Buffalo, Buffalo, NY

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Camille Williams1, Hugo Peye2, Roberto Toro3, Anita Beggiato1, Franck Ramus4
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0090 Shared & unique network features predict cognition, mental health and personality in childhood
Jianzhong Chen1, Angela Tom1, Valeria Kebets1, Leon Qi Rong Ooi2, Scott Marek2, Nico Dosenbach3, Danilo Bzdok1, Avram Holmes1, B.T. Thomas Yeo3
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0091 Neuroimaging predicts personalized motor function after perinatal stroke: A machine learning study
Helen Carton1,2, Brandon Craig3, Jacqui Hodge1, Deepthi Rajashekar1, Pauline Mouches3, Nils Forquet4, Adam Kirt6
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0094 Accounting for motion in fMRI: What part of the spectrum are we characterizing in autism and ADHD?
Mary Beth Nebel1, Liwei Wang2, Stewart Mostofsky3, Benji Risk3
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0101 Sensory perception in autism: An ALE meta-analysis of task-based fMRI studies
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Victor Pereira-Sanchez1,2,2 Alexandre Franco3, Pilar de Castra-Mangiano3, Maria Valdejo-Veladiets4, Azucena Diaz-Suarez4, Cesar Solotillo4, Maria Fernandez-Seara4, Michael Milham5, Francisco Castellanos6
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Oliver Gale-Grant1, Raïca Dimitrova1, Lucilio Cordero-Grande1, Andreas Schult1, Anthony Price2, Katy Vecchiato2, Andrew Chew1, Nicholas Harper3, Shona Falconer4, Emer Hughes1, Jonathan O’MacEoin3, Serena Counsell1, Daniel Rueckert5, Steve Smith6, Joseph Hajnal6, David Edwards6, Dafnis Battle6
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Katherine Lawrence1, Leann Hernandez1, Emily Fuster1, Namita Padgaonkar1, Genevieve Patterson1, Jiwan Jung1, Nana Okada1, Jennifer Lowe1, Jackson Hoeckstra1, Shuliamee Green1, Susan Bookheimer1, Daniel Geschwind1, Mirella Dapretto1
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0141 Functional Brain Networks and Neurodevelopmental Outcomes in Children with Congenital Heart Disease
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0142 Detecting tissue abnormalities in childhood epilepsy with developmental models of clinical MRI
Jonathan O’Murcheartaigh1, Sara Lorio1, Sophie Adler1, Torsten Baldeweg1, Helen Cross2, David Carmichael1, Christopher Clark2
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Shle Qi1, Robin Morris1, Jessica Turner1, Zening Fu1, Rongtao Jiang1, Thomas P. Deramus2, Dongmei Zha1, Vince Calhoun1, Jing Su1
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0162 Mapping latent neuroanatomical substrates underlying severe temper outbursts in children
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0165 Cortical gyrification in ASD and ADHD across the lifespan: A systematic review and meta-analysis
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0166 Functional cartography of cognitive dysfunction in focal epilepsies: A multiscale task-fMRI analysis
Lorenzo Cocchi1, Casey Paquier2, Xiaosong He1, Maria Centeno2, Christian Vollman1,2, Karin Trimmer1,2, Pamela Thompson1,2, Sally Bansedale1,2, Gavin Winston1,2, John Duncan1,2, Danielle Bassett1, Matthias Koepf3, Boris Bernhardt4,1,2, University of Pennsylvania, Philadelphia, PA; 2UCL Queen Square Institute of Neurology, London, UK; 3Montreal Neurological Institute, Montreal, Quebec; 4University of Vienna, Vienna, Austria

0168 Robust Topological Alterations in the Frontal Lobe and Default Mode Network in ADHD
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0170 Longitudinal Changes of Magnetization Transfer Ratio in Postoperative Cerebellar Mutism Syndrome
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0172 Using Functional Networks to Classify Seizure Onset Zones in Children with Focal Epilepsy
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0183 Structural brain network development in middle childhood after prenatal methamphetamine exposure
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0184 Decreased Dynamic Integration Ability in Cortical Resting-State Networks in Autism Spectrum Disorder
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0186 Stratifing dystrophic axonal injury in focal pediatric seizures using diffusion tensor imaging: A pilot study
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0206* Aberrant social orienting and extrinsic functional connectivity during natural viewing in autism
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0210 Functional connectivity differences between ADHD individuals with good and poor treatment response
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0226 Infant Regional Corpus Callosum and Forebrain Volumes After Surgery for Long-Gap Esophageal Atresia
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0233 Functional brain dynamics in autism assessed using co-activation pattern analysis
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0239 Gene expression-cortical morphometry association in autism subtypes with different language outcomes
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0245 Patterns of functional hypo- and hyperconnectivity in data driven symptom-defined autism subtypes
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0250 Non-sedated neuroimaging to detect brain changes after mild traumatic brain injury in young children
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0259 Gray Matter Co-Alteration Networks in Autism Spectrum Disorder: A Meta-Connectomic Approach
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0261 The General and Specific Neurocognitive Configurations of Attention-Deficit/Hyperactivity Disorder
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0266 Uncertainty-informed detection of MRI-negative focal cortical dysplasia using Bayesian deep learning
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0278 Optimal control energy landscape tracks metabolic underpinnings in temporal lobe epilepsy
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0284 ADHD symptom level and neural processing of a naturalistic stimulus in typically developing children
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0327 Brain activity during emotional movies predicts subtypes of psychopathic personality traits
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0302 Longitudinal White Matter Development and Changes in Autism Severity Across Early Childhood
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0314 The relationship between externalizing and internalizing behaviour and the cortico-
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0331 Atypical neural underpinnings of face processing in ASD revealed by cross-modal analyses
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0347 Head Circumference and other Morphological Parameters in Male Adults with Autism Spectrum Disorder
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0355 A connectome-wide mega-analysis of functional dysconnectivity in autism spectrum disorder
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0364 Task-induced ACC network adjustments mediate effect of childhood psychopathology on social function
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0374 Longitudinal Functional Connectivity of Cognitive Brain Networks in Older Adults with Autism
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0382 Altered functional brain connectivity to verbal sounds in preterm born infants
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0386 Brain Neural Flexibility as a Potential Biomarker for ADHD Evaluation
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0391 Reduced structural connectivity in newborns with congenital heart disease.  
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0395 T1/T2 ratios: investigating myelination in perinatal stroke patients  
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0400 Functional connections underlying the bilingual executive function advantage in children with autism  
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0402 Abnormal Sulcal Pattern in Children with 16p11.2 Deletion and Duplication Syndrome  
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0404 Motor Performance and White Matter Microstructure in Young Children with Prenatal Alcohol Exposure  
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0418 aberrant functional connectivity in affective networks underlies persistent post-traumatic headache  
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0420 Language network connectivity relates to language outcomes in children with Benign Epilepsy with GTCS  
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0421 Estimating the impact of drug prevention on functional brain outcomes using Bayesian mixed effects  
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0425 Evaluation of MRI scoring systems prediction with two-year outcome in Neonatal Encephalopathy  
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0431 Mapping Neural Correlates of Biological Motion in School-Age Children with Autism using HD-DOT  
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0438 Altered Functional Connectivity in Limbic & Striatal Network Regions in Adolescents with Concussion  
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0446 The structural and functional interplay in autism animal models: Grik4over mice as an example  
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0450 Motor cortical beta-band inter-trial variability and age-related change in autism spectrum disorder  
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0451 The structural basis for functional connectivity: an evidence from agenesis of corpus callosum  
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0454 Age-related parietal GABA alterations in children with Autism Spectrum Disorder  
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0457 Reduced asymmetry of hand knob volume and impaired U-fiber hand tracts in aging adults with ASD  
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0464 Longitudinal symptoms changes are correlated to altered local gyriﬁcation index (LGI) in autism
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0475 Relationship between fMRI BOLD signal and MEG theta power in autism spectrum disorders
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0477 A canonical correlation analysis and diffusion MRI study on children with mild TBI
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0478 A brief intervention targeting impulsivity and sensation seeking: effects on reward anticipation.
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0479 Associations between MRI, Hammersmith Infant Neurological Exam and General Movements in Very Preterm
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0486 Altered Probabilistic Connectivity of Striatal-Executive Networks in Children with Hydrocephalus
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0492 Autism Symptoms and Sensory Abnormalities: Their Relationship and Underlying Functional Connectivity
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0495 Sex-speciﬁc Volumetric Differences Associated with Substance Use through Adolescence
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0501 Dimensional and categorical approaches to map neurobiology underlying cognitive imbalances in autism
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0503 Regional cerebellar volumes in children with autism and associations with core autism traits
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0073 Hippocampus connectivity mediates the association between acceptance and PTSD symptom severity
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0075 Pre-operative local brain volumes predict outcome of subcallosal cingulate DBS for depression
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0076 Dissociating trait and state anxiety effects on mismatch negativity and sensory gating ERPs
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0077 Functional connectivity gradients of the striatum in schizotypy and ﬁrst-episode psychosis
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0080 Simultaneous associations of brain volume with depression symptoms and urban environment features
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0082 The early postpartum period — differences between women with and without a history of depression
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0083 Linked Independent Component Analysis for Treatment Response in Schizophrenia
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0085 Investigating changes to glutamate and GABA in gender dysphoria
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0087 Activity flow models reveal the role of schizophrenia network abnormalities in cognitive activation
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0088 Longitudinal Connectome-Wide Analysis of the Real-time fMRI Neurofeedback Training Effects in MDD
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0089 RS-fMRI in the Assessment of the Functional State of the Brain in Patients with Opioid Addiction
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0098 Associations of cigarette smoking with gray and white matter in the UK Biobank
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0103 Multivariate Autoregressive Models reveal altered directional network interactions in schizophrenia
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0108 Electrophysiological connectivity following ketamine infusion in healthy and depressed volunteers
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0112 Myelin Imaging of the Cholinergic System in First-Episode Psychosis
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0117 Surface area covariance in the mentalizing network: Insight into social cognition in schizophrenia
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0118 Changes in Resting-State MEG Spectral Power and Connectivity from Combat Related PTSD
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0119 The frequency-specific resting connecome in bipolar disorder: A MEG study
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0120 Inverse correlation between omega-3 concentration and emotional brain response on major depression
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0123 Cytokines levels reflect the disrupted functional connectivity in patients with bipolar disorder
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0125 Convergent molecular, cellular, and neuroimaging signatures of major depression
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ABSTRACTS

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0164 Using task and intrinsic functional connectivity to detect changes after ketamine
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0167 Failure of network segregation during memory consolidation and retrieval in schizophrenia
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0173 Sulcal alterations and functional implications associated with hallucinations in schizophrenia
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0175 Altered Neurobehavioral Responses to Social Reciprocity in Women with Bulimia Nervosa
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0176 Regional Heterogeneity of Gray and White Matter Changes in Schizophrenia
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0177 Machine Learning Prediction of Childhood Maltreatment Using Multimodal Neuroimaging Data
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0185 Association between polygenic risk for schizophrenia with functional and structural brain
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0188 Fractional anisotropy and processing speed are associated in depressed patients and healthy controls
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0190 No evidence for biological subtypes of depression: Another non-replication of Drysdale et al. (2017)
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0191 Classifying Major Depression Using Ensemble GAN (EnGAN) Based on Functional Network Connectivity
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0193 BCPL: Convolutional Prototype Learning for Brain Networks for Depression Diagnosis
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0194 A LHPP genetic variant conferring risk to MDD and SCH was associated with GMV of parahippocampus
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0197 Functional brain imaging markers as predictors to escitalopram and sertraline therapy in major depression
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0198 Higher-order psychopathology associations with total brain volume
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0199 Morphological Alterations in Obsessive-compulsive Disorder
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0202 Prefrontal hyperactivity related to expected reward value in adolescent major depressive disorder
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0203 Depression phenotypes and structural brain changes following childhood trauma: A replication study
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0204 Higher-order psychopathology associations with total brain volume
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0205 Multi-site bipolar disorder classification using subtropical shape morphometry
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0206 Positive Symptoms Associated with Gray Matter Patterns in the Cerebellum and OFC in Schizophrenia
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0207 C-Reactive Protein and Brain Structure in Major Depressive Disorder
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0208 Reward Processing Does Not Predict Anhedonia in Depressed Adolescents
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0209 Brain Dynamics of Mind Wandering and Behavioral Variability in ADHD
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0210 Prefrontal Hyperconnectivity Linked to Persistent Symptoms in Mild Traumatic Brain Injury
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0211 Brain activation patterns during working memory tasks in schizophrenia and major depressive disorder
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0212 A novel cognition-guided neurofeedback treatment for methamphetamine addiction
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0240 Disrupted intrinsic visual-auditory connectivity networks associated with depressed symptoms in MDD
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0238 Voxel-wise meta-analysis of grey matter changes in Major Depressive Disorder
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0237 Atypical Antipsychotics Prevent Illness-Related Volume Loss within the Basal Ganglia in Psychosis
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0238 Voxel-wise meta-analysis of grey matter changes in Major Depressive Disorder
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0241 Structural connectivity of white matter tracts in patients with obsessive-compulsive disorder
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0243 Genetic specific deficit of abnormal gyriﬁcation in unaffected relatives of schizophrenia patients
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0244 Interactions between smoking and internet gaming disorder on spontaneous brain activity
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0247 Resting-state functional connectivity using network-based thalamic seeds in first episode psychosis
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0251 Brain Age and Epigenetic Age Acceleration During Conversion to Psychosis.
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0254 Disrupted Intersubject Variability Architecture in Functional Connectomes in Schizophrenia
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0265 Meta-analysis of coincident grey matter volume decreases and increases in psychiatric diseases
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0272 Clinical-anatomical phenotypes of schizophrenia
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0277 Tools for Neuroimaging-Behavioral Relationships In Dimensional Geometric Embedding (N-BRIDGE)
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0280 Hallucinations and Delusions Relate to Distinct Hierarchical Alterations in Neural Timescales
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0282 Characterizing cortical myeloarchitecture in schizophrenia spectrum disorder
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0283 Neuroanatomical signature of a novel transcriptome-based polygenic risk score for depression
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0289 Thinner Parahippocampal Area 3 in First-Episode Psychosis in Discovery and Replication Samples
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0290 Effects of cross-sex hormone treatment on own body perception in relation to self
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0292 Brain Microstructure Alterations and Human Cytomegalovirus Infection in Major Depressive Disorder
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0293 Impaired TPJ Deactivation during Category Fluency in First-Episode Psychosis
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0294 Effects of Oxytocin on Neural Reward Processing in Women with and without Autism
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0295 Effects of Simultaneous rtfMRI and EEG Neurofeedback in Major Depression: Insights from eLORETA
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0300 Structural MRI spatial pattern associated with schizophrenia patients in a multivariate approach
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0304 Empathy subtypes in MDD based on amygdala connectivity at 7 Tesla and socio-emotional behaviour
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0308 Increased structural covariance of the insula in drug-dependent subjects
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0309 RTMS Treatment Alters the Dynamics Between Functional Networks in Treatment-resistant Depression
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0308 FMRI Neurofeedback Amygdala Training Influences Immune Responses
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0311 Brain alterations associated with suicidal ideation and attempt across 18 international studies
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0313 The relationship of free Kuwait with the cognitive control network in early psychosis
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0316 Thicker prefrontal cortex is associated with negative symptoms in schizophrenia – an ENIGMA study
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0317 Consistent Temporal Dynamic Response to Drug Cues across Multiple Clinical Populations
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0319 Learning without contingencies induces higher order asynchrony in brain networks in schizophrenia
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0321 Association of reduced cortical thickness with treatment resistance in schizophrenia
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0322 Effects of Levodopa on Cue Reactivity in Abstinent Alcoholics
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0324 Abnormal maintenance of long-range temporal dependence during sleep in insomnia
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0325 White matter integrity in people with treatment-resistant schizophrenia
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0326 Abnormal effective connectivity in the right frontoparietal network in major depressive disorder.
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0327 Resting-State Network Properties Reflect Adolescent Psychiatric Symptoms and Immune Activity
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0328 White Matter Integrity Across Major Depressive Disorder, Bipolar Disorder and Schizophrenia
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0329 Hippocampal subfields volume and cognitive function in schizophrenia and mood disorders
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0330 Neuroimaging effect of aerobic exercise on white matter abnormality in patients with schizophrenia
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0331 Brain connectivity patterns during rest associated with suicidal risk
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3044 Cmorph LGI is more spatially precise than standard FreeSurfer method – evidence from schizophrenia
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3049 Characterising Neural Heterogeneity in Psychiatric Disorders using Normative Models
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3050 Male Internet gaming disorder subjects are more impulsive than females in inter-temporal decisions
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3051 Altered Brain Functional Connectome as a Trait Marker of Anorexia Nervosa
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3052 Reward-related decision making in anorexia nervosa – a longitudinal fMRI study
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3056 Hallucination proneness modulates functional involvement of the dorsal cingulate cortex circuit
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3057 Association of CDH13 genotype with structural connectivity estimates in human corticospinal tract
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3058 Morphometric profiles of eating disorder symptomatology in the ABCD study
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3059 Schizophrenia disorganization and core-deficit association with diminished postmovement beta rebound
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3060 Predicting Conversion to Schizophrenia from Prodromal States using a Machine Learning Approach
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3062 In vivo mGlur5 binding and functional connectivity in abstinent subjects with alcohol dependence
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3063 Sex-specific effects of C4 schizophrenia risk alleles on longitudinal changes in cortical structure.
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3065 Opposite functional connectivity changes in manic and depressive episodes in bipolar disorder
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3066 Identifying Major Depressive Disorder from Resting State fMRI Using Convolutional Neural Networks
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3070 Alcohol Cue Related Effects on the Response Inhibition Network in Patients with Alcohol Use Disorder
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0371 Thalamic neuro-metabolite correlates of cognitive impairments in Schizophrenia
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0373 Effects of chronic cocaine use on frontostriatal functional connectivity: a longitudinal study
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0377 Positive valence systems deficits in adolescent depression
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0383 Quantitative Susceptibility Mapping of Brain Tissue-Iron Distribution in the Psychosis Spectrum
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0385 Examining Depression in MS Using Multi-Shell Diffusion Imaging & Structural Connectometry
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0388 EEG Microstates in Patients with Psychotic Disorders: Effect of Antipsychotic medication
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0390 FMRI-Based Prediction of Clinical Improvement in Psychosis with Machine and Deep Learning
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0393 A double-blind rtfMRI neurofeedback study on auditory verbal hallucinations
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0394 Transient States Changes of Functional Network Connectivity in Major Depressive Disorder
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0396 Reward circuitry activations during feedback of performance differentiate anxiety variants in youth
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0397 Association between Grey Matter Volume and Altered Brain Signal Complexity in Schizophrenia
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0398 Enhancement of memory in schizophrenia with PDE4 inhibitor Rofulimast
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0399 Hippocampal progression in First Episode Psychosis
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0405 Graph theoretic analyses of brain networks in schizophrenia during memory formation & consolidation
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0406 Effects of lifetime alcohol consumption on surface morphometry in alcohol-dependent patients
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0408 Classifying Heterogeneous Presentations of PTSD via Intrinsic Connectivity Network Machine Learning
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0411* Psychopathology phenotypes explain individuals' unique deviations from normative neurodevelopment
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0412 Insula hypoactivation is associated with dissociative experiences
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0453 OCD symptom dimensions predict the degree of dACC modulation during motor control and working memory
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0455 Preferential response to slow stimuli in MDD, and its basis in intrinsic neural activity (at rest)
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0456 Morphological brain correlates of substance user: A systematic review and meta-analysis
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0460 Alterations in Social Cognitive Networks in Individuals at Risk for Psychosis
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0466 Mapping Neurodevelopmental Trajectories of Thalamo-cortical Systems Across the Mental Health Spectra
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0467 Adolescent behavior and brain volume related to adult polygenic risk score for alcohol use disorder
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0470 White matter microstructural deficits in 364 adults with a history of suicide attempts
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0471 Disrupted functional connectome hierarchy in depression: a multi-site fMRI study with 2234 subjects
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0473 Effects of saracatinib on reward circuitry in subjects with and without a family history of alcohol
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0480 Relationship between amygdala subregional networks and positive symptom severity in schizophrenia
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0481 FC deficits as neural biological correlate of trait and state characteristics in MDD
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0483 Neural oscillations abnormalities in first-episode schizophrenia
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0484 Patients with psychosis present abnormal transitions between their dynamic functional networks
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0485 Sex-Specific Hippocampal Volume and Verbal Memory Relationships in Psychosis
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0488 | Exploring the Relationship Between Early Psychosis Verbal Memory Deficits and White Matter Integrity  
Charlie Henri-Bellemare, Gregory Kiar, Katie Lavigne, Raihaan Patel, M Mallar Chakravarty, Martin Lepage  
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0489 | Characterisation of structural underpinnings of functional connectivity differences in schizophrenia  
Jiayi Zhang, Geetha Chilla, Qian Hui Chew, Renick Lee, Kuan Jin Lee, Kang Sim, Bhanu Prakash KV  
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0490 | Functional MRI to distinguish apraxia-related processes in stroke: Healthy pilot study  
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0494 | Altered Brain Connectivity in Patients with Schizophrenia  
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0499 | Exploring the Relationship Between Early Psychosis Verbal Memory Deficits and White Matter Integrity  
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0502 | Obesity and Cerebral Blood Flow in the Reward Circuitry of Adolescents with Bipolar Disorder  
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0527 | Replicable neural and behavioral patterns of delayed fear extinction in a multicenter fMRI setting  
Isabelle Bidderbusch, Adrian Wrobleski, Yubuo Yunbo, Hans-Ulrich Wittchen, Andreas Ströhle, Alfons Hamm, Jan Richter, Volker Arolt, Jürgen Margraf, Jürgen Deckert, Tilo Kircher, Benjamin Straube  
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0504 | Adding positive punishment facilitates learning in fMRI neurofeedback  
Manfred Kloepfl, Paul Michenthaler, Godber Godbersen, Andreas Hahn, Rupert Lanzenerberger  
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0554 | Neural Correlates of Aversive Learning as Mechanisms Linking Childhood Trauma with Psychopathology  
Stephanie DeCross, Katie Mclaughlin  
Harvard University, Cambridge, MA, Harvard, Boston, MA

0586 | Neural Correlates of the Relationship between Micro-expressions Recognition and Deception Detection  
Zhencai Chen, Zhennan Liu, Keding Li, Ziyue Xin, Xunbing Shen  
Jiangxi University of traditional Chinese Medicine, Nanchang, Jiangxi

Emotional Percepcion

0507 | Aberrant cortical connectivity demonstrated by HEFs in patients with mood disorders  
Yutaka Kato, Yuichi Takai, Satoshi Umeda, Masaru Mimura, Masato Fukuda, Hajime Tabuchi  
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0515 | Neural processing of alarm and non-alarm signaling in human scream calls  
Sascha Frühholz, Joris Dietzker, Matthias Staib, Wiebke Trost  
University of Zurich, Zurich, Zurich

0516 | Artificial intelligence is perceived as evolutionary threat: neural evidence from amygdala response  
Zhengde Wei, Ying Chen, Xiaochu Zhang  
University of Science & Technology of China, Hefei, Anhui

0530 | Temporal Decoding of Vocal and Musical Emotions: Same Code, Different Timecourse?  
Sebastien Paquette, Simon Rigolot, Karina Grunewald Zola, Alexandre Lehmann  
McGill, Montréal, Québec, Université du Québec à Trois-Rivières, Trois-Rivières, Québec, University of Sydney, Sydney, McGill, Montreal, Québec
0534 Neurobiological Affective Processes' Contribution to General Intelligence
Leonardo Christov-Moore1, Anthony Vaccarino1, Antonio Damasio1, Jonas Kaplan1
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0535 The role of the pontine region in visual affective processing
Jingjun Wang1, Dorita H. F. Chang1, Di Qi2, Weiwei Men2, Jia-Hong Gao2, Tativa Lee1
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0537 Cognitive consequences related to depressive traits: an ERPs study
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0538 Reduced probability but preserved empathic ability in adolescents with CD and high CU traits
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0552 Neurophysiological and behavioral correlates of emotional auditory processing in healthy adult women
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0553 Mind acts upon mind: Brain-to-brain synchrony in lover-lover dyads revealed by EEG hyperscanning
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0556 Psychological and Neural Correlates of Real-time Affective Instability
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0571 Neural spiking in the human medial temporal limbic system to normal and whispered emotional voices
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0575 Mood symptom severity affects prefrontal emotion processing in psychgenic nonepileptic seizures
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0579 Neural Correlates of Emotional Perception by Multi-Voxel Pattern Analysis
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0584 Functional neuroanatomy of dimensional emotions in facial processing: An ALE meta-analysis
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0588 Alteration in cortical processing of facial emotions in broader autism phenotype
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0545 The effect of specific types of childhood maltreatment on subcortical structures
Janik Gottermann1, Lena Waidtma2, Dominik Grothe3, Hannah Lehmk4, Stella Fingas5, Susanne Meinert6, Verena Enneng7, Simon Schmit8, Tina Meiler9, Frederike Stein9, Katharina Brosch9, Andreas Jansen10, Axel Krug10, Igor Nenadic11, Tilo Kircher12, Bernhard Baude13, Udo Dannlowski14, Nils Oepel14
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0547 Lower Reward Network Glutamate is Associated with Diminished Reward Responsiveness
Valerie Sydor1, Bart Larsen1, Christian Kohler1,2, Andrew Crow1, Monica Calcium1, Ruben Gur1,2, Raquel Gurt1,2, Joseph Kable1,2, Jami Young1,2, Di Qi1,2, Dorita H. F. Chang1,2, Andrew Crow1,2, Netta Dunsky1,2
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0585 How do abstinent stimulant users process monetary risk in non-choice situations?
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0541 Core Aspects of Self-Concept Biases in Social Anxiety: Neurobehavioral Indications
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Self Processes
Freudian ideas represented in the brain: A fMRI-study of ego-functions, the BIG-5, and the DMN.  
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Functional and morphological changes related to sexual orientation in female-to-male transsexuals  
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Neural Correlates of Sexual Orientation in Men: Brain Activity During Reading Mind in the Eyes task  
Monika Fokierska-Zukowska, Artur Marchewka, Jan Szczyiński, Andrzej Sokołowski, Wojciech Dragon  
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Premature Ejaculation Recognition Using Convolutional Neural Network Based on FC and SICE Features  
Jiaming Lu, Xin Zhang, Wen Zhang, Qian Chen, Zhao Qing, Bing Zhang  
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Why are you laughing? Neural correlates of social intent attribution to auditory and visual laughter  
Dirk Wildgruber, Sophia Stegmaier, Katharina Koch, Lena Schwarz, Benjamin Kreifelts, Thomas Ethofer  
University of Tübingen, Tübingen, Germany

An fMRI study on the neural bases of interference in false belief reasoning.  
Foyzul Rahman, Dwayne May, Daniel Shaw, Klaus Kessler, Charlotte Hartwright  
Aston University, Birmingham, United Kingdom

Relationship between depression and dorsolateral prefronto-thalamic tract injury following mild TBI  
Hyek Gyu Kwon, Sung Ho Jang, Mi Young Lee  
Eulji University, Sungnam-si, CT, College of Medicine, Yeungnam University, Daegu, Daegu, Department of Physical Therapy, College of Health and Therapy, Daegu Haany University, Gyeongsangbuk-do, Gyeongsang

Neural responses of in-group “favoritism” and out-group “discrimination” toward moral behaviors  
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Altered Hippocampal Function and Self-Reflection Network in Psychogenic Nonepileptic Seizures (PNES)  
Adam Goodman, Neha Balachandran, Jane Allendorfer, Amber Martin, Valerie Vogel, Krista Tocco, W. Curt LaFrance Jr., Jerzy Szafarski  
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An fMRI Study on Mentalization and Intergenerational Ambivalence  
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ERP evidence for modulations of spontaneous gender categorization of faces by perceived race  
Shihui Han, Ting Zhang  
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An Interplay Between Pubertal and Adult Testosterone and Brain Response to Faces in Young Men  
Zhide Li, Steven Tilley, Ammar Khairullah, Tomas Paus  
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Theory of mind and grey matter volume in late childhood  
Yu Tong Guo, Elizabet Leland, Miriam Beauchamp, Annie Bernier  
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Haste Makes Waste: Oxytocin Effect On Intertemporal Choice  
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Does theory of mind has a structural substrate?  
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Motherhood Influences on Neural Mechanisms for Perceiving Eye Gaze and Emotional Facial Expressions  
Shadi Bagherzadeh Azbar, Andrea Hildebrandt, Werner Sommer  
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Examining social attribution skills in very preterm born children using MEG and fMRI  
Sarah Massad, Marilee Vandervouw, Margot Taylor  
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Neural Correlates of Charitable Cognition Moderated by Likelihood of Making a Difference  
Samantha Fedele, Emma Pearson, Nancy Diazgranados, Reza Momenan  
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0581 The neurocognitive systems underlying shared attention to emotional videos
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0582 The role of functional connectivity in the link of peer victimization and adolescent psychopathology
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0583 Doctor Trustworthiness Reduces Pain and Its Neural Correlates in Virtual Medical Interactions
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0584 Expectations of Identity-Specific Social Outcomes in Orbitefrontal Cortex
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Social Interaction

0508 Reduced Accumbal Volume in Individuals with Anxious Tendencies, Regardless of Their Bully History
Hideo Suzuki¹, Jacob Benton¹
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0522 Corporate perspective taking shapes brain hemodynamic activity and eye-movements during movie viewing
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0525 Dissecting the midlife crisis: Social, personality & demographic indicators in social brain anatomy
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0539 Neural basis of sharing information through goal-directed conversation: hyperscanning fMRI study
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0543 Neural networks supporting digital and natural voice recognition
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0549 Parent-adolescent fMRI hyperscanning and dyadic neurofeedback for influencing brain response
Kara Kerr¹, Erin Ratliff¹, Stormie Fuller¹,², Danielle DeVille¹,², Kelly Cosgrove¹,³, Masayo Misaki¹,², Amanda Morris²,³, Jerzy Bodurka¹,²
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Violations in the eye of beholders: noradrenergic system, social norms processing and pupillometry
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Evidence of Parent-adolescent Cross-brain Connectivity during an fMRI Hyperscanning Task
Erin Ratliff¹, Masayo Misaki¹,², Kara Kerr¹, Kelly Cosgrove¹,³, Andrew Moore³, Margaret Johnson³, Danielle DeVille¹,², Kyle Simmons¹, Jerzy Bodurka¹,², Amanda Morris²
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Increased Synchronous Brain Activity of Dyads in fMRI Hyperscanning Joint Attention Studies
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Increasingly Close Relationships Indicate Increasing Similarities In Brain Activity Viewing A Movie
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0587 A computational model of one-shot economic game and its neural substrates
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0591 Reduced Volume of the Nucleus Accumbens in Bully Perpetration and Victimization Experiences
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0594 Childhood Trauma Is Associated with Bully Perpetration Depending on Amygdala Volume
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Social Neuroscience Other

0514 Linking emotion perception to neurocomputational processes underlying adaptive social functioning
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0528 Child and Adult Stress: Effects on the Brain and Cognitive Ability in the UK Biobank Sample
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An fMRI study on the magnitude of romantic love and psychological characteristics in couples
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0556 Towards a neurometric-based construct validity of trust
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0560 Insula, thalamus and anterior cingulate volumetric changes after mindfulness training in novices
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0570 Lack of relationship between empathy and aspects of brain structure and function in children.
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0512 Brain Decoding of Affective Meaning through Personal Stories
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0517 An ERP study of appreciation in different uses
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0518 Creative comprehension and appreciation: an ERP study
Jun-Yu Yang¹, Yu-Chen Chan¹
¹National Tsing Hua University, Hsinchu, Taiwan

0519 An ERP study of humor in the resolution processes
Jui-Hsuan Hsieh¹, Yu-Chen Chan¹
¹National Tsing Hua University, Hsinchu, Taiwan

0520 An EEG study of Magic Attention and awareness
Min-Tsung Yeh¹, Yu-Chen Chan¹
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0521 An ERP study of humor and monetary rewards
Chuan-Han Kao¹, Lin-Yi Wang¹, Yu-Chen Chen¹
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0523 An fMRI study of reasoning jokes on humor processing
Yu-Ting Li¹, Yu-Chen Chen¹
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0529* The relationship between BMI and volume of subcortical structures is age-dependent
Filip Moryś¹, Alain Daghet¹
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0540 Selectively altering love related-belief in the human brain improves romantic relationships
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0544 Can we reliably measure emotion regulation using fMRI?
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0555 A r-fMRI Study on People with High and Low Life Satisfaction based on Psychological Needs Support
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0560 Microstructural variability in the external capsule is associated with emotional reactivity to daily
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0561 Religious chanting may affect brainstem activity and modulate emotion
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0564 Sense of humor moderates the mesolimbic reward pathways: An fMRI study of humorous rewards
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0568 Being moved by moving images: Brain responses to artistic landscape clips
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0573 Prediction of the intensity of humour-related amusement over time: A behavioural and EEG study
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0574 Shared vs. distinct neural bases for hunger and emotion: A functional neuroimaging meta-analysis

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0577 Does resting state cortico-imblic functional connectivity relate to emotion regulation ability?

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0578 A human brain circuit for spirituality and religiosity

Michael Ferasun, Frederic Schaper, Alexander Cohen, Shan Siddiqi, Sarah Merrill, Jordan Grafman, Cosimo Urgesi, Franco Fabbro, Michael Fox
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0593 Offending behavior linked to activity in regions subserving emotional processes: An ALE meta-analysis

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0604 FAAH genetic variation modulates neural correlates of extinction recall – An fMRI study

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0606 Making the Most of testing imaging genetics

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0610 Altered White Matter and Ventricle Structure Associated with C4A Gene Expression in Schizophrenia

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0611 Identification of Independent Genomic Sources Driving Structural and Functional Brain Variation

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0616* Improving discovery of the genetic architecture of the cerebral cortex

Carolina Makowski, Dennis van der Meer, Oleksandr Frei, Tobias Kaufmann, Lars Westlye, Ole Andreassen, Donald Hagler, Chun Chieh Fan, Terry Jennigan, Anders Dale, Chi-Hua Cheri
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0617 Presymptomatic and Symptomatic MAPT Mutation Carriers Feature Functional Connectivity Alterations

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0602 Extending Genome-Wide Association Study Results for Subcortical Brain Volumes in a Neonatal Cohort

Harriet Cullin, Konstantina Dimitrakopoulou, Dafnis Batalle, Oliver Gale-Grant, Heman Patel, Charles Curtis, Andreas Schuh, Lucilio Cordero-Grande, Emer Hughes, Anthony Price, Daniel Rueckert, Joseph Hajnai, Steve Smith, David Edwards

0603 An EEG and Genetic Study of Adaptation to Subpolar and Polar Regions

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0599 Association of ULK4 and the Hyperdopaminergic Response of the Human Reward System

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0605 Identification of Independent Genomic Sources Driving Structural and Functional Brain Variation

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0622 Acceleration of Heritability and Genetic Association Studies with Algorithms and GPU Parallelization
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0626 Genome-Wide Brain-Wide Analysis of Betweenness Centrality: A Structural Connectome Study
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0629 Genome-wide association study of language network’s functional connectivity
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0630* Molecular genetics of the biological age of the brain in the UK Biobank
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0632 Age-related changes in sleep duration and brain structure with genetic association
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0633 Polygenetic Mediation Analysis of Amyloid Imaging Phenotypes in Alzheimer's disease
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0634 Polygenetic score for Schizophrenia is associated with white matter connectivity in healthy population
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0596 The Impact of Population Structure on Neuroimaging Studies
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0598 Genetic Associations in Diagnostic Specific Trajectories Revealed with Autoregressive Mixed Models
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0609 Heritability of Subcortical Structures Using a Twin and Non-Twin Sibling Design
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0614 Signatures of functionally interacting genetic assemblies in the human brain.
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0618 Genetic and Environmental Influence on Resting State Networks in Young Healthy Adults
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0623 Handling Genetically Related Subjects through Linear Mixed-Effects Modeling in Neuroimaging
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0628 The influence of genetic variation on resting-state connectivity in infancy
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Genetic Modeling and Analysis Methods
**Neurogenetic Syndromes**

**0601** Enabling big-data analyses of Huntington’s disease with federated BIDS-compatible public datasets

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**0607** Age-dependent connectivity differences within the default mode network in Down Syndrome

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**0620** High-risk psychiatric mutations affect functional connectivity along shared parsimonious dimensions

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**0621** Expression of Genes Causing Spinocerebellar Ataxia is Related to Dopamine Synthesis Measured by PET

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**0625** Impact of 7q11.23 Copy Number Variation on Developmental Gray Matter Trajectories

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**Transcriptomics**

**0600** Pairwise Interactions in Gene Expression Determine a Hierarchical Transcription Profile of the Human

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**0605** Transcriptomic Analysis of Alzheimer’s Disease Associated Brain Hypometabolism

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**0608** Validating cellular dimensions of cortical organization through neuroimaging-transcriptomics

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**0612** Transcriptomic parcellation of the human brain reflects structure and function

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**0613** Neuroimaging-genetic associations in Parkinson’s disease

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**0615** Comparison of brain connectomes by MRI and genomics and its implication in Alzheimer’s Disease

Young Woo1, Ponos Roussas2, Vahram Haroutunian3, Pavel Katsel2, Joelle Jee2, Eric Schadt1, Jun Zhu1

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**0624** Principal axes of gene-regulated spatial organization of the human brain

Jacob Vogel1, Konrad Wagstyl1, Casey Paquola2, Jakob Seidlitz1, Alex Diaz-Papkovich1, Thomas Funck3, Bratislava Mici1, Boris Bernhardt1, Alan Evans1

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**0627** Brain disorders taxonomy from a transcriptomics point of view

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0642 Online decoding for rtfMRI neurofeedback via group classification models of a decision-making task
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0650 Posterior parietal cortex plays a role in tactic perception and decision making
Donghyeok Lee1, June Sic Kim1, Seokyun Ryu1, Chun Kee Chung2
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0668 Modulations of Insular Cortex Activity during Risky Decision Making: a fMRI Study
Zarina Von Siebenthal1, Olivier Boucher1, Latifa Lazzoumi1, Véronique Taylor1, Kristina Martinu2, Mathieu Roy1, Pierre Rainville1, Franco Lepore2, Dang K. Nguyen2
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0669 Causal role of Parietal Cortex in valuing uncertainty information during ambiguity decision-making
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0673 Noradrenaline in Optimal Decision-Making: Testing SAPEs in Electrophysiology and BOLD Imaging
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0675 Toward a Predictive Model of Delay Discounting
Jeremy Mysiwowski1,2, Jeff Soldate1, Mikhail Koffarnus1, Jonathan Lisinski2, Warren Bickel3, Sarah Snider1, Stephen LaConte1,2
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0679 Anxiety representation in anterior insula is not task related but baseline related
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0683 An fmri investigation of the neural correlates of reasoning in moral judgment
Fiona Ching1, Isaac N. Ip1, H. T. Chi2, Y. L. Chan2, Ken K. C. Wu1, Savio W. H. Wong1
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0698 Neural Correlates of Accuracy and Confidence during Realistic Decision-Making in Noisy Environments
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0706 Deciding to Sample: Modeling instrumental information demand and belief updating in humans
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0708 Online decision strategies can modulate Amygdala and Hippocampus activity during reward processing
Jeff B. Bowers1,2,4, Joanne Zhao2,4, Yixin Chen2,4, Andrew D. Young1,2,4
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0711 Individual-specific functional architecture and activation patterns in medial prefrontal cortex
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0713 Neurobiological Substrates Associated with Risk-Seeking Behavior in Adolescents
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0721 Neural computations underlying human reinforcement learning in a continuous choice space
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Executive Function, Cognitive Control and Decision Making

0635 Network centrality dissociates brain regions in right ventral IFC activated for response inhibition
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0639 Pragmatic and Social Cues Modulate Amygdala and Hippocampus Activation in Reciprocated Emotional Decision-Making
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0644 Neural Population Coding for Delay Discounting
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0647 Interindividual and Intra-individual Variability in Delay Discounting Behavior: Ameta-Analysis of the Decision-Making Literature
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0656 Conflict monitoring modulates effective connectivity of the cingulo-cerebellar circuitry in humans
Joshua Goh, Jen-Hau Chen

0640 Neural correlates of nontouch in healthy subjects
Esro Afi, Fivos Iliopoulos, Tilman Stephan, Vladimir Nikulin, Arno Villringer
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0644 The DMCC Project: A neuroimaging study of individual variation in cognitive control function
Todd Braver, Alexander Kizhner, Rongxiang Tang, Michael Freund, Matthew Singh, Anxu Wang, Jost Ettel
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0648 Brain structure and function predict different domains of cognitive control in normal aging
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0651 Neural Signatures of Dual-Task Response Conflicts and Their Modulation by Age
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0652 Age Differences in Predicting Executive Functioning from Structural and Functional Neuroimaging Data
Mariosa Heckner, Edna Cieslik, Kaustubh Patil, Simon Eckhoff, Felix Hoffstaedter, Robert Langner

0653 Representational similarity analysis of color-word Stroop reveals neural coding of cognitive control
Mike Freund, Todd Braver
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0656 Conflict monitoring modulates effective connectivity of the cingulo-cerebellar circuitry in humans
Hengy Cao, Tyrone Cannon

0657 Neural coding of visual objects rapidly reconfigures to reflect subtrial shifts in attentional focus
Lydia Barnes, Erin Goddard, Alexandre Woolgar

0660 Food-related cognitive flexibility and future body fat gain: neural correlates and modulation of BMI
Hua Ao, Yang Liu, Ouwen Li, Xiao Gao
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0662 The no-smoking signs with high craving smoking symbols induced low craving: An fMRI and EEG study
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0664 Shared mechanisms of attention and emotion control in depression
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0670 Can fatigue resulting from cognitive work be distinguished from fatigue due to task disengagement?
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0723 Neural activity underlying temporal switching between predictive and reactive saccades
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0639 Neural and behavioural outcomes differ following motor imagery vs. physical practice-based training
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0645 Probing the effect of block duration on corticospinal excitability during motor imagery performance
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0659* Neural Tracking of Rhythmic Constructs in Imagined Speech
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0663* Real-time reconstruction of letter shapes in the Mind’s Eye
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0676* Signatures of excitatory and inhibitory activity on the hemodynamic response in the awake mouse
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0681 Perceived and mentally rotated contents are differentially represented in cortical layers of V1
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0646 Investigating a cortical muscle gradient using multivariate pattern & connectivity analyses
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0677 The plasticity of white matter connectivity on bilateral PAC by musical improvisation training
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0691 Effects of musicianship and absolute pitch on structural brain networks
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0717 Sensorimotor adaptation during vocal pitch regulation in trained singers
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**0689** Morphological changes after chemotherapy treatment for breast cancer
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**0707** Brain functional plasticity in music composition
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**0750** Ventrolateral frontal to parietal connectivity patterns relate to second language learning
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**0638** Slip-sliding away: common reductions in task positive neural systems emerge with the passage of time
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**0643** Integration of structural and functional connectomes to predict individual cognitive abilities
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**0647** Emergence of neural dynamics within a co-ordinate space of large-scale neural hierarchies
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**0666** Sex-specific cognitive profiles related to resting state functional connectivity in males and females
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0725 The neural dynamics of semantic categorization in semantic variant of Primary Progressive Aphasia.
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0729 Identifying the core language system in brain with individual fingerprint
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0735 Age-related differences in processing violations in highly predictable speech: An fMRI study
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0752 Neural correlates of Metaphors comprehension in Mexican children and adolescents
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0758 The cognitive and neural correlate of verbal irony
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0764 Reorganization of language networks after temporal lobe epilepsy surgery – a clinical fMRI study
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0766 An fMRI study of late bimodal bilinguals during story comprehension
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0778* Neural correlates of individual differences in story understanding
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0727 Brain networks underlying orthographic, phonological and semantic processing of Chinese characters
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0752 Multimodal Principal Component Analysis to Link White Matter Features to Reading Skill
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0771 The role of the dorsal branch of the arcuate fasciculus in phonological working memory in bilinguals
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0777 Solving the enigma: dual role of the cerebellum in predictive speech planning
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0782 Bilingual language experience and the neural underpinnings of working memory
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0786 Effects of Bilingualism on Resting-State Functional Connectivity
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0787 The role of the dorsal branch of the arcuate fasciculus in phonological working memory in bilinguals
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0788 Cortical activations during overt language generation using HD-DOT
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0789 Evaluation of three fMRI language protocols in presurgical patients from a public hospital in Chile
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0790 Degeneration of contralateral corpus callosum in acute post-stroke aphasia
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0791 Optimizing grammar tasks for pre-operative fMRI based on task-based and resting-state activations
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0792 Bilingual language experience and the neural underpinnings of working memory
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0793 Speech Perception in Noise in Amateur Singers: an MRI Study
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0779 Extracallosal hyperconnectivity in well-performing preterm children versus language-impaired peers
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Long-Term Memory (Episodic and Semantic)

0782 A novel approach to investigate memory encoding with inter-subject correlation analysis
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0786* Telling the truth from false memories by restudy: The role of parietal cortex
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0787 The effect of cognitive load on the retrieval of long term memory: an fMRI study
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0793* Decoding Identity from Brain Activity elicited during the Recollection of Personal Experiences
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0794 The subsequent memory effects before and during memory encoding period of scalp EEG
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0798 Towards a perfect whole-brain classifier of future memory recognition
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0806 Hippocampal subfield volumes predicts behavioral pattern separation during childhood
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0807 Structural brain network supporting episodic memory in the absences of one medial temporal lobe
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0808 Topographic profiling of memory-related pattern separation processes
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0814 Working Memory and Episodic Memory Distinct Processes: Insight from Lesion Symptom Mapping.
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0825 Aging and neural recruitment during episodic memory encoding
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0831 Evidence for predictive coding mechanism in repetition suppression for faces in FFA
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0834 Category specificity in the medial temporal lobe during associative memory and integration
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0836 Age-related difference in neural mechanisms underlying the reverse own-age bias in source memories
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0837 An fMRI study of Autobiographical Memory Associated with Self-Defining Episodes During Adolescence
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0844 Dynamic switching between brain networks – A Tri-Network perspective
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0845 Narrative speech production in angular gyrus: autobiographical, event-semantic, and object- semantics
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ABSTRACTS
0855 Connectivity Gradients During Episodic Past and Future Thinking and Their Modulation by TMS
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0850 Neural Plasticity and Recovery of Function

0784 Changes in Structural Connectivity Show a Novel Type of Primary Cortex Reorganization
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0785 Brain plasticity mediates the effect of vigorous physical activity on mental health in adolescence
Piergiorgio Salvinoni, Thomas Wassenaar, Gwenaelle Douaud, Thomas Nichols, Steve Smith, Catherine Wheatley, Nicholas Beale, Helen Dawes, Heidi Johansen-Berg.

0789 A single, clinically relevant dose of baclofen significantly impairs motor sequence learning
Ioana Grigorescu, Elias Geist, William Clarke, Uzay Emir, Ainslie Johnstone, Charlotte Stagg.
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0791 A new insight of brain reorganization in the sensorimotor cortex after spinal cord injury
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0796 Activity-dependent changes in white-matter in the adult human brain with neurofeedback fMRI
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0799 Microstructural specificity of white matter imaging after stroke
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0802 Persistent hippocampal network abnormalities in long-term follow-up of NMDA receptor encephalitis
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0805 What Can MR Spectroscopy Measures of Occipital GABA tell about Visual Plasticity in Human Adult?
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0812 Motor network integrity of the anterior intraparietal sulcus aids grasping performance after stroke
Lukas Hense, Fabian Lange, Caroline Tschirpe, Shivakumar Viswanathan, Jana Freytag, Lukas Voli, Simon Eickhoff, Gereon Fink, Christian Grek.
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0813 An MRI Pilot Study on Mindfulness and Cognitive Impairment After Breast Cancer Treatment
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0815 GABAergic inhibition in sensorimotor cortex promotes retention of adaptation memory in older adults
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0816 Real-time fMRI Neurofeedback in chronic stroke patients to increase lateralisation of brain activity
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0823 White matter microstructural changes in short-term learning of a sequential pinch-force task
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0824 Population receptive field properties reflect remapping in V1 in peripheral retinal degeneration
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0826 Rest EEG Connectivity between Posterior Parietal and Primary Motor Cortices During Stroke Recovery
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0827 Training Selective Attention in Older Adults via Real-Time fMRI Based Neurofeedback
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0829 Interhemispheric Functional Reorganization after BCI-Guided Upper-Limb Training in Chronic Stroke
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0830 Sequential topological network changes after stroke restricted to primary motor cortex
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0832 BCI Training Effects on Chronic Stroke Correlate with Functional Reorganization in Motor Regions
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0847 Structural neuroplastic responses preserve functional connectivity in children born without a corpus
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0849* Disuse-driven plasticity is specific to the somatomotor and cingulo-opercular networks
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0854 Quantitative MRI of Social Isolation in Male and Female Mice
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0892 Rethinking repetition suppression as a metric of learning
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0893 Exploring error detection/correction mechanisms in motor imagery
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0841 Sensory stimulation-induced changes in EEG power during sleep relate to motor memory consolidation
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0828 Connectivity between contralateral SMA and ipsilateral M1 predicts cross-education of a SRTT
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0840 Specific patterns of functional connectivity predict motor learning and intermanual transfer
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0842 Exercise effects on motor memory consolidation and intermuscular coherence
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0851 Dynamic Imaging of Phase-Amplitude Coupling during Rhythm Processing in Percussionists
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Working Memory

0783 Pramipexole increases lateral prefrontal and parietal activity underlying sequential working memory
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0788 Probing the Network Basis of Memory Function and Dysfunction in Children with Epilepsy
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0800 The Effect of Resistance Training on Visuospatial Working Memory: An ERP Study
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0801 Does everyone use common neural networks for visual short-term memory and attention control?
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0803 Dorsal Caudate Connectivity Mediates the Effect of Severe Pediatric Obesity on Working Memory
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0810 Which BOLD feature is most important to working memory performance?
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0811 The transfer Effects of Adaptive Visual-spatial Span Training
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0819 Working memory alterations after a romantic relationship breakup
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0820 Neural Oscillations of Working Memory for Spatial and Temporal Order Information: An MEG Study
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0822 A Gradient of Dopamine Receptors Controls Access to Working Memory in a Large-Model of Cortex
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0839 Predicting cognitive abilities using voxel-wise measures of neural efficiency and capacity
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0838 Electrophysiological correlates of BOLD self-regulation of Supplementary Motor Cortex
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0804 Targeted Memory Reactivation features on Sleep Spindle activity recorded with High-density EEG
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0805 Task-Merging for Finer Separation of Functional Brain Networks in Working Memory
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0821 Dynamic Functional Connectivity During Context-Dependent Rule Learning
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0833 Associative learning under uncertainty in autism
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0835 Stress modulates the link between striatal GABA and hippocampal activity during motor learning
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0838 Electrophysiological correlates of BOLD self-regulation of Supplementary Motor Cortex
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0841 Behavioral and neurofunctional BDNF-effects in a longitudinal verbal learning task
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0843 Daytime nap memory enhancement by boosting hippocampal and higher visual area activation at encoding
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0857 **Associations Between Adiposity and Hippocampal Subfield Volume: the IGNITE study**  
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**Aging**

**0858** Effects of Musical Instrument Training Program on Verbal Memory and Neural Efficiency in the Elderly  
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0859 Effects of hormone exposure and APOE genotype on brain aging in 16,854 UK Biobank women.  
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0846 Sensorimotor network dynamics underlying visuomotor adaptation  
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0848 Neural signatures of interacting sensorimotor and temporal expectations during rhythm learning  
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0850 Associations between Hippocampal Subfield Volumes and Memory: Examination of Laterality Models  
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0853 Exercise levels, verbal memory, and hippocampal gray matter volume in persons with epilepsy  
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0860 Impact of ageing on resting-state networks in 3 large cohorts of healthy elderly adults  
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0861 The relation between regional white matter hypertensity and parameters of alpha oscillations  
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0868 The Association between Poor Sleep and Accelerated Brain Ageing in Older Adults  
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0855 0866 Anticholinergic drugs may accelerate degeneration of nucleus basalis of Meynert in healthy people  
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0869 Effects of the PICMOR Intervention Program on Regional Brain Volume in Older Adults  
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0870 Electrophysiological signatures of brain network dynamics in elderly  
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0875 Adult age differences of value beliefs and prediction error processing in pupillary responses  
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0878 Kinematic analysis of postural anticipation and recovery in young and older adults  
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0881 Reduced Modulation of Task-Related Connectivity Mediates Age-Related Declines in Motor Performance  
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0884 Amyloid-based Modulation of Functional Connectivity between Locus Coeruleus and Medial Temporal Lobe
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0886 Changes in Gray Matter Asymmetry in Broca’s Area in Later Adulthood
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0887 Aging of Prefrontal White Matter Tracts: Insights from Diffusion Tensor Imaging
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0888 Age Effects on Subregions of the Fusiform Gyrus in Healthy Older Adults
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0889 Brains appear older with increasing blood pressure with or without hypertension.
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0890 Alteration of Emotion Regulation in Late-life Depression – a dynamic causal modelling study
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0891 Cognitive decline associated with frequency specific resting state functional change in normal aging
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0892 Determinants of Gray and White Matter Volume in a Chinese Population: the Shanghai Changfeng study
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0897 MR-based classifier of arteriolar sclerosis and small vessel atherosclerosis
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0898 Age-related Functional Connectivity Changes within the Default Mode Network
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0899 Extrinsic control of brain networks with sex hormones
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0900 Age-related Functional Connectivity Changes within the Default Mode Network
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0901 Age-related Functional Connectivity Changes within the Default Mode Network
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0902 Age-related Functional Connectivity Changes within the Default Mode Network
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0903 A high spatial resolution diffusion tensor template of the older adult brain
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0904 Age-related Overlapping Modular Organization of Resting-state fMRI
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0905 Does shiftwork affect brain and cognitive health? Multimodal evidence from a population-based sample
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0906 Age Related Change of Brain Activation during NF-fMRI Training Using a Small Humanoid Robot Agent
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0907 Neural plasticity with and without short-term exercise-intervention in healthy elderly people
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0908 Teenage girls responding as men to psychosocial stressors: evidence from two large Australian cohorts
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0909 Reaction time is associated with altered choline and GABA in aging: a drift-diffusion analysis
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0950 Effects of 6 months of exercise on cardiac-related brain pulsatility in older adults using BOLD fMRI
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0951 Microstructural Correlates of Cognitive Performance in Aging
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0956 Human age is predicted by a linear covariation of brain network and behavioral factors
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0957 Lower education is accompanied by greater longitudinal brain network decline in older adults
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0962 RsFC-Based Brain Aging in Depression is associated with Increased Impulsivity and Response to TMS
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0965 Basal Ganglia Connectivity in Senior Adults Has High Sensitivity to Time-of-Day Effect
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0970 Aging is associated with higher glucose cost and beta amyloid burden in the sensorimotor cortex
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0973 Characterizing the Generalizability of an Attention Neurourocom in Healthy Aging
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0974 Brain microstructure and cognitive aging in community-dwelling older adults
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0975 Mapping Memory Related Tissue Changes in Healthy Aging via Multidimensional Diffusion Encoding at 7T
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0979 Intranasal Oxytocin Modulates the Salience Network in Aging
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0980 Statistical estimation of accelerated brain aging after mild traumatic brain injury in older adults
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0984 Default mode network dysfunctions in geriatric mild traumatic brain injury vs. Alzheimer’s disease
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0985 The Musicians Aging Brain
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0987 Oxytocin Facilitates Neural Recruitment in Medial Prefrontal Cortex and Superior Temporal Gyrus
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0990 Age differences in white matter: a 3-way multimodal fusion analysis
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0891 APOE4 genotype and air pollution interact to predict brain structure in healthy adults in UK Biobank
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0899 WMH and PVS mapping from clinical MRI using semi-supervised multi-modal convolutional neural network
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0904 Age-related Changes in Cortical Architecture and Cognitive Function
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0867 Restricted plasticity after long-term unilateral deprivation in adolescents with profound deafness
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0872 Distinct developmental trajectory of middle temporal gyrus sub-regions from children to adult
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0874 Influence of normal variation in birthweight on brain structure in later life
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0876 Striatal dopamine function makes the difference to effect of adolescent inhibitory control
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0880 Reduced frontopolar volume links childhood trauma to adulthood obesity
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0892 Inferring the infant pain experience
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0895 Refining the fingerprint: Optimising connectome fingerprinting for neurodevelopmental applications
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0898 Spatiotemporal patterns of sulcal pits in the fetal brain
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0902 Parenting behavior and brain functional connectivity development in children
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0907 Neurodevelopment of Semantic Systems in Reading
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0909 Investigating brain structural variation in infants with congenital heart disease
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0916 Sex Differences in Adolescent Functional Connectivity Maturation Related to Major Depression
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0929 Sex Continuum: Brain, Body, and Personality
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0939 Metacognition using Child-Parent Perspectives Scale: The Cortical Thickness Contribution
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0943 Generative models of network rewiring during neurodevelopment
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0945 Decomposing the role of alpha oscillations during brain maturation using aperiodic signal components
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0948 Prenatal stress alters hypothalamic-pituitary-gonadal axis structures in adults: Project Ice Storm
Sherri Lee Jones1, Chloe Anastassiadis2, Matthieu Dupuis2, Guillaume Eibell1, François-Pierre Marcoux3, James Gazetas4, Gabriel Devenyi5, Jamie Near1, David Laplante1, Tuong-Vi Nguyen1, Jens Pruessner1, Suzanne King1
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0949 Developmental trajectory of striatal reward processing relates to subclinical psychiatric risk
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0952 Amygdalar Emotional Responses Moderating the Links Between Family Conflict and Youth Adjustment
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0953 Longitudinal development of brain iron is linked to cognition in youth
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0954 Greater age-related changes in fronto-limbic white matter morphometry following early life stress
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0955 Early malnutrition induced premature cognitive aging is mediated by Brain States set at school-age
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0959 Lifespan Volume Trajectories from Non-Harmonized T1-weighted MRI Before and After Site Correction
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0960 Development of Neonatal Structural Covariance Networks
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0961 Early Parenting Intervention Effects on Brain Responses to Maternal Cues Among High-Risk Children
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0964 Region-specific Early Developmental Patterns of the Nodal Efficiency in the Infant Brain
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0969* Discovering developmental patterns and regionalization of cortical myelin during the first two years
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0976 Differential structural brain development of healthy adolescents with lower and higher IQ
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0977 Arithmetic in the developing bilingual brain
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0981* Harmonious family climate mediates the impact of socioeconomic status on child brain function
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0982 Sex specific neurodevelopmental associations with maternal and paternal history of suicide in ABCD
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0986 Neural correspondence of primary and secondary reward processing in typically developing children
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0898 Developmental Trajectories of Cortical Thickness are Confounded by Age-Related MRI Quality Variance
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0899 Monkey Offspring Functional Brain Connectivity Echoes Prior Human Findings Predicting Maternal IL-6
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Normal Brain Development: Fetuses to Adolescence

0863* Tracking white matter development in the human fetus
Sian Wilson1, Maximillian Pietsch2,1, Daan Christiaens2,1, Lucilio Cordero-Grande2,1, Anthony Price3,1, Jana Hutter1,2, Emer Hughes1,2, Serena Counsell1, Donald Tournier2,1, Tomoki Arichi2,1, Joseph Hajnal1,2, David Edwards1, Jonathan O’Muircheartaigh1,2, Damien Fair1,2
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0865* The Developing Human Connectome Project: functional connectivity across the perinatal period
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0868 Exploring the microstructural properties of the newborn sensorimotor network with diffusion MRI
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0871 Performance Evaluation of Open Source Neonatal Brain Extraction Software using Public Datasets
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0877 Brain activation patterns in newborns: the influence of prenatal exposure to a foreign language
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0882 The Development Gradients in the School-age Children Connectome
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0885 The Organization of the Brain Functional Connectome Follows Puberty-Dependent Nonlinear Trajectories
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0890 Resting state functional networks in 1-to-3-year-old typically developing children
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0900 Association between the thickness of transient fetal cortical compartments and gene expression
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0912 Multilayer network dynamics at birth predicts cognitive and language function at two years of age
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0917 Brain Structure Related to Irritability in Early Childhood across Two Clinically Enriched Samples
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Lifespan Development Other

0856 Structural properties of human superior longitudinal fasciculus lateralization along the lifespan

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0866 Task-context functional connectivity differences across the lifespan

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0873 Prematurity affects functional cortical networks and their relationship to neurological performance

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0879 Brain-Wide Functional Connectivity Differences During Movie-Watching and Rest Across Development

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0883 Prenatal exposure to antiepileptic drugs affects cortical networks of newborns

Anton Tokariev, Mari Videman, Sampsa Vanhatalo

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0901 Functional connectivity signatures of sex chromosome aneuploidies

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0963 Maternal Health Factors and Intracranial Hemorrhage Associations with Preterm Neonates’ Brain Volume

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MODELING AND ANALYSIS METHODS

Activation (eg, BOLD task-fMRI)

1010 What is the test-retest reliability of common task-fMRI measures?

Maxwell Elliott, Annchen Knodt, David Ireland, Menwether Morris, Richie Poulton, Sandyha Ramakha, Maria Sison, Terrie Moffitt, Avshalom Caspi, Ahmad Hariri

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1035 BOLD fMRI to assess the impact of alcohol advertisements in young drinkers

Quentin Duchê, Elise Bannier, Jacques François Diouf, Romain Moirand, Karine Gallopol-Morvan, Sophie Lacoste-Badie, Olivier Droulers

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1118 Language signatures in intrinsic functional space and their perturbations in epileptic patients

Elise Roger, Jessica Royer, Sara Larivière, Sonja Banjac, Qiongling Li, Lorenzo Caciagli, Monica Bociu, Boris Bernhardt

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1170 An fMRI Study of Emotional Working Memory in Males with Childhood Sexual Abuse Histories

Carley Chasson, Andrea Smith, Jessie Moorman, Elisa Romano

University of Ottawa, Ottawa, ON

1185 Exercise versus diet effects on the neuronal response to visual food cues

Kristina Leggett, Marc-André Cornier, Brianne Sutton, Allison Hild, Jason Tregellas

University of Colorado School of Medicine, Aurora, CO

1197 Pain conditioning of behavioural and regional brain responses to tussive stimuli

Abubakar Abubaker, Matthew Dimmock, Stuart Mazzone, Michael Farrell

Monash University, Melbourne, Australia, 2The University of Melbourne, Melbourne, Australia

1199 Genetic variation of PDE4B modulates activity of brain regions relevant for psychiatric disorders

Karolin Eimenkel, Jens Treadlein, Esther Diekhoff, Bernd Kraemer, Anja Richter, Oliver Gruber

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1202 Cognitive Evaluation in Adult Survivors of Childhood Acute Lymphoblastic Leukemia using fMRI

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1224 Quantifying consistency of activation across individuals and groups: the case of perinatal stroke

Kelly Martin, Anna Seydell-Greenwald, William Gaillard, Peter Turkeltaub, Eiessa Newport

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1229 A Novel Approach for Group fMRI Studies Using BrainSync Transform and Pairwise Statistics

Anand Joshi, Soyoung Choi, Haleh Akrami, Robin Hellerstedt

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| **1095** | Meta-matching: exploiting large-scale datasets to boost RSFC behavior prediction in small studies |
| | Tong He1, Lijun An1, Jiashi Feng2, Simon Eickhoff1, B.T. Thomas Yeo1, Eric Forstmann2,4, Joshua Vogelstein2,3, Abigail Greene1, Daniel Barron1, David R. Eades1, Daniel J.的优势 |
1133* Brain Gender Spectrum
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1138 High positive predictive value in classification of progression from mild cognitive impairment to AD
Debra Dawson1, Ziqi Hao1, Kelvin Mok1, Li Lin1, Ying Han1, Pierre Belloc2, Amir Shmuel2
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1139 Behavioral performance prediction in aging with advanced resting-state imaging acquisitions
Scott Peltier1, Michelle Karker1, Bruno Giordani1, Henry Paulson2, Benjamin Hampstead2
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1143 Self-supervised deep learning from sleep EEG signals
Hubert Banville1,2, Isabela Albuquerque2, Aapo Hyvärinen3, Graeme Moffat3, Denis-Alexander Engemann4, Alexandre Gramfort1
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1147 Commonality and specificity across psychosis sub-groups using brain dynamic functional connectivity
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1161 Clustering Based on sMRI and Relationships with Cognition, Personality Traits and Depression
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1171 ABCD ML: A Machine Learning library designed for Neuroimaging data
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1196 Deep-learning based segmentation and detection of perivascular spaces in young adults
Boutinaud Philippe1, Ami Tschida1, Filiro Adonias2, Junyi Zhang3, zhao hanifehou3, VICTOR NOZAIS3, Alexandre Laurent1, Yi-Cheng Zhu1, Leonie Lampe1, Christophe Tzourio4, Bernard Mazoyer1, Marc Joliot5
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1207 Accuracy of predicting task activity from brain connections relates to cognitive and mood measures
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1214 Predicted Age Difference of the Language Network is Associated with Explicit and Implicit Memory
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1216 Multimodal Neuroimaging for Cardiovascular Disease Risk Prediction
Amy Senti1, Javier Rosero2, Peter Gianaros2, Timothy Verstynen1
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1225 Incorporating bagging into Connectome Predictive Modelling
David O’Connor1, Evelyn Lake1, Dustin Scheinost1, R. Todd Constable1
1Yale University, New Haven, CT

1230 Stacking Learning of Multimodal Neuroimaging data enhances cognitive prediction
Javier Rosero1, Timothy Verstynen1, Amy Senti1, Fang-Cheng Yeh1
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1233 Extraction of discriminative features from EEG signals of dyslexic children, before and after cure.
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1248 Deep Net Region-Aligned Prediction (RAP) localises life factors affecting brain aging in UK Biobank
Han Peng1, Christian Beckmann2, Steve Smith1, Andrea Vedaldi2

1252 Bridging the gaps between clinical scales and brain imaging in Multiple Sclerosis
Barbara Buckova1,2, Jan Mares3, Jakub Kopal3, Kamilo Rossova4, Jaroslav Hlinka5, Anna Oliaee6, Anahita Oliaee6, Reza Rostami1
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1262 Divergence between schizophrenia and autism spectrum disorder on brain function and structure
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1272 The Contribution of Brain Structural and Functional Variance in Predicting Age, Sex and Treatment
Zing-Xuan Chen1,2, Guo Fur1, Le Li1, Xiao Chen2, Su Lu1, Chao-Gan Yan2,3, Yung-Chin Hsu1,2,4
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1274 Brain functional connectivity feature selection based on neighborhood rough set
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1275* Unfairness in RSFC-based behavioral prediction across African American and White American samples
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1277 Identification of Minimal Hepatic Encephalopathy based on Dynamic Graph Theory Analysis
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1287 Manifold learning reveals anomalies of language and memory processing in temporal lobe epilepsy
Sanja Banjac1, Félix Renard1, Elise Roger1, Arnaud Attyé6, Émilie Cousin1, Cédric Pichat1, Laurent Lamalle1, Loreda Minotti1, Chrystelle Moscato1, Alexandre Krainik2, Philippe Kahane1, Monica Baciu1
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1294 Cortical thickness subtyping of Autism Spectrum Disorder (ASD) using Normative modeling
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1295 Automated Classification of Alzheimer’s Disease with Graph Neural Network
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1296 Confound removal and normalization in practice: a neuroimaging based sex prediction case study
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1298 Fluid Intelligence Classification Based on Cortical WM/GM Contrast, Cortical Thickness and Volumetry
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1301 Factors influencing fMRI neurofeedback learning – a machine learning mega-analysis
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1302 Are there morphological subgroups in MDD and how can we find them? Towards clustering in ENIGMA MDD
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1309 Comparing Predicting Power of Three Brain Age Gap Estimation Pipelines in Major Depression Disorder
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1309 Reproducible high risk functional connectivity endophenotype for subset of ASD
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1309 Automated Segmentation of Cerebral Microbleeds and Iron Deposits using Deep Learning
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1309 A benchmark on data augmentation schemes for fMRI data
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1352 Benchmarking CPU vs GPU training of deep artificial neural networks for decoding brain activity
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1361 Learnt dynamics generalizes across tasks, datasets, and populations
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1362 Predicting Longitudinal Atrophy in Parkinsons diseases using Agent-Based Model
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1363 Controlling for Effects of Confounding Variables on Machine Learning Predictions
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1364 Automatic Placement of Anatomical Fiducials using Regression Forests and 3-Dimensional Features
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1365 Brain disorder diagnosis by fusing multi-modal brain measures using deep learning
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1366 Predict functional connectivity from structural connectivity with artificial neural network
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1367 Machine Learning Based Classification of Temporal Lobe Epilepsy with the Neuropsychological Tests
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1368 Dynamic network coding of working-memory domains
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1369 Diagnostic Prediction for Major Depressive Disorder via MVPA of Cerebellum GMV Features
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1380 Machine learning algorithm for the diagnosis of behavioural variant frontotemporal dementia
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1381 Deep Learning reconstruction of respiratory variation signals from fMRI data
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1382 Cognitive state annotation of human brain dynamics using deep graph convolution
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1441 Exploring hippocampal activation in language and memory tasks using the machine learning approach
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1454 New factorization method improves brain prediction of depressive symptoms in the general population
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1461 EGFR mutation status prediction using radiomics of brain metastasis of the contrast-enhanced T1 MRI
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1472 Detecting Clinically Variable Tissue Injuries in Neonatal MRI
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1478 Predicting individual differences in mathematical ability with functional connectivity
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1481 Towards holistic neural encoding models for multimodal naturalistic stimuli
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1482 Understanding deep learning-based brain age predictions
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1514 Multimodel machine learning, feature selection and MRI: Classifying Schizophrenia
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1553 High-dimensional prescriptive inference in the focally damaged human brain
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1565 Accelerated brain aging in young adult frequent cannabis users
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1575 Language deﬁcits can be predicted from multi-modal connectivity ﬁngerprints
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1592 Identifying states with dynamic Connectome Predictive Modelling
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1597 MRI imaging-based Anatomical Markers of Post-traumatic Epilepsy
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1633 Deep learning-based quality control for infant fMRI based on features beyond head motion
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1642 Prediction of early-stage Parkinson’s disease using connectivity and morphometry of the striatum
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1658 Importance of feature selection in brain age estimation using structural MRI
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1669 Multimodal estimation of cognitive-load under stress
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1674 Imaging genetic strategies for predicting the quality of sleep using depression-specific biomarkers
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1675 Generalized Multimodal Predictors of Antidepressant Treatment Response Across Multiple Interventions
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1687 Stacked classification for Schizophrenia Diagnosis
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1689 Age-related Choroid Plexus Calcification: Association with subcortical brain volumes and hypertension
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1700 Modeling ADHD and Stimulant Medication Use in Adolescents With Machine Learning
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1701 Spatially Adaptive Biomarkers across Alzheimer’s and Parkinsons disease
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1702 Decoding behavioral responses from fMRI without learning behavioral responses from fMRI
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1712 Lesion Localization in Paediatric Epilepsy Using Patch-based Convolutional Neural Network
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1723 Effects of Pain on the Brain Hemodynamic Response of Mental Arithmetic Tasks
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1725 Encoding models of auditory features in full-length movies estimated using transfer learning
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1772 Fusion of functional and structural connectivity improve performance in predicting fluid intelligence
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1737 How are cross-validated decoding accuracies distributed across subjects?
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1744 Transfer learning on EEG image based feature maps for robust classification
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1750 Multi-Kernel SVM Based on Subspace of Independent Component for Multi-Modal Classification
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1752 Functional Brain Network-Subject Mapping Using Deep Siamese 3D-Convolutaional Neural Networks
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Connectivity (eg. functional, effective, structural)

0995 Functional connectivity of EEG is subject-specific, related to phenotype, and different from fMRI
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1012 Human Structural Connectomes are Heritable
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1014 Enriching Statistical Inferences on Brain Connectivity via Latent Space Graph Embeddings
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1015 Task-driven white matter connectivity in the cognitive control network
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1016 Network localisation of multiple system atrophy derived from heterogeneous neuroimaging findings
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1019 Age- and Sex-Specific Influence of Testosterone-Cortisol Ratio on Cortico-Hippocampal Development
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1021 Reliability modelling of resting-state fMRI functional connectivity
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1026 Rich spatio-temporal structure of spinal cord resting-state networks revealed by iCAPs
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1028 Involvement of hippocampal integrity and connectivity in multiple sclerosis
Gabriel Gonzalez-Escamilla1,2, Dumitru Ciocoiu3, Vinzenz Fleischner4, Angela Rodetz5, Julia Kraemer6, Sven Meuth7, Muthuraman Muthuraman8, Sergiu Groppa9
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1039 Exploring the brain’s routing strategies by simulating packet-based communication on the connectome
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1052 Uncovering the role of brain microstructural attributes on the formation of functional connectivity
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1062 Multi-resolution Graph Neural Network to Identify Disease Relevant Variations in Brain Connectivity
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1063 The high-creative brain can provide an optimized framework routing core cognitive functions to create
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1093  High frequency oscillations are associated with large-scale brain reorganization in epilepsy  
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1119  Functional connectivity-based decoding of game performance  
Uijong Jui1, Christian Wallraven1  
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1122  Macroscale structural manifold perturbations in autism spectrum disorder  
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1124∗ Structural connectome manifolds guide dynamic functional network reconfigurations  
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1125  Predicting the Structural Connectome in Humans based on Functional and Resource Constraints  
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1130  Dual regression may reduce global signal bias in fMRI functional connectivity maps  
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1132  Inner- and Inter- Hemispheric Connectivity Balance in the Human Brain  
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1142  Predicting seizure outcome of epilepsy surgery using virtual resection of MEG-based brain networks  
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1146  The Organization of Functional Connections Without Direct Structural Links  
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1149  Brain parcellation driven by dynamic functional connectivity better predict cognitive performance  
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1155  Neuroanatomical alteration is associated with moderate alcohol use in bipolar disorder  
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1156  Modelling hemodynamic variations for improving effective connectivity estimates of regression DCM  
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1157  Stochastic Resonance and Multi-stability in Frequency-Dependent Plasticity  
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1163∗ Kelvinat’s influence on global rs-fMRI and individual variation in neuro-behavioral relationships  
Flora Moustaje1, Jie Lisa Ji1, Katrin Preiler2, Franz Vollenweider3, Charlie Schliefer4, Brendan Adkins5, Sarah Fineberg6, John Krystal7, Greta Repovs8, Nicole Santamou5, Aleksandar Savi2, Younghun Cho9, John Murray10, Alan Anticevic10  
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1164  Understanding the mechanisms that establish functional connectivity in the human brain  
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1167  Emergence of Canonical Functional Networks From Complex Laplacian of Structural Connectome  
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1180  How tasks change whole-brain functional organization to reveal brain-phenotype relationships  
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1184  Dynamic spatio-temporal brain connectivity patterns in psychosis  
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1188  Modulation of white matter bundle connectivity in the presence of axonal truncation pathologies  
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1192  A Spatial Developmental Generative Model of Human Brain Structural Connectivity  
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1193 Brain Fingerprint Analysis using resting state fMRI in Asymptomatic High-School Football Athletes
Sumro Ban1, Nicole Vike1, Eric Naumann1, Joaquin Gonzalez1, Thomas Talavage1
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1204 Sex-related changes of cigarette smoking on dopamine functional circuits
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1211 Atypical Intrinsic Visual Motor Functional Connectivity Associated with Imitation Deficits in Autism
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1215 Statistical inference for joint embeddings of multiple connectomes:
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1220 Relating EEG power to laminar specific fMRI connectivity.
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1225 Age and task load modulation of brain network reconfiguration with spatial working memory
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1256 Statistical covariance network changes in focal and generalized epilepsies: a worldwide ENIGMA study
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1263 Stress-activated connectivity changes across time
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1273 Functional Connectivity from Individual-fMRI-Subspace Improves Comparison of OCD and Control group
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1280 A Unified Framework for Multimodal Structure–function Mapping Based on Eigenmodes
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1415 Test-retest reliability of functional connectivity at resting-state and naturalistic movie viewing
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1416 Effective Connectivity of Frontottrial Systems in First-Episode Psychosis
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1417 Childhood maltreatment is associated with widespread functional dysconnectivity in adolescents
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1422 Body Mass index (BMI) and Structural Brain Connectivity in the Human Connectome
Project Dataset
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1426 Dynamic functional network connectivity at rest and its behavioral correlates in response inhibition
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1447 Network structure of the mouse brain connectome with voxel resolution
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1454 Topographic patterns of connectivity between amygdala and striatum.
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1467 Revisiting correlation-based functional connectivity to compare brain anatomy and function
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1473 The Structural Basis of Individual Differences in Brain Functional Connectivity
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1474* Hemispheric specialization of the inferior parietal lobe across key cognitive domains
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1476 Functional Connectivities Mediate the Essential Hypertension History to Prospective Memory
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1484* Modelling cortical layer connectivity in the macaque brain
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1485 MEG functional connectivity and topology changes distinguish between voluntary hand and foot
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1487 The R1-weighted connectome: complementing brain networks with a myelin-sensitive measure
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1491 Targeting in the neurosurgical treatment of tremor: a connectivity study of Vim variability
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1494 Using the Free-energy Principle to Understand Neurofeedback Self-regulation learning
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1496 Altered structural covariance of the striatum in lifelong premature ejaculation patients
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1505 Functional organization of the hippocampus on its anteroposterior axis during childhood
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1506 Prediction loss aversion with topological metrics
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1508 Multilayer Brain Network Dynamics in Autism Spectrum Disorders: A Multi-Site fMRI Study
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1515 Brain Network Simulations Indicate Effect of NRG-1 on Excitation-Inhibition Balance
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1517 Enhancing the Statistical Power of Tracking Network Alterations Using Longitudinal Network Analysis
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1518 Tensor factorization based identification of brain subnetwork level correlates of clinical measures.
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1519 Intercortical epileptic discharge: A biomarker of structural and functional network pathology
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1520 Evolution of functional connectivity in stroke patients: a longitudinal study
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1523 Evaluation of Constrained Spherical Deconvolution Methods to Analyze the Dentatorubrothalamic Tract
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1526 A General Learning-based Framework to Characterize Intrinsic Connectivity Strength in Brain Networks
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1529 Functional Multi-Way Connectivity between Networks and Voxels
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1532 Task-based Approach for Classification in Schizophrenia
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1533 Reproducible Networks Hubs of the Human Brain Using Meta-Connectomic Analysis of 5212 Subjects
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1541 Reproducible Networks Hubs of the Human Brain Using Meta-Connectomic Analysis of 5212 Subjects
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1543 Functionally connected networks based on high lesion probability seed from traumatic brain injury
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1546 Effects of acute exercise on resting state functional connectivity in young and older adults
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1545 Improved cognitive flexibility after glioma surgery is related to functional connectivity changes.
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1560 Effects of acute exercise on resting state functional connectivity in young and older adults
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1568 Systemic Physiological Noise Might Falsely Boost NIRS RSFC Test-retest Reliability
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1576 Identifying Functional Brain Connections Predicting Mind-Wandering in the Aging Brain
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1694* A multi-analysis approach to task-modulated functional connectivity in autism
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1703 Comparison of Network Architecture in Clinically Distinct Subgroups of Children with Mild TBI
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1704 Causal modeling of task information flow with high spatiotemporal precision in source EEG networks
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1709 Disrupted Functional and Structural Connectivity and Clinical Implication in Temporal Lobe Epilepsy
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1718 Network communication models improve structure-function coupling and prediction of human behavior
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1722 Predicting Brain Age Using Functional Network Connectivity: A Deep Neural Network Method
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1729 Triple-network connectivity differences in youth with autism compared to early-onset psychosis
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1731 Functional Connectivity of Resting State Networks is Affected by Excess Environmental Stimuli
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1738 Independent and combined effects of chronic cannabis use and HIV on insular functional connectivity
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1739 Functional Network Connectivity of High-Frequency Resting-State Components
Thomas DeRamus1, Ashkan Faghiri1, Oktay Agoçalı1, Eswar Damaraju1, Victor Vergaro1, Rogers Silva1, Julia Stephens1, Tony Wilson1, Yu-Ping Wang5, Vince D. Calhoun4.
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1742 Multi-echo fMRI and Localization Method Affect Functional Estimates of the Locus Coeruleus
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1751 Robustness of structural network metrics across parcellations: between health and disease
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1753 Directed activity flow: Directed connectivity improves causal interpretation of predictive models
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Diffusion MRI Modeling and Analysis

0997 Quantitative Analysis of the Sensitivity of Probabilistic Tractography to Seed Placement
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1009 White matter microstructural differences in young children carrying a 16p11.2 deletion
David Romasco1,1, Julia VilIon-Reina2, Clara Moreau1, Borja Rodriguez-Herreras1, Paola Suarez1, Joana Oro1, Vincent Junod1, Sonia Richetin1, Marine Jequier-Gyga1, Sebastien Jacqumont2, Nadia Chaban1, Anne Maillara.
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1011 Structural connectivity manifolds in the human temporal lobe
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1033 NODDI can differentiate microstructural changes due to inflammation and tissue destruction in humans
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1034 Hybrid Surface Segmentation for improved Anatomically-Constrained Tractography
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1036 Expression quantitative trait loci-derived scores and white matter microstructure in UK Biobank
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1066 Multi-compartment modelling of diffusion MRI signal shows TE-based volume fraction bias
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1101 Optimization of Diffusion Imaging at 10.5T in Nonhuman Primates
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1108 Multivariate Quantification of Brain Development During the First Two Years of Life
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1144 What underlies differences in fractional anisotropy in aging? The role of complex fibre architecture
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1145 Cortical diffusivity: A distinct and sensitive marker of adult aging
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1167 Quantifying Differences in White Matter within Multiple Sclerosis Women using Machine Learning
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1200 Single Subject Based Analysis of Learning Induced DTI Changes
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1208 Structural connectivity changes in thalamus related network in patients with functional constipation
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1328 Connectomic Analysis of SNC and VTA Projections to the Striatum and Cortex
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1410 White Matter Tract Abnormalities in Sport-Related Concussion: An Image Based Meta-Analysis
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1477 **Cluster-based analysis of diffusion MRI tractography measures in Huntington's disease**
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1510 **Isotopic diffusion MRI at high b-values reveals cerebellar changes in movement-disorder patients**
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1623 **Combining Dense Prediction and Semi-Supervised Learning for Arterial Segmentation**
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1652 Altered structural brain controllability in patients with psychosis
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1660 A novel unsupervised deep learning based diffusion imaging marker of tumor extent
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1714 Finding critical language connections with multiple tractography algorithms: A new analytic approach
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1757 Optimization of NODDI subcortical intrinsic parallel diffusivity across development
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1299 Connectome harmonics track EEG network dynamics on a subsecond time scale

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1322 A STATIS approach to linking brain and behaviour during naturalistic music listening

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1425 Extracting class- and trial- specific discriminative EEG activity using deep neural networks

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1429 Dynamic Brain Network Based on EEG Microstate During Sensory Gating in Schizophrenia

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1432 Assessment of Magnetoencephalography Source Estimation Algorithms

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1448 Spontaneous EEG dynamics form transient states of simultaneity establishing large-scale networks

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1548 MRI-DWI-MEG pipeline for individualized insilico BigBrain like preparation
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1627 Functional Connectivity Visualization with Virtual White Matter Fibers in Brainstorm
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1661 EEG-fMRI analysis of epileptic discharges guided by clustering of electrical source imaging.
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1689 A Minimal model of brain activity based on graph Laplacian eigenmodes
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1692 Using Structural Connectivity to Reconstruct Brain Activation and Effective Connectivity
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1711 A Comparison of Dissimilarity Measures for Representational Similarity-based Fusion of fMRI and MEG
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1711 Lag-dependent correlations between resting-state fMRI and EEG show distinct spatial patterns
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174 Patterns in Structural and Functional Connectivity Measures in Autism During Executive Attention
Mary Baker1, Ronald Anderson1, Michael O’Boyle2
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1756 Altered functional connectivity during balance perturbation task in Traumatic Brain Injury patients
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1762 Probing The Spatiotemporal Characteristics of Brain’s Task-Discriminating Functional Networks
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1764 Changes in Brain Connectivity Induced by Gamma-Band Visual Stimulation
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1128 A novel digital reference object for DCE-MRI measurement of subtle blood-brain barrier leakage
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1117 Transient Increases in Heart Rate during Resting-State fMRI and their Association to Peaks in DVARS
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1141 Modelling effects of impaired neurovascular coupling on BOLD-based functional connectivity at rest
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1172 Resting-state fMRI noise regression in multi-site aging studies
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1250 Generative Adversarial Networks to Model Scanner Noise for Improving Multi-Site Data Harmonization
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1490 PaLOS index: a metric to detect removal of brain signals with artifact correction
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1513 Effects of resting-state fMRI denoising strategies on connectopic maps in single subjects
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1522 A federated denoising autoencoder for brain mri denoising
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1552 Simulation of spatially dependent physiological noise in BOLD fMRI data
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1518 Towards site-to-site harmonization of T1-weighted MRI
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1607 How does preprocessing impact recovery of individual information in early childhood fc-fMRI?
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1706 FMRI Dynamic Phantom for Improved Detection of Resting-State Brain Networks
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1730 ENIGMA-GAD: Comparison of a classical method with ComBat to address scanner variability
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fMRI Connectivity and Network Modeling

996 Improved fingerprinting using edge-centric functional connectivity
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1000 Physiological and Motion Signature in Functional Connectivity and their Subject Discriminability
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1001 Graph Theory Analysis of Chronic Pain Patients Pre and Post Acceptance and Commitment Therapy
Sarah Meier1, Semra Aytur1, Kimberly Ray2, Donald Robin1
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1002 Replicating Smith et al’s (2015) positive-negative mode linking brain activity and subject measures
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1003 Reproducible neuremarkers of head motion
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1007 Identifying the Eigen-partition of Temporal Functional Brain Networks
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1008 Network-based atrophy modelling in the common epilepsies: a worldwide ENIGMA study
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1029 Functional connectome fingerprinting: Identifying individuals using refined brain connectivity
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1031 Edge functional connectivity reveals overlapping community structure
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1032 Ghost attractors in spontaneous brain activity
Jakub Vohyrek1, Joana Cobral2, Bruno Cessac1, Morten Kringelbach1, Gustavo Deco2

1041 Investigating white matter lesion load, intrinsic functional connectivity, and cognition in aging
Karim Kantarovich1, Laetitia Miwambwe-Tshilobo2, Sara Fernández-Caballero2, Amber Lockrow2, Gary Turner1, R. Nathans Spreng2
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1047 Detecting Change-Points in Covariance of Multivariate Time Series Models for fMRI data
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1054 High-amplitude co-fluctuations in cortical activity drive resting-state functional connectivity
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1056 Sensitivity of functional connectivity measures to motion artifact in resting-state fMRI data
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1064 Modeling functional resting-state networks through neural message passing on the human connectome
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1072 Brain hierarchical organization is altered in epileptogenic malformations of cortical development
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1074 Connectivity in ALS – A Pilot Study
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1075 Comparison between gradients and parcellations for functional connectivity prediction of behavior
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1080 Attention and working memory evoke loss of higher-order network structure in OCD
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1084 Spectral dynamic causal modelling in resting-state neuroimaging reveals changes in effective connect
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1087 Improved Behavior Prediction from Brain Functional Connectivity by Correlation Guided Graph Learning
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1166 Hierarchical Modelling of Individual- and Population-Level Resting State Networks from Big fMRI Data
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1173 Cross-task flexibility of human cerebral cortex
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1178 Is resting-state fMRI worth doing? Re-examining the speech and language network with rs-fMRI
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1181 Attractor dysfunction in fMRI dynamic connectivity related to nicotine abuse
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1182 The edge-centric representation of functional brain networks
Joshua Faskowitz1, Youngheun Jo1, Farnaz Zamani Esfahlani1, Olaf Sporns1, Richard Betzel1
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1190 Reproducibility measures for brain network connectivity analyses
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1194 Translatable Functional Connectivity Topology as Assessed Through Functional Gradients in Mice
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1198 Translational fMRI detects similar network changes in mice and humans after stroke
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1203 Estimation of Dynamic Scale-Free Brain Connectivity Network from fMRI Time Series
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1205 Functional Connectivity Differences among Different Sleep Stages in White Matter
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1206 Neural Mechanism of the Emotional and Cognitive Interference Processing in Test-anxious Individuals
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1209 The relationship between the ACC-DLPFC connectivity and test anxiety: A resting-state fMRI study
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1212 Impulsivity and Thought Suppression in EIU: Associated Neural Network and Genotype
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1219 Abnormal Functional Connectivity of Ventral Anterior Insula in Military Veterans with Chronic Pain
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1221 Presurgical brain mapping of the language network in pediatric patients with epilepsy
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1226 Controllability of noise diffusion relates structure to function in the human connectome
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1227 Representational Learning of Resting State Functional MRI for Individual Identification
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1241 Association Between Adolescent Resting-State Connectivity and the Internalizing Symptom Dimension
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1244 Across subject covariance of pairwise changes in individualized functional network sizes
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1252 Rapid precision functional mapping of individuals using multi-echo fMRI
Charles Lynch, Jonathan Power, Marc Dubin, Faith Gunning, Conor Liston
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1255 CO2 Fluctuation in resting-state fMRI: Generating End-tidal CO2 from Respiration using Deep Learning
Vismay Agrawal, J. Jean Chen
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1259 Assessment of Site-to-Site Constant Differences in Resting-State Functional Connectomes
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1264 Inference of multiple functional brain networks using Graph Laplacian Mixture Model
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1269 Statelets: a novel approach to capture transient evolution of dynamic states
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1271 Large-scale biophysically-plausible circuit model of time-varying functional connectivity
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1276 Functional Neural Networks in Writer’s Cramp as Determined by Graph-Theoretical Analysis
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1289 A combined RS-EEG/RS-fMRI characterization of the Alzheimer continuum: a longitudinal study
Comila Civitini, Federica Agosta, Giordano Cecchetti, Silvia Basad, Marco Cursi, Roberto Santangelo, Francesco Case, Fabio Minicucci, Giuseppe Magnani, Massimo Filippi
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1292 Optimising network modelling methods for fMRI
Usama Pervaz, Diego Viduurre, Mark Woolrich, Steve Smith

1293 Stepwise connectivity reveals the spreading of pathology in Parkinson’s disease
Silvia Basad, Ibai Diez, Federica Agosta, Elisenda Buechekeik, Maricruz Rodriguez, Vladimir Kostic, Massimo Filippi, Jorge Sepulcre
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1316 Joint Embedding: A scalable framework for aligning and comparing individuals in a connectivity space
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1332 Investigating hippocampal-cortical functional connectivity using static and dynamic measures
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1346 Personalized Circuit Modeling Captures Individual Variation in Functional Dynamics of Human Cortex
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1356 Dynamic functional connectivity during a cannabis cue-reactivity video in heavy cannabis users
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1358 Individually unique functional organization in human frontoparietal cortex
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1365 The contribution of physiologic fluctuation to dynamic switching large scale brain network
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1367* Signal routing via cortical hierarchies
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1412  Pre-operative epileptic network architecture constrains surgery-induced connectome reorganization
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1535 Topological variations in connectivity dynamics decode states of the brain
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1537 Ketamine-induced anxious ego-dissolution correlates with FC reduction between PCC and insula
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1632 An updated and extended atlas for corresponding brain activation during task and rest
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1667 Aberrant Limbic-Executive rather than Default Mode-Salience System in Major Depressive Disorder
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1662 Cognitive state and cathecolaminergic system modulates cortical information processing dynamics
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1673 Personalized In-silico Approach for Resting-State Functional Connectivity in Focal Epilepsy Patients
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1674* The brainlife.io cloud-services for functional network neuroscience
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1688 Neural Correlates of Stress & Resilience in Family Dementia Caregivers.
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1695 Dynamic Resting State Functional Connectivity Analysis using the Network Diffusion Model
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1696 Familial Environment Predicts Variations in Induced Functional Connectivity to Contextual Valence.
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1176  RBSN: Region-based Diffeomorphic Spatial Normalization via Landmark Matching
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1228  Non-linear registration of 1µm Histology Sections into 3D 20µm BigBrain Space
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1247  Tfw and DTI spatial normalization in older adults: Multi-channel or Single-channel registration?
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1261  Improving the Speed of Surface Registrations
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1281  Correlation of gait disturbance and cortical thickness for idiopathic normal-pressure hydrocephalus
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1320  Voxel Size, Shape, and Uncertainty in Volumetric Segmentation
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1353  Impact of commonly used acquisition sequences on automated hippocampal subfield volume estimates
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1404  Quantitative Evaluations of Geometric Distortion Corrections in Surface-Based Analysis of 7T fMRI
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1634  Template registration of spinal cord fMRI data using cerebrospinal fluid segmentation
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1639  Comparison of the motor-hand area morphology in Great Apes
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1707  An automated, geometry-based method for the analysis of hippocampal thickness
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1755  Modification of the CIVET Pipeline for Estimation of Subplate Thickness
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1758  MRI guided stitching and docking of brain blocks for alignment of histology to MR images
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1005 Modeling Random Noise in fMRI with Wishart Distributions: Implications for Functional Connectivity
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1022 Magnetization Transfer Imaging with a Surface Cryogenic Coil
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1024 A Joint Causal Network Estimation Framework for fMRI Time Series
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1037 Spatial Confidence Sets for Standardized Effect Size Images
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1045 Hierarchical Nonlinear Embedding of fMRI Time Series Reveals Brain’s Dynamic Topological Structure
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1046* Brainiak Education: User-Friendly Tutorials for Advanced, Computationally-Intensive fMRI Analysis
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1048 Graph Neural Network Analysis of Resting-state fMRI
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1051 GANxEEG – Automatic Stimulus Adaptation for ERP Maximisation
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1053 Glial glutamate regulation, critical determinant of whole brain physiology: a computational study
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1058 Optimization study of a new computational model for brain lactate exchanges at rest
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1059 Revealing brain network communities with empirical mode decomposition and k-modes clustering
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1073 Precise spatial normalization to the MNI space using cerebral artery segmentation
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1100 NeuroQuery: comprehensive meta-analysis of human brain mapping
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1107 Capturing distributed brain effects related to behavior using the Bayesian polyvertex score
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1111* MyPLS 2.0 – Partial least squares analysis for multivariate brain-behavior associations
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1116 Dynamics of topologically-characterized structures within fMRI signal
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1120 How to Improve the Functional Alignment of fMRI Data Using Spatial Brain Information?  
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1189 Rethinking measures of local shape complexity for neuroimaging applications  
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1210 Layer-sensitive fMRI  
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1215 Improved Cortical Surface Reconstruction and Thickness Estimation  
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1223 Data-driven event segmentation of brain activity reveals the temporal hierarchy of brain function  
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1235 Imputation of Missing Behavioral Measures in Connectome-based Predictive Modeling  
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1245 Low Amplitude Random Burst Sensing of Neuromodulators  
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1246 Visualizing neuroimaging data from multiple research sites without requiring collocation  
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1257 Generative Modeling of Brain maps with Spatial Dependence  
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1258 Simultaneous missing data interpolation and slice time correction in rsfMRI using matrix completion  
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1267 Spine intervertebral disc labeling using a fully convolutional redundant counting model  
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1268 Novel brain shape asymmetry signatures for subject identification  
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1279* SimNIBS 4.0: Detailed Head Modeling for Transcranial Stimulation Brain and EEG  
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1282* VB Toolbox: A Tool for Investigating Neural Feature Gradients in Python and MATLAB  
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1304 Graph diffusion on the structural connectome to identify aligned and liberal fMRI activity  
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1324 Validating multi-echo fMRI analysis methods across a range of acquisitions  
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1325 Improving deconvolution of fMRI signal with Sparse Paradigm Free Mapping using stability selection  
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1335 Analyzing fMRI datasets by interpreting the decoding decisions of pre-trained deep learning models  
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1340 Confounder: A BIDS app for assessing the influence of experimental confounds in task-based GLM model
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1341 Fuzzy: An Ecosystem for Evaluating the Stability of Pipelines Through Monte Carlo Arithmetic
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1342 Discovery of Image-Level Multi-Dimensional Patterns of Population Variability in Brain
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1384 Streamlined Magnetic Resonance Fingerprinting/Whole-brain coverage with deep learning reconstruction
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1398* OpenNFT: open-source Python/Matlab framework for real-time fMRI neurofeedback and quality assessment
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1402 Recursive quality assessment and real-time head motion detection of real-time fMRI using OpenNFT
Nikita Davydov, Evgeny Prilepin, Tibor Auer, Nicolas Gninenko, Alexander Khramov, Dmitri Van De Ville, Artem Nikonorov, Yury Koush

1405 Group-Patch Based Classification for Predicting Imbalanced Neuron Spikes
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1411 Brain Structure-Function Relationships via Spectral Factorization and the Transfer Function
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1419 Localizing Uni-directional Neural Pathways by MRI: A Theoretical Exploration
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1420 A multivariate approach to analyze connectivity matrices with individual-specific parcellation
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1425 Spatially focused, dynamic fMRI graph signal processing to unravel novel relationships to behaviour
Thomas Bolton, Maria Giulia Preti, Dimitri Van De Ville

1432 In Transient Spectral Peak Analysis Brain Functions Exhibit Distinct Profiles Disrupted by Disease
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1449 1D vectors reduce cervical spinal cord area mis-estimation in multi-echo GRE scans
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1463 The ARbrain package: Flexible cluster inference of fMRI data with full family-wise error control
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1464 A powerful solution with full FWER control to the problem of sequential analyses of open datasets
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1469 A Dual-projection MRI Data Denoising Method Based on ICA and Regression
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1480 Enrichment of data analytics by whole-brain computational models
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1501 Hippocampal Formation Under Resting-State Conditions
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1502 A NPE-mutated method to strengthen outcomes of ICA on both individual and group level fMRI data
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1512 Real-Time pRF Mapping using Gradient Descent on Hashed-Gaussian Tiles
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1525 A Parcellation-Free Framework for Structural and Functional Connectivity Integration
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1531 Mixed models improve precision and minimise false positives in vertex-wise analyses of grey-matter
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1534 Bringing spiral sampling efficiency to fMRI: VASO fMRI with SMS spiral read-out
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1536 FastSurfer – A fast and accurate deep learning based neuroimaging pipeline
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1545 Estimation of smoothness and confidence regions for peak location using convolution random fields
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1555 Characterization of Individual Variability for the Improvement of Reliability
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1557 Inhibitory Response Neurotypes Differ in Cognitive Performance and Default Mode Network Cohesion
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1558 BLMM: Parallelized & Distributed Computing for Big Linear Mixed Models
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1565 Haemodynamic Response Function Learning: a Semi-Blind Multivariate Deconvolution of the fMRI Signal
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1570 Simultaneous vasculature and multi-parametric mapping enables blood t1 measurements
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1580 Group level supervised PCA and denoising of Blood Delay Maps
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1582 Disentangling functional pathways for visual and auditory word processing: RSA analysis of MEG data
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1587 Statistical Pitfalls in Brain Age Analyses
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1588 Valid cluster inference with harmonic mean p-value for neuroimaging data analysis
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1599 Patch-based Tissue Classification in Infant Brain MRI using Two-Stage CNN
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1601 The ARBrain toolbox: a toolbox for cluster inference of neuroimaging data in SPM
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1616 A Python Tool for Assessing Experimental Timing Efficiency and Sensitivity
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1622 Reinforcement Learning the Heuristics of Hub Identification over Brain Networks
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1635 Unbiased atlas construction for neocortices via unsupervised learning
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1643 Vertex-wise mixed modeling using QDEC
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1649 Evaluation of the effect of SatPads on spinal cord functional MRI
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1655 Statistical inference from persistent homology of fMRI signals.
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1669 FMRI based predictive eye estimation regression (PEER) in macaques during naturalistic viewing
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1668* Assessing the utilities of resting-state functional gradients as a novel imaging biomarker
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1724 Identifying Differences Between Expert and Novice Meditator Brain Scans via Multiview Embedding
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1728 ANy-wise Independent Component Analysis
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1736 Optimal Experimental Design for Big Data: Applications in Brain Imaging
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1740 Brain Age Prediction from Structural MRI using Deep Learning & Information-Theoretic Divergence
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1761 3D Tortuosity of the central sulcus; applied to patients with Alzheimer’s and control subjects
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1766 Quantifying Normal on Apparent Diffusion Coefficient Maps for Generic Detection of Abnormalities
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Motion Correction and Preprocessing

1127 Deep Convolutional Autoencoder for Reducing Motion Artifacts in Structural Brain MRI Scans
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1159 Comparison of different strategies for regresssing motion artifacts from fMRI data
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1243 Motion artifacts of food-cue fMRI in states of hunger and satiety: Impact of age and clinical status 
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1339 Removal of low-rank global signals in fMRI improves connectome-based prediction of individual traits 
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1351 A Wavelet Noise Reduction Method for Improving Machine Learning Detection of Pediatric Epilepsy 
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1369 Motion matters: An analysis of motion bias correction in diffusion MRI 
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1395 Artefact Reduction in Simultaneous EEG-fMRI: A systematic review of methods and contemporary usage 
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1488 Assessment of fMRI Preprocessing Pipelines using Multiple Quality Control Metrics 
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1509 ICA-based denoising strategies in highly motion correlated tasks with Multi Echo BOLD fMRI 
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1521 Comparison of cortical thickness and area measures of 3T MPRAGE data at different resolutions 
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1527 Improved estimates of BOLD correlation structure through simultaneous spatiotemporal denoising 
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1617 The Virtual Brain and focal lesions – advancing processing for longitudinal multi-modal stroke data 
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1662 Evaluation of confound regression strategies for denoising in utero resting-state functional MRI 
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1676 Comparison of AROMA and FIX in motion correction for multiband pediatric clinical neuroimaging 
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1705 A device for detecting head movements in a mock scanner, for screening and training subjects 
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1708 Leverage scrubbing: A data-driven PCA-based artifact detection method for fMRI 
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1745 Mock MRI training impact on ‘scannability’ in children with neurodevelopmental disorders 
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1751 Mock fMRI training impact on ‘scannability’ in children with neurodevelopmental disorders 
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1023 Structural and Functional Brain Network Alterations in Major Depressive Disorder from Meta-Analysis 
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1044 Convergent univariate and multivariate evidence for task-general fronto-parietal cognitive control 
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1150 Longitudinal tracking of Alzheimer’s disease enabled by multi-modal regression models
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1151 Exploring the stability of canonical correlation analysis between imaging and non-imaging datasets
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1186 Permutation inference for CCA after deconfounding can lead to inflated error rates
Anderson Winkler1, Olivier Renaud1, Steve Smith1, Thomas Nichols4

1249 Removal of Scanner Effects in Covariance Improves Multivariate Pattern Analysis in Neuroimaging Data
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1283 What make one’s brain unique: how the brain correlate with demographics, environments and cognition
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1290 Quantifying the Uncertainty in Multi-Voxel Pattern Analysis
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1302 Dissociating semantic processing from executive control is linked to mental time travel
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1303 Interactive visualization of neural network relevance maps for assessing disease patterns in MRI
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1307 On discovery of brain-phenotype relationships: detection, estimation, and prediction
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1314 Translating ENIGMA-Schizophrenia Big Data findings to the Individual: Regional Vulnerability Index
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1355 Predicting Individual Face-selective Topography Using Naturalistic Stimuli
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1371 Canonical correlation analysis of a functional connectivity normative model in ASD.
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1372 Genetic networks related to neural auditory paired stimulus response in psychosis: A B-SNIP study
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1382 Does functional alignment improve inter-subject decoding?
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1458 Analysing linear transformations between pairs of multivariate patterns in fMRI
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1511 Altered BOLD variability development in very preterm-born young adolescents
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1562 Revealing trans-diagnostic patterns of reward system dysfunctions using cluster analysis

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1573 Optimizing functional topographies of hyperalignment common model space

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1615 White Matter Integrity Similarity Networks as a Novel Way to Investigate White Matter Microstructure

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1647 A hierarchical Bayesian approach to link brain imaging to behaviour in incomplete datasets

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1670* Braph 2.0: A Graph Theory Software for the Analysis of Multilayer Brain Connectivity

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1733 A Joint Analysis of Multi-paradigm fMRI on Cognitive Abilities of Young Adult Females

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1746 Examining the latent structure of threat reactivity using a structural equation modeling approach

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1748 Confounds in predictive models: removing or controlling their effects

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1749 Structured Coupled Matrix-Tensor Factorization for HRF Estimation Using Simulated EEG-fMRI Data

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1754 Efficient large-scale Independent Vector Analysis using Self-Referenced IVA (SRIVA)

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1038 Relationship between brain distributions of tau and atrophy to brain regional connectivity

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1049* A High-Resolution In Vivo Atlas of the Human Brain’s GABAA Receptor System

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1175 Estimating PET partial volume full-width-half-maximum directly from human data

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1319 Fully Automated Cortical Surface-based PET Pipeline that Provides Personalized Quantification Report

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1713 Estimation of the Centiloid cut-off values for amyloid positivity

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1025 Spinal Cord Tumor Segmentation Using Multimodal Deep Learning Approach

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1071 Uncertainty estimation of white matter hyperintensity segmentation using a Bayesian 3D U-Net  
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1082 An Atlas of the Human Hypothalamus at Ultra-High Resolution using the BigBrain  
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1089 Quantification of white matter hyperintensities in a healthy population-based cohort  
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1090 Deep Convolutional Neuro Network Approach Improves Hippocampal Segmentations in  
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1091 New evaluation criterion for functional brain parcellation methods using a multi-domain  
task battery  
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1092 Applying Deep Convolutional Neural Networks for Neonatal Brain Image Segmentation  
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1093 Segmentation of Diffuse White Matter Abnormality in Very Preterm Infants using Deep Learning  
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1095 Development of an automated processing pipeline for brain MRI-histology correlations  
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1097 DeepACSN: automated segmentation of 3D electron microscopy images of white matter  
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1099 Combined Automated Hippocampal Segmentation  
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1100 Mapping internal brainstem structures using MP2RAGE at 7T and 3T  
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1101 Comparison of multiple sclerosis (MS) lesions segmentation using quantitative or FLAIR  
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1102 Cross-species parcellation of the corpus callosum using joint embedding of connectivity  
blueprints  
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1103 A Nested U-Net Approach for Brain Tumour Segmentation  
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1106 3D Patchwise Tiramisu Net for Segmentation of Sub-millimetre Resolution 7T Brain Images  
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1237 Automatic segmentation of spinal MS lesions: How to generalize across MR contrasts?
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1240 White Matter Changes on T1 versus T2 MRI: Overlap and Comparison of Four Segmentation Algorithms
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1288 Semantic segmentation of tissues in rat brain MR images using a Deep Learning convolutional network
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1301 Fast brain segmentation of out-of-the-scanner MR 7T volumes using deep learning
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1305 Mapping of the human cerebral cortex using mRNA expression patterns
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1306 Hippocampal subfield volume estimations utilizing multispectral MR information within FreeSurfer
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1326 Automated hippocampal unfolding for quantitative mapping, morphometry, and subfield definition
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1331 Modeling Longitudinal Change in Brain Volumes: Manual and Automated Methods Compared
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1336 Effects of early surgical menopause on sleep, memory, and medial temporal lobe structure at midlife
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1345 Neonatal functional brain atlas using a two-level group-wise functional parcellation framework
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1409 Movie fMRI reveals reproducible and subject-specific dynamic states of brain parcellation
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1451 Connectivity-based parcellation discloses the topographical organization of the globus pallidus
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1492 Macapype: An open multi-software framework for non-human primate anatomical MRI processing
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Correlation of Myelin Content and Neurite Density in the Early Developing Human Cortex
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Ex vivo mapping of the cyto- and myeloarchitecture of the human cerebral cortex using UHF MRI
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Four new cytoarchitectonic areas surrounding the primary and early auditory cortex in human brains
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Assessing Quantitative MRI Techniques using Multimodal Comparisons
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Cortical confluence: Cytoarchitectural mapping of the transition from iso to allocortex.
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Evolution of cortical myelination in chimpanzees
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Cortical Atlas of the Domestic Canine Brain
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Laminar-specific microstructural gradients reveal differentiated hierarchical organization
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In Vivo Myeloarchitectonic Abnormalities in Middle-Aged Adults with Autism Spectrum Disorder (ASD)
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1883 Neuroimaging measures of cortical demyelination after mild traumatic brain injury in older adults
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Microcircuitry and Modules

Microanatomy of the Mouse Auditory Cortex — Structural Basis for Acoustic Communication Processing?
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Normal Development

Volumetric Analysis of Cerebrospinal Fluid (CSF) as a Function of Age and Gender
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Testosterone-Cortisol Ratio Alters Top-Down Processes as a Function of Cortico-Volumetric Analysis of Cerebrospinal Fluid (CSF) as a Function of Age and Gender
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Linked signatures of brain structure and function in young children pre-reading measures
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Development of Brain White Matter Functional Network in Typically Developing Children and Adolescent
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Corticital Thinning During Childhood and Adolescence, Gene Expression, and Psychiatric Disorders
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Effect of regional variation in nonlinear scaling on voxelwise morphology of the human brain
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DNAm Predicts Future Gray Matter Volume and Cognitive Performance in Normally Developing Children
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Subcortical Structures

Multimodal high-resolution mapping of subcortical regions with MAP-MRI and histology
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Parcellation of the human basal forebrain based on diffusion-weighted structural connectivity data
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Multi-contrast Anatomical Subcortical Structures Parcellation
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The effect of a physical activity intervention on the anterior hippocampus of young adolescents
Thomas Wassenaar1, Piergiorgio Salvani1, Nicholas Beale1, Catherine Wheatley1, Claire Sexton1, Helen Dawes1, Heidi Johannsen-Berg1

Cytoarchitectonic Mapping of the ventral striatum and pallidum in ten human postmortem brains
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The multimodal 7 Tesla submillimeter Amsterdam Ultra-high field adult lifespan database (AHEAD)
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The effects of diffusion signal modeling and segmentation approaches on subthalamic parcellation
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Measuring Biological Gradients along the Human Dorsal Striatum in vivo using Quantitative MRI
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1853 Somatovisual processing in the deep layers of the human superior colliculus
Kevin Sitek1, Qureshi Asma1, Francesco Molina2, Gisela Hagberg1, Jung Hwan Kim1, Klaus Scheffler1, Marc Himmelbach1, David Bass1
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1856 Direct visualization and characterization of the human zona incerta and surrounding fiber tracts
Jonathan Lau1, Yiming Xiao2, Greydon Gilmore4, Keith MacDougall3, Andrew Porpentine1, Catherine Curnet1, Terry Peters1, Ali Khan1
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1859 Mapping the human subcortical auditory system with 3T quantitative MRI
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1867 Morphological Heterogeneity of the Human Nucleus Accumbens: Characterising the Core and Shell
Eugene McTavish1, Chao Suol1, Jeggan Tiego1, Yann Chye1, Yu-Chi Chen1, Kevin Aquino1, Rebecca Segrave1, Mark Belgraves1, Alex Fornito1, Murat Yuce1
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1878 Cerebellar contribution to cognitive processing
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1881 Linking vestibular function and sub-cortical volume changes in a longitudinal study of aging adults
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1882 Comparative behavioral and task fMRI in Focal Hand Dystonia during increasingly complex motor task
Noreen Bukhari-Pariakturk1, Andrew Michael2, Mariusz Derezinski-Choo1, James Voyvodic1, Simon Dow1, Nicole Calakos1
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1886 Characterization of the hippocampal formation using diffusion-weighted imaging
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1772 Tissue properties of visual white matter pathways in glaucoma
Shumpei Ogawa1, Hiromasa Takemura2, Hiroshi Horiguchi, Atsushi Miyazaki1, Kenji Matsumoto1, Yoichiro Masuda, Keji Yoshikawa1, 2, Tadashi Nakano1
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1774 Tract-specific microstructural anomaly detection using autoencoders for single subject analysis
Maxime Chamberland1, Sila Genc1, Erika Raven1, Chantal Tax1, Gred Parker1, Adam Cunningham2, Joanne Doherty1, 2, Marianne van den Bree1, Derek Jones1
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1776 New insights into the anatomy, connectivity and functions of the middle longitudinal fasciculus
Francesco Latini1, Gianluca Trevisi1, Markus Fahlström1, Malin Jemstedt1, Ása Alberius Munkhammar1, Maria Zetterling1, Göran Hessleifer1, Mats Ryttlefors1
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1780 Towards identifying reliable short-ranged, “U”-shaped structural connectivity
Jason Ka1, Ali Khan1
1University of Western Ontario, London, Canada

1787 Cross-species connectivity blueprint gradients uncover multiscalar human temporal lobe adaptations
Guilherme Blazquez Freches1, Koen Haak1, Katherine Bryant1, Alberto Llera1, Saad Jbabdi1, Christian Beckmann2, 3, Rogier Mars2, 3
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1793 Classifyer: a linear classifier of single streamlines for white matter bundle segmentation
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1799 Microstructural changes in the reward system are associated with post-stroke depression
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1803 Probing myelination of distinct fibres within the same voxel using myelin-weighted tractography
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1805 Is Posterior Subthalamic Area Important for Fiber Tracking of Dentato-Rubro-Thalamic Tract?
Anupa Ambili Vijayakumar1, Drew Parker1, Ronald L Wolf1, Jacob Antony Alappatt1, Andrew I Yang1, Ashwin Ramayya1, 2, Rogni Verno1
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1806 Investigating the axon-diameter based human brain connectome using MRI
Hila Gast, Yaniv Assaf
Tel Aviv University, Tel Aviv, Israel

1823 Precision DTI Imaging Reveals Incomplete Adult Hemispherotomy
Nicole Seider, Jarod Roland, Matthew Smyth, Andrew Van, David Montez, Catherine Hoyt, Jacqueline Hampton, Kristen Scheidter, Deanna Greene, Joshua Shimany, Nico Dosenbach
Washington University in St Louis, St Louis, MO, University of California, San Francisco, CA, Washington University in St Louis, St Louis, MO

1830 Allometric length scaling of the corpus callosum with increasing brain size
Liyuan Yang, Chenxi Zhao, Yirong Xiong, Gaolang Gong
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1832 A reproducible set of rules for clinical tractography
Louis-Marie Terrier, Frédéric Andersson, Laurent Barantin, Helen Cléry, Ilyess Zemmoura, Christophe Destrieux
UMR 1253, iBrain, Université de Tours, Inserm, Tours, France, CHRU de Tours, Tours, France

1833 Relation between U-fibers configuration, sulcus shape and hand functional activation in the central
Miguel Guevara, Zhong Yi Sun, Denis Riviere, Jean-François Mangin
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1838 ENIGMA-DTI: mapping white matter deficits in cross-diagnostic psychiatric research
Peter Kochunov, L. Elliot Hong, Emily Dennis, Rajendra Morey, David Tato, Elisabeth Wilde, Mark Logue, Sinead Kelly, Gary Donohoe, Pauline Favre, Josselin Houenou, Christopher Chingi, Laurenu Hullemen, Ole Andreason, Laura van Velzen, Liang Huang, Julio Villalon-Reina, Carrie Bearden, Fabrizio Piras, Gianfranco Spalletta, Oudie van den Heuvel, Dick Veitman, Dan Stein, Meghann Ryan, Yunlong Tan, Theo Van Erp, Jessica Turner, Elizabeth Hodda, Tatia Nir, David Glahn, Paul Thompson, Neda Jahanshad
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1839 Lateralization of major fasciculi in the human lineage
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1841 Analysis of fiber characteristics in the isthmus of the corpus callosum: Abozit et al. revisited
Maria Morozova, Henriette Rusch, Carsten Jager, Alfred Anwander, Siawoosh Mohammadi, Stefan Geyer, Nikolaus Weiskopf, Markus Morawski
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1843 The Latent Network of The Brain: Toward Geometrical Markers in Brain Network Science
Alberta Cacciotti1, Alessandro Muscoloni2, Vaibhav Narula2, Alessandro Calamuneri3, Salvatore Nigro4, Emeran Mayer5, Jennifer Labus6, Giuseppe Anastasi4, Aida Quattrone1, Liang Zhan7, Anand Kumar8, Alex Leow4, Olusola Ajilore5, Angelo Quattrone1, Demetrio Milardi1,2, Carlo Cannistraci2
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1847 Diffusion MRI-based assessments of corticospinal tract integrity in stroke patients
Jord Vink1, Sjors Heuberger2, Eline van Lieshout3, Anne Visser1, Bart van der Worp4, Rick Dijkhuizen5
1University Medical Center Utrecht, Utrecht, Utrecht, Nederland, 2Utrecht University, Utrecht, Utrecht, 3University Medical Center Utrecht, Utrecht, Utrecht

1849 Mapping Pontocerebellar Connectivity with Diffusion MRI
Paul-Noël Rousseau1,2, Malartic Chakravarty1, Christopher Steele1
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1851 Variability in the genetic bases of brain white matter microstructure
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1861 Bridging the Gap: From Neuroanatomical Literature to Probabilistic Tractography
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1864 White Matter Segmentation Education (WiMSE): An interactive guide to white matter segmentation
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1868 What can go wrong in clinical g-ratio weighted imaging? – The error when omitting B1+ correction
Tim Emmenegger1,2, Gergely David3, Isabel Ellerbrock3, Patrick Freeman1,4,5, Siawoosh Mohammadi1,2,5
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1872 Examining the similarity of pseudo disconnection methods to in-vivo chronic post-stroke data
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1873 Relationship Between Brain Structural Connectivity and Balance Deficits in Individuals with TBI
Alaleh Alivar1,2, Soha Saleh1,2, Didier Alexandre1,2, Michael Glassen1, Armand Hoxha1, Guang Yue1,2
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1876 Medial forebrain bundle structure is linked to human impulsivity
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1880 White Matter Tract Atlases of the Baby Brain
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1884 Correlation of priors-assisted Meyer’s loop tractography with post-surgical visual field deficit
Dmitri Shastin1, Sanchita Bhatia1, Chantal Tax1, Greg Parker1, Stefan Schwartz2, Khalid Hamandi1, William Gray1, Derek Jones1, Maxime Chamberland1
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1887 Inter-operator variability of tractography-derived measures in corticospinal tract
Richard Ariganjian1, Aveni Barrett1, Rachel Custer1, Yin He1, Tashiya Islam1, Matthew Lohey1, Cooper Larsson1, Omedeh Mahmoud2, Clarissa Morales1, Jovicarole Roya1, Noorahloda Sadeghi1, Nien-Chu Shih1, Matthew Thurston1, Amarylis Tiknic1, Xin Wang1, Kay Jann1, Ryan Cabeen2, Farshid Sepehrband2
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1979 Prefronto-thalamic tract injury and cognitive outcome according to EVD location in stroke patients
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1Yeungnam university medical center, Daegu, Korea, Republic of, 2Yeungnam university medical center, Daegu, AK, 3Yeungnam university medical center, Daegu, AK, 4Eulji University, Gyeonggi, AK

1848* Time-of-Flight-MRA-Derived-Probabilistic-Map of Each Major Cerebral Artery
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1986 A generative model for primate brain shapes
Katja Heuer1, Marian Kleineberg2, Russell Dinnage1, Chet Sherwood3, Ernst Schwartz1, Georg Langs4, Romain Valabregue5, Mathieu Santin1, Marc Herbin1, Roberto Toro6
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1860 BrainFS: An Online System for the Analysis of Brain Volumetry
Gonzalo Rojas1, Joaquim Monte2, Evelyng Faure1, José Molina-Mateo1, Maria de la Iglesia-Vaya2, Marcelo Galvez2
1Universidad Politecnica de Valencia, Valencia, Valencia, 2Eulji University, Gyeonggi, AK
Brain Atlases

1888 An MSM registration pipeline to bridge atlases across the MNI and the FS/HCP worlds
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1889 An Age-Specific Atlas for Delineation of White Matter Pathways in Children Aged 6-8 Years
Arthur Spencer, Jonathan Brooks, Hollie Byrne, Richard Lee-Kielland, Ela Chakkarapani
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1890 An MRI-Derived Neuroanatomical Atlas of the Fisher 344 Rat Brain
Dana Goerzen, Caitlin Fowler, Gabriel Devenyi, Jurgen Germann, Dan Madalaru, Mallar Chakravarty, Jamie Neaf
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1893 The MNI-NOEL50 submillimetric whole-brain MRI template
Niels Alexander Fertl, Benoit Caldarou, Vladimir Fonov, Fatemeh Fadaie, Seok-Jun Hong, Louis Collins, Andrea Bernasconi, Neda Bernasconi
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1899* Original to digital: microstructural and functional atlases in common MRI space
Ray Pinenburg, Simone Dunn, Lianne Schoitens, Martijn van den Heuvel
1VU Amsterdam, Amsterdam, Netherlands

1904 The construction of an Iranian brain MRI template
Forough-sadat Razavi-ghahfarokhi, Minoo Sisakhti, Seyed Amir Hossein Batooli
*Neuroimaging and Analysis Group, Research Center for Cellular Imaging, Tehran, Iran, Islamic Republic of

1906 JuGeS – bridging the scales between gene expression and cytoarchitecture
Sebastian Bludau, Thomas Mühleser, Peter Pieperhoff, Pia Berger, Nina Unger, Magdalena Wojtusiak, Dominque Hilger, Sven Cichon, 1,2,3 Timo Dickscheid, Katrin Amunts
1Research Centre Jülich, Jülich, Germany, 2University of Basel, Basel, Switzerland, 3Heinrich-Heine-University, Düsseldorf, Germany, 4University Hospital Basel, Basel, Switzerland

1916 Influence of the population differences on the construction of cortical surface atlases
Guoyuan Yang, Jelena Bozek, Meizhen Han, Jia-Hong Gao
1Center for MRI Research, Peking University, Beijing, China, 2Faculty of Electrical Engineering and Computer Science, University of Zagreb, Zagreb, Croatia

1922 Linking Multimodal Parcellation 1.0 of Human Connectome Project to MNI Coordinates
Tetsuya Yamamoto, Masaki Fukunaga, Norhiro Sadato
1National Institute for Physiological Sciences, Okazaki, Japan

1923 Construction of Chinese anatomical connectivity-based parcellation
Meizhen Han, Guoyuan Yang, Hai Li, Long Qin, Jia-Hong Gao
1Center for MRI Research, Peking University, Beijing, China

1924 Validating the use of individual-level structural prior matching in neonatal functional neuroimaging
Liam Collins-Jones, Tomoki Arichi, Tanya Poppe, Addison Billing, Jinxin Xiao, Sabrina Brigadoi, Jeremy Hebdon, Clare Elwell, Robert Cooper
1University College London, London, UK, 2King’s College London, London, UK, 3University of Padova, Padova, Italy

1926 JuBrain Atlas with GapMaps—a full probabilistic cytoarchitectonic atlas of the human cerebral cortex
Hartmut Mohrberg, Katrin Amunts
1Research Center Jülich, Germany, 2C. and O. Vogt Institute for Brain Research, Heinrich-Heine-University Düsseldorf, Germany

1937* Segregation of functional territories in individual brains
Ana Luisa Pinho, Bertrand Thirion
1Inria Saclay-Ile-de-France, Gif-sur-Yvette, France, 2Inria, Gif sur Yvette

1943 Towards a dataset of 20 ultra-high resolution neurotransmitter receptor human atlases
Thomas Funk, Nicola Palomero-Gallagher, Konrad Wastg, Mona Omidyeganeh, Claude Lepage, Paule Toussaint, Alexander Thiel, Karl Zilles, Alan Evans
1McGill University, Montreal, Quebec, 2Forschungszentrum Jülich INM, Jülich, Germany, 3University College London, London, London, 4Jewish General Hospital and McGill University, Montreal, Quebec, 5Forschungszentrum Jülich INM, Jülich, Jülich, 6McGill University, Montreal, Montreal

1946 Anatomical Organization of Human Mediodorsal Thalamus and its Extra-thalamic connections
Kavin Li, Lingzhong Fan, Wen Lin, Wei Yang, Tianzi Jiang, Bo You
1Harbin University of Science and Technology, Harbin, China, 2Brainetome Center, Institute of Automation, Chinese Academy of Sciences, Beijing, China, 3National Laboratory of Pattern Recognition, Institute of Automation, Chinese Academy of Sciences, Beijing, China, 4University of Chinese Academy of Sciences, Beijing, China, 5School of Life Science and Technology, University of Electronic Science and Technology of China, Chengdu, China, 6The Queensland Brain Institute, University of Queensland, Brisbane, Australia

1947 An individual-specific parcellation of human cerebral cortex with subcortical references
Li-an Ma, Lingzhong Fan, Luqi Cheng, Hiantian Zhang, Tianzi Jiang
1School of Artificial Intelligence, University of Chinese Academy of Sciences, Beijing, China, 2Brainetome Center, Institute of Automation, Chinese Academy of Sciences, Beijing, China, 3National Laboratory of Pattern Recognition, Institute of Automation, Chinese Academy of Sciences, Beijing, China, 4School of Future Technology, University of Chinese Academy of Sciences, Beijing, China, 5CAS Center for Excellence in Brain Science and Intelligence Technology, Institute of Automation, Chinese Academy of Sciences, Beijing, China, 6University of Electronic Science and Technology of China, Chengdu, China, 7The Queensland Brain Institute, University of Queensland, QLD, Australia

1952 The HBP human brain atlas – a modular reference framework spanning scales and modalities
Timo Dickscheid, Jean-François Margin, Yann Leprince, Dirk Pieter, Thomas Lippert, Jan Bjaalie, Katrin Amunts
1Forschungszentrum Jülich, Jülich, North Rhine-Westphalia, 2CEA - NeuroSpin, Gif-sur-Yvette, Ile de France, 3Institute of Basic Medical Sciences, Oslo, Norway
1914 The DataLad Handbook: A user-focused and workflow-based addition to standard software documentation
Adina Wagner, Laura Waite, Alexander Waite, Niels Reuter, Benjamin Poldrack, Jean-Baptiste Poline, Tobias Kaelin, Christopher Markiewicz, Peter Vavara, Lya Paa Olives, Peter Herholz, Lisa Mochalski, Lisa Wiersch, Nevena Kravcic, Pottawatomi Chorma, Yaroslav Halchenko, Michael Hanke
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1919 C-BIGR Clinical-Biological Imaging and Genetic Repository: MNI platform to accelerate open science
Krishna Chhapar1,2, Henri Rabalais1, Samir Das1, Rida Abou-Haidar1, Melanie Legault1, Zalia Rosli1, Marie-Noëlle Boivin1, Mahdieh Tabatabaie2, Sonia Lai Wing Sun1, Christine Rogers1, Jason Karamchandani1,2, Alan Evans1
1 McGill Centre for Integrative Neuroscience, Montreal, Canada, 2 C-BIGR, Montreal Neurological Institute, Montreal, Canada, 3 Tenenbaum Open Science Institute, Montreal Neurological Institute, McGill University, Montreal, Canada, 4 Clinical Research Unit, Montreal Neurological Institute, McGill University, Montreal, Canada, 5 Department of Neuropathology, Montreal Neurological Institute, McGill University, Montreal, Canada, 6 Department of Neuropathology, Montreal Neurological Institute, McGill University, Montreal, Canada

1921 Brain/MINDS Beyond project – Harmonized Brain MRI Protocols and Preprocessing in Travelling Subjects
Shinsuke Koike, Tomoyuki Okada, Masaki Fukunaga, Hiroki Togo, Atsushi Miyazaki, Toshihiko Aso, Takayuki Ose, Akiko Uematsu, Michiko Asano, Kento moriya, Naohiro okada, Tetsuya Matsudo, Norihira sadato, Yasumasa okamoto, Seori Tanaka, Takashi Hanakawa, Kiyoji kasai, Mitsuo Kawato, Matthew Glasser, Takuya Hayashi
1 The University of Tokyo, Tokyo, Tokyo, 2 Kyoto University, Kyoto, Kyoto, 3 National Institute for Physiological Sciences, Okazaki, Aichi, 4 National Center of Neurology and Psychiatry, Kodaira, Tokyo, 5 Tamagawa University, Machida, Tokyo, 6 RIKEN Center for Biosystems Dynamics Research, Kobe, Hyogo, 7 Hiroshima University, Hiroshima, Hiroshima, 8 ATR, Seika, Kyoto, 9 ATR - Computational Neuroscience Laboratories, Kyoto, Japan, 10 Washington University, Saint Louis, MO

1931 Building a Rare Disease Database for a Natural History Study of 4H Leukodystrophy
Aaron Spahr1, Zalia Rosli1, Melanie Legault1, Cecile Madjar1, Marie-Lou St-Jean1, Cassandra Lucio1, Samir Das1, Genevieve Bernard
1 Department of Neurology and Neurosurgery, Pediatricians, and Human Genetics, McGill University, Montreal, Quebec, 2 McGill Centre for Integrative Neuroscience, Montreal, Quebec, 3 Department of Neurology and Neurosurgery, Pediatricians, and Human Genetics, McGill University, Montreal, Quebec

1936 R-BIDS, a DICOM conversion and BIDS data structuring workflow developed in R
Nikolas Wulff1, Sven Eppe2, Benedikt Sundermann2, Klaus Berger1, Heike Minnerup1
1 Institute of Epidemiology and Social Medicine, Münster, NRW, 2 Landeskreisregister NRW Gmbh, Bochum, NRW, 3 Institute of Clinical Radiology, University Hospital Münster, Münster, NRW

1938 Boosting Multi-site fMRI Analysis Using Privacy-preserving Federated Learning
Xiaowai Li1, Yufeng Gu1, Nicha Dwornek1, James Duncan1
1 Yale University, New Haven, CT, 2 Zhejiang University, Hangzhou, Zhejiang

1939 The Courtous project on neuronal modelling – first data release
Julie Boyle1, Basile Pinsard2, Amal Boukhdir3, Sylvie Belleville4, Simona Brambatti4, Jen-I Chen4, Julien Cohen-Addad4, Andre Cyr5, Adrian Fuente4, Pierre Rainville6, Pierre Bellec6
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1940 MNE-BIDS: Standardizing archiving and analysis of electrophysiology data with MNE
Stefan Appelhoff1, Matthew Sandersen2, Teon Brooks3, Marijn Vliet4, Romain Quentin5, Chris Holdgrafer6, Maximilien Chaumont7, Ezequiel Mikulan8, Kambiz Tavabi9, Richard Höchenberger10, Dominik Wekely11, Clemens Brunner12, Alexander Rockhill13, Eric Larson14, Alexandre Gramfort15, Mainak Jas16
1 Center for Adaptive Rationality, Max Planck Institute for Human Development, Berlin, Germany, 2 Macquarie University, Sydney, Australia, 3 Mozilla, New York, USA, 4 Aalto University, Espoo, Finland, 5 National Institute of Neurological Disorders and Stroke, Bethesda, USA, 6 UC Berkeley, Berkeley, USA, 7 Institut du cerveau et de la moelle épinière (ICM), Paris, France, 8 University of Milan, Milan, Italy, 9 University of Washington, Seattle, USA, 10 Institute of Neuroscience and Medicine (INM-3), Jülich, Germany, 11 Max-Planck-Institute for Empirical Aesthetics, Frankfurt, Germany, 12 University of Graz, Graz, Austria, 13 University of Oregon, Eugene, USA, 14 INRIA, Paris, France, 15 AA Martins Center for Biomedical Imaging, Charleston, USA

1941 A system for automatic BIDS conversion from the Siemens console in Flywheel
Timothy Verstynen1, John Pyles2, Can Akgun3, Thad Brown4, Kaleb Fischer5, Jeff Yager5
1 Carnegie Mellon University, Pittsburgh, PA, 2 Flywheel Exchange, LLC, Minneapolis, MN

1942 ADMetaBioMine Database: published metabolite measures in brain and biofluids in Alzheimer’s disease
Anuradha Surenra1, Sabrina Loudjani2, Miroslava Cuperlovic-Culf2, AmanPreet Badhwar1, 2 National Research Council Canada, Ottawa, Ontario, 3 CRIUGM, University of Montreal, Montréal, Quebec

1949 Aiding computational modeling in Alzheimer’s research: publishing simulation-ready ADNI derivatives
Roopa Pai1,2, Paul Trieckmann1,2, Petra Ritter1,2,3
1 Charité – Universitätsmedizin Berlin, Berlin, Germany, 2 Berlin Institute of Health, Berlin, Germany, 3 Bernstein Center for Computational Neuroscience, Berlin, Germany

1950 Scalable Bayesian Model for Harmonising Neuroimaging Features in Multi-site Longitudinal Studies
Habib Ganjiyahi1, Thomas Nichols1
1 University of Oxford, Oxford, United Kingdom

1954 IBC dataset extension, second release of high-resolution fMRI data for cognitive mapping
Ana Luisa Pinho1, Juan Jesus Torre2, Bertrand Thirion3
1 Inria Saclay-Île-de-France, Gif-sur-Yvette, France, 2 Inria Saclay-Île-de-France, Gif-sur-Yvette, Essonne, 3 Inria, Gif sur Yvette
**ABSTRACTS**

**Workflows**

**1956**

**Physio/phys2bids**: BIDS formatting of physiological recordings

*The phys2bids contributors Physio*: Daniel Alcalá, Aparna Ayyagar1, Molly Bright1, César Caballero-Gaudes1, Vicente Ferrer Gallardo1, Soichi Hayashi1, Ross Markello1, Stefano Moia1, Rachael Stickland1, Ekene Uwuru1, Elena Zavala1

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**1966**

**EzBIDS**: The open cloud service for automated, validated DICOM to BIDS conversion

Daniel Levitas1, Soichi Hayashi1, Franco Pesti1
1Department of Psychological and Brain Sciences, Indiana University, Bloomington, IN

**1973**

**NIDM-Terms: A Community-Driven Controlled Vocabulary for Brain Initiative Imaging Experiments**

David Keato1, Karl Helmer2, Theo Van Erp3, Nazek Queder1, Jean-Baptiste Poline4, Satrajit Ghosh1, I. Burak Ozyurt5, Jeffrey Grethe1
1University of California, Irvine, Irvine, CA, 2Massachusetts General Hospital, Boston, MA, 3University of California, Irvine, Irvine, CA, 4McGill University, Montreal, QC, 5MIT, Cambridge, MA, 6University of California, San Diego, San Diego, CA, 7UCSD, San Diego, CA

**1980**

**Probabilistic Programming for Bridging the Gap Between Cognitive Science and Statistical Modeling**

Valentin Ioven1, Demian Wassermann1
1Universite Paris-Saclay, Inria, CEA, Palaiseau, Ile-de-France

**1984**

**OmniiBIDS: Automatic Conversion of Structured NIfTI Datasets to BIDS**

Alexandre Hutton1, Jean-Baptiste Poline1
1McGill University, Montreal, Quebec, 2McGill University, Montreal, Quebec

**1985**

**A Multidimensional Imaging and Neurocognitive Dataset for the Assessment of Dementia**

Dan Petersen1, Jason Webster1, Annika Noreen1, Franklin Faust1, Robin Stillwell1, Christina Casi2, Kimiko Domoto-Reilly1, Kristoffer Rhoads1, Carolyn Parsey1, Michael Persenaire1, Tung Le1, Thomas Grabowski1
1University of Washington, Seattle, WA

**1892**

**Connectome Mapper 3: a software pipeline for multi-scale connectome mapping of multimodal MR data**

Sebastien Tourbier1, Yasser Alemán-Gómez1, Emeline Mullier2, Alessandra Griffo2, Meritxell Bach Cuadra1, Patic Hagmann1
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**1900**

**Nghes: a python toolbox for high-resolution neuroimaging**

Pierre-Louis Bazin1, Julia Huntenburg1, Julia Hucky1, Leevi Kerkela2, Hoang Dung Do1, Tristan Grataud1, Christopher Steele2
1Université de vanam, Amsterdam, North Holland, 2Systems Neuroscience Lab, Champalimaud Research, Lisbon, 3Concordia University, Montreal, 4UCL Great Ormond Street Institute of Child Health, University College London, London

**1901**

**BrainSpace: a toolbox for the analysis of macroscale gradients in neuroimaging and connectomics data**

Reinder Vos de Woel1, Oualid Benkarim2, Casey Paquola1, Sara Lariviere1, Jessica Royer1, Shahin Tavakol3, Ting Xu4, Seok-Jun Hong4, Geoff Langs4, Sofie Vaill4, Bratislav Misi5, Michael Milham4, Daniel Margulies1, Jonathan Smallwood6, Boris Bernhardt1
1McGill University, Montreal, Quebec, 2The Child Mind Institute, New York, NY, 3Medical University of Vienna, Vienna, Vienna, 4Heinrich Heine University, Düsseldorf, North Rhine-Westphalia, 5CNRS, Paris, Ile de France, 6University of York, York, North Yorkshire

**1910**

**BrainSuiteDiffusion Pipeline (BDP): Processing tools for diffusion-MRI**

Divya Vardarajan1, Chitresh Bhushan2, Clio Gonzalez Zacarías1, Soyoung Choi1, Yijun Liu1, Anand Joshi1, David Shattuck1, Justin Haldar1, Richard Leahy2
1Athinoula A. Martins Center for Biomedical Imaging, Harvard, Boston, MA, 2General Electric Research, Niskayuna, NY, 3University of Southern California, Los Angeles, CA, 4University of California, Los Angeles, Los Angeles, CA

**1911**

**Variability in the analysis of a single functional neuroimaging dataset by many teams**

Rotem Botvink-Nezer1,2, Felix Holmeister1, Colin Camerer1, Anna Dreber3,4, Jurgen Huber1, Magnus Johannesson5, Michael Kirchler1, Thomas Nichols6, Russell Poldrack1, Tom Schönberg1
1Tel Aviv University, Tel Aviv, Israel, 2Dartmouth College, Hanover, NH, USA, 3University of Innsbruck, Innsbruck, Austria, 4California Institute of Technology, Pasadena, CA, USA, 5Stockholm School of Economics, Stockholm, Sweden, 6University of Oxford, Oxford, United Kingdom, 7University of Stanford, Stanford, CA, USA

**1913**

**DPABI/Surf V1.3: An Updated Surface-Based Resting-State fMRI Data Analysis Toolbox**

Chao-Gan Yan1, Xin-Di Wang1, Zhi-Kai Chang1, Carlos Romenes1, Oualid Benkarim2, Fabrice Bourdet3,4,5, Olivier David1, Nicolas Roehri1, Christian Bénar2
1Aix Marseille University, Inserm, Institut de Neurosciences des Systèmes, Marseille, France, 2APHM, Timone Hospital, Clinical Neurophysiology, Marseille, France, 3Grenoble Alpes University, Inserm, U1216, CHU Grenoble Alpes, Grenoble Institut Neurosciences, Grenoble, France
1920* Clinica Alexandre Routier1, Arnaud Marcoux1, Mauricio Diaz Melo2, Jorge Samper-Gonzalez1, Adam Wild1, Alexis Guyot1, Junhao Wen1, Elina Thibeau-Sutrel1, Simona Bottani1, Stanley Durrlemann1, Ninon Burgos1, Olivier Callicot1
1ARAMIS Lab, ICM, Inserm U127, CNRS UMR 7225, Sorbonne University, Inria, Paris, France, 2Inria Paris, SEED, Paris, France

1925 A model implementation of a scalable data storage for scientific computing with DataLab Benjamin Poldrack1, Adina Wagner2, Alexandre Watele1, Lauro Watele1, Michael Hanke1
1Institute of Neuroscience and Medicine: Brain and Behavior (INM-7), Research Center Jülich, Jülich, Germany, 2Institute of Systems Neuroscience, Heinrich Heine University, Düsseldorf, Germany

1927* Methodological variability and vibration effects in transcriptomic processing pipelines Ross Markello1, Bratislav Misić2
1McGill University, Montreal, Quebec, 2McGill University, Montreal, QC

1929 The rsHRF toolbox (v2.2): Additional features and analyses, and extended user documentation Sofie Van Den Bossche1, Guorong Wu1, Nigel Colenbrener1, Daniele Marinnazza1
1Department of Data Analysis, Faculty of Psychology and Pedagogical Sciences, Ghent University, Ghent, Belgium, 2Key Laboratory of Cognition and Personality, Faculty of Psychology, Southwest University, Chongqing, China

1930 Development, implementation, and QA/QC of a reproducible fMRI analysis pipeline for the DMCC project Joset Elser1, Mitch Jeffers1, Nicholas Bloom1, Todd Braver1
1Washington University in St. Louis, Saint Louis, MO

1933 New Open Science features in the CBRAIN platform Natacha Beck1, Pierre Roux2, Gregory Kiar1, Shawn Brown1, Candice Czech1, Serge Boroday1, Xavier Lecours-Boucher1, Darcy Quesnel1, Christine Rogers1, Najmeh Khalli-Mahani2, Reza Adalat1, Tristan Giardard1, Samir Das1, Alan Evans1
1McGill University, Montreal, Quebec, 2McGill University, Montreal, QC

1945 Exploring Self-Generated Thought During Resting-State Imaging with Natural Language Processing Huixian Li1, Bin Lu2, Xiao Chen1, Francisco Castellanos1, Chao-Gan Yan2
1Institute of Psychology, Beijing, Beijing, 2Institute of Psychology, Chinese Academy of Sciences, Beijing, Beijing, 3Nathan Kline Institute for Psychiatric Research, New York, NY, 4Institute of Psychology, Chinese Academy of Sciences, Beijing, China

1957* Semi-Automatic SEEG Localization and Interactive Neuroimage Visualization in Epilepsy Patients Adam L1, Chester Huyh1, Christopher Coogan1, Joao Kongi1, Nathan Crane1, Zachary Fitzgerald1, Jorge Gonzalez-Martinez1, Sridevi Sara1
1Johns Hopkins University, Baltimore, MD, 2Johns Hopkins Hospital, Baltimore, MD, 3Cleveland Clinic, Cleveland, OH, 4University of Pittsburgh Medical Center, Pittsburgh, PA

1960 NiPReps: enabling the division of labor in neuroimaging beyond FMRIPrep Oscar Esteban1, Jesse Wright1, Christopher Markiewicz1, William Hedley Thompson1, Mathias Goncalves1, Rastko Cirić1, Ross Blair1, Franklin Feingold1, Ariel Rokem1, Satrajit Ghosh1, Russell Poldrack1
1Stanford University, Stanford, CA, 2Karolinska Institutet, Stockholm, CA, 3Stanford University, Boston, MA, 4The University of Washington eScience Institute, Seattle, WA, 5MIT, Cambridge, MA

1961* FMRIPrep: extending the scanner to produce ready-for-analysis fMRI data Mathias Goncalves1, Christopher Markiewicz1, Karolina Finci1, Russell Poldrack1, Oscar Esteban1
1Stanford University, Stanford, CA, 2Nicolas Copernicus University in Torun, Toruń, Kuyavian-Pomeranian

1962 ChRIS: An Opensource Software Platform for Containerized Neuro-Imaging Research Rudolph Pienaar1,2, Jorge Bernal1, Gideon Pint1, P. Ellen Grant2
1Boston Children’s Hospital, Boston, MA, 2Harvard Medical School, Boston, MA

1963 The ABCD Brain Analysis Tool Philip Nguyen1, Alexandra Potter1, Hugh Garavan1, Bader Chaarani1
1University of Vermont, Burlington, VT, 2The University of Vermont, Burlington, VT

1964 An Automated Data Management Infrastructure for Multi-site Clinical MRI Studies Gabrielle Hernandez1, Dawn Smith1, Erin Dickie1,2, Michael Joseph1, Jerroid Jeyachandra1, Kevin Witzak1, Navana Calarco1, Tom Wright1, Joseph Viviano1, Jon Pipitone1, Mathuvinthi Manogaran1, Dawson Overton1, Aristote Voinoskos1
1Centre for Addiction and Mental Health, Toronto, Ontario, 2University of Toronto, Toronto, Ontario

1965* Cloud-Oriented Neuroimaging with BrainForge: Auto Group ICA, Managed Study Integration, and Beyond Bradley Baker1, Eric Verner1, Vince Calhoun1, Helen Petropoulos1, Rajkija Raja1, Jill Fries1, Sandeep Panta1, Ravi Kalyanam1, Margaret King1
1Tri-Institutional Center for Translational Research in Neuroimaging and Data Science (TReNDS), Atlanta, GA, 2Georgia State/Georgia Tech/Emory, Atlanta, GA, 3Mind Research Network, Albuquerque, NM

1967* PyNets: Reproducible Ensemble Graph Analysis of Functional and Structural Connectomes Derek Pisner1, Ryan Hammonds2
1University of Texas at Austin, Austin, TX, 2University of Texas at Dallas, Dallas, TX

1969 Nifflows: making neuroimaging tools and analyses FAIR Dorota Jarecka1, Christopher Markiewicz1, Mathias Goncalves2, Jakub Kaczmarzyk3, John Lee1, Satrajit Ghosh1
1MIT, Cambridge, MA, 2Stanford University, Stanford, CA, 3Stony Brook University School of Medicine, Stony Brook, NY, 4National Institute of Mental Health, Bethesda, MD

1977 A Unified, End-to-End Pipeline Solution for Human and Nonhuman Functional Connectomics Hecheng Jin1, Steve Giavasis1, Xinhui Li1, Anibal Solor1, Lei Ai1, Alexandre Franco1,2, Xindi Wang1, Alessandro Gazzar1, Marco Pagan1, Andrew Fox2, Adam Messinger2, Sheila Keilholz2, Brian Russ2, Ting Xu1, Cameron Craddock3, Michael Milham1
1Child Mind Institute, New York, NY, 2University of Texas at Austin, Austin, TX, 3Nathan Kline Institute, Orangeburg, NY, 4Montreal Neurological Institute (MNI), Montreal, Quebec, 5Istituto Italiano di Tecnologia, Rovereto, Italy, 6California National Primate Research Center, University of California, Davis, Davis, CA, 7INMH, Bethesda, MD, 8Emory University / Georgia Institute of Technology, Atlanta, GA, 9The University of Texas at Austin Dell Medical School, Austin, TX

1979 Evaluating and Improving Cross-Pipeline Reproducibility in Functional Connectomics: A Case Study Xinhu Li1, Steve Giavasis1, Hecheng Jin1, Lei Ai1, Anibal Solor1, Azeez Adebimpe1, Alexandre Franco1,2, Russell Poldrack1, Joshua Vogelstein1, Ting Xu1, Theodore Satterthwaite1, Cameron Craddock3, Michael Milham1
1Child Mind Institute, New York, NY, 2University of Texas at Austin, Austin, TX, 3University of Pennsylvania, Philadelphia, PA, 4Stanford University, Stanford, CA, 5Johns Hopkins University, Baltimore, MD, 6The University of Texas at Austin Dell Medical School, Austin, TX
Informatics Other

1902 NeuroLibre: A cloud-based and curated repository for Jupyter Notebooks in neuroscience
Loïc Tetet*, Mathieu Boudreau*, Elizabeth Dupre*, Agah Karakuzu†, Félix-Antoine Fortin†, Jean-Baptiste Poline*, Samir Dos†, Pierre Beliec†, Nikola Sikov‡
†Centre de recherche de l’Institut de gériatrie de Montréal, Montreal, QC; ‡Polytechnique Montréal, Montreal, QC; §McGill University, Montreal, QC; ¶Calcul Québec, Montreal, QC

1903 Analytic variability in fMRI: Multivariate and meta-analytic approaches to the problem and solution
Kendra Oudyke*, Alexandre Pérez*, Peer Herholz*, Jean-Baptiste Poline†
†Montréal Neurological Institute, McGill University, Montréal, Québec

1905 Data Visualization for Query by Image Using Modern Javascript
David Olsen†, Ciprian Ionita†, Robert Mileitch†, David Wack†
†University at Buffalo, SUNY, Buffalo, NY

1917 EEG-based brain age gap estimation and its relation to pathology detection
Lukas Gemein†, Robin Schirmeister†, Tonio Ball†
†Neuromedical AI Lab, University Medical Center Freiburg, Freiburg, Baden-Württemberg; ‡University Freiburg, Freiburg, Baden-Württemberg; §University Medical Center Freiburg, Freiburg, Baden-Württemberg

1928* Mapping Cross-Scale Brain Data Using Inter-Atlas Connectivity Transformation (IntACT)
Gleb Bezgin‡, Randy McIntosh‡, Alan Evans‡
†Montreal Neurological Institute, Montreal, Quebec; ‡University of Toronto, Toronto, Ontario; §McGill University, Montreal, Montréal

1932* NiMARE: A Neuroimaging Meta-Analysis Research Environment
Taylor Solo†, Tal Yarkoni†, Katherine Bottenhorn‡, Thomas Nichols‡, Krzysztof Gorgolewski‡, Michael Riedel‡, James Kent‡, Enrico Glerean‡, Murat Bilge‡, Jesse Wright‡, Puck Reinders‡, Dylan Nielson‡, Julio Yanes‡, Alexandre Pérez‡, Matthew Sutherland‡, Angela Laird‡
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1934 Corpus Callosum length and area measurements, an open source software for ultrasound and MR images
Elsinda Bonet-Carme*, Maria Dominguez*, Elena Monterde†, Miriam Pérez Cruz†, Elisenda Eixarch†, Eduardo Gratacós†
†BCNatal Fetal Medicine Research Center (Hospital Clínic and Hospital Sant Joan de Déu), Barcelona, Spain; ‡Institut d’Investigacions Biomediques August Pi i Sunyer (IDIBAPS), Barcelona, Spain; §Transmural Biotech S.L., Barcelona, Spain; ¶Center for Biomedical Research on Rare Diseases (CIBER-ER), Madrid, Spain
1971* Nilearn and Nistats: Machine learning and statistics for fMRI in Python
Jérôme Dockès1, Kshitij Chawla1, Alexandre Abraham2, Thomas Bazeille3, Moritz Boos4, Salma Bougacha4, Danilo Bzdok4, Jerôme-Alexis Chevalier4, Kamalaker Dadi4, Gilles de Hollander5, Céline Delettre6, Elizabeth DuPre7, Daniel Gaie6, Krzysztof Gorgolewski6, Alexandre Gramfort6, Antoine Grigs6, Roberto Guidotti7, Ryan Hammonds7, André Hoyal-Hidro7, Julia Huntbnger8, Gregory Kier9, Eric Larson20, Guillaume Lemaître21, Franziskus Liem22, Christopher Markiewicz23, Tuan-Ính Nguyen1, Ana Luísa Pinho1, Derek Pitsner23, Mehdi Rahimi23, Paula Sanz-Leon24, Sylvain Takerkart25, Bertrand Thorion26, Jacob Vogel26, Johannes Wiesner26, Gaël Varoquaux27
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1972 A guide for using neuroimaging meta-analysis techniques and their variability
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1974 Constructing a Community-Driven, Structured Vocabulary for Describing Neuroscience Experiments
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1976 Re-Executeability Assessment of the Recent Autism Literature
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1982 Visualization of Very Large Volumetric Images in Virtual Reality
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1983 The NeuroHub project: vision, components and timeline
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1994 Everybody Moves: Quantifying Sharpness in Motion Corrected T1-Maps at 7T
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2000 Long-term changes in the structure of the brain after TBI sustained in adolescence
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2008* A Bayesian normative model to estimate multi-scanner effects in structural neuroimaging data
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2024 Exploring the locus coeruleus with high-field MRI
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ABSTRACTS

2055 Behind brain structural alteration patterns. Can clustering reveal organizational principles?
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2067 Vertex-wise structural covariance in functionally-derived brain networks in schizophrenia
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2068 Morphological signatures of human spatial memory
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2073 Fully transparent qMRLab pipelines to quantify brain microstructure: From scanner to publication
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2076 Cervical Spinal Cord Atrophy Above Level of Asymptomatic Degenerative Cervical Cord Compression
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2083 Subregion-specific Insular Morphological Changes across Mental Disorders
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2090 Assessing the Impact of Progressive Motor Correction on the Reliability of Structural Imaging
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2112 General principles of gene dosage effects on brain structure
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2113 Cervical Spinal Cord Atrophy Above Level of Asymptomatic Degenerative Cervical Cord Compression
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2117 Low CD4 nadir linked to widespread cortical thinning in adults with HIV
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2118 Assessment of vNav prospective motion correction in the HCP Aging study
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2119 Brain Laterality Revealed on 6000+ Subjects and Varied across Lifespan
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2120 Masking out the Dura Mater in MRI: improving brain segmentation
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2121 Reduced Hippocampal Volume Following a First-Episode of Psychosis and Association with Verbal Memory
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2124 Shared and distinct structural plasticity following unilateral brain damage
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2021 Associations between glutamate and resting state functional connectivity in Cannabis users. 
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2022 Silent fMRI of auditory and motor functions using coherence-resolved Looping Star
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2023 Impact of sex on weight-loss and brain function in obese patients at 6-month post-surgery
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2026 Abnormal propagated activity of the precuneus in disorders of consciousness
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2027 Neural response to attentional state modulation is sensitive to development and trait inattention
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2033 Global Signal in Deep Anesthesia
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2038 Time-resolved fast neural decoding independent of variation in hemodynamic response latency
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2041 Aberrant functional connectivity of amygdala subregions in individuals with high anxiety trait
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2042 Abnormal Intrinsic Functional Architecture in Drug-free Patients with Major Depressive Disorder
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2043 Cognitive/Neural Compensatory Mechanisms in Schizophrenia: Reaction Times-Brain Activity Correlates
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2045 Assessment of brain functional connectivity alterations in heavy smoker using resting-state fMRI
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2046 Effects of acupuncture on cue-induced brain activations and alcohol cravings: A functional MRI study
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2047 Bariatric surgery-induced changes in gut microbiota associated with resting brain activity
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2048 Artificial scotoma size estimation on high-resolution 7T retinotopy data
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2049 Gender difference of the depressive symptoms reduction during college life
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2050 More FMRI QC in AFNI: updates for afni_proc.py’s automatic HTML review
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2052 Influence of GRAPPA pre-scan methods on temporal SNR of rapid GE-EPI measurements at 9.4 Tesla
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2054 The Role of Emotion Processing Areas in Children’s Face Perception Network
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2056 Maintaining context and temporal information during sequence execution
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2057 Context-Sensitive Models of Naturalistic Stimuli Reveal Unique Patterns of Brain Activity
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2059 A Connectivity-Based Real-Time fMRI Neurofeedback Targeting the Ruminaton
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2061 Cortical Depth-Dependent Function Analysis in the Native EPI Space Based on BISEP at 7T
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2089 Changes of homotopic functional connectivity after unilateral stroke
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2091 Reduced neural satiety responses in women affected by obesity
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2092 Frequency-specific regional homogeneity alterations in Tourette syndrome
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2097 Cybersickness in Virtual Reality is Correlated to the Attenuated Activation of the Insular Cortex
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2098 Alterations in functional connectivity dynamics reveal distinct state-wise signatures in anti-NMDARE
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2100 Pulpometry tracks cognitive load and salience network activity in a working memory fMRI task
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2104 Attribution modulation of sensory responses in non-corresponding primary sensory cortices
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2110 Layered fMRI of prediction error related activity in early auditory cortices
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2130 Multi-perfusion Information to Assess the Impact of Sub-concussive on High School Football Players
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2132 Associations of different forms of childhood maltreatment and reward processing
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2133 Studying the Dynamic Pattern of Low Frequency Oscillation in RS-fMRI Data Using a Carpetplot
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2140 Humans exploit movements rather than endpoints in action segmentation: a computer vision model test
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2141* On Visualization and Interpretation of Complex Connectomic Results
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2144 Highly Purified Cannabidiol (CBD) affects Working Memory Performance in Epilepsy
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2146 Language System Response Predicts Heavy Vapers’ Reaction to Anti-Vaping PSAs: Preliminary Findings
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2147 The Neural Correlates of Alcohol Demand in Individuals with Alcohol Use Disorder
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Decoding Faces in a Movie Using fMRI: A Comparison of Two Approaches
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Functional connectivity of the visual cortex regions with positive and negative BOLD response
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Sex differences in the neural response to acute psychosocial stress
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Identification and Removal of Simultaneous Slice Artifacts in Multiband fMRI
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Diffusion MRI

Advantage of diffusion MRI with simultaneous multi-slice readout-segmented EPI in tractography
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Accelerated MRI acquisitions for combined diffusometry and T2- or T2*-relaxometry
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1Center for Advanced Imaging Innovation and Research (CAI2R), NYU School of Medicine, New York, NY, USA, 2Center for Biomedical Imaging, Dept. of Radiology, NYU School of Medicine, New York, NY, USA, 3Siemens Medical Solutions, New York, NY, USA, 4Dept. of Psychiatry, NYU School of Medicine, New York, NY, USA, 5Clinical Research Division, Nathan Kline Institute for Psychiatric Research, Orangeburg, NY, USA

Fast EPI geometry correction: application to functional and diffusion MRI
Maarten Versluis1, Giuseppe Valvano1
1Philips Healthcare, Best, NB

Neural connectivity of the precuneus in the human brain: a diffusion tensor tractography study
Sung Ho Jang1, Yousung Seo2, Minkyung Cho2
1College of Medicine, Yeungnam University, Daegu, Daegu, 2Yeungnam Univ. Hospital, Daegu

Diffusion Kurtosis Imaging Detects Hypertension-Related Alterations in Brain Microstructure
Thomas Weltori1, Sarah Hellewell1, Nadia Lahoud1, Stuart Grieve1
1University of Sydney, Sydney, NSW

Effect of dMRI data quality on diffusion measures in children
Nabin Koirala1, Meaghan Perdue2, Elena Grigorenko2, Nicole Lundi1
1Haskins Laboratories, New Haven, CT, 2University of Houston, Houston, TX

Glymphatic system activity declines with age in older but not in younger individuals
Rodolphe Nenert1, Jane Allendorfer1, Adam Goodman2, Jerzy Szoftarski2
1University of Alabama at Birmingham, Birmingham, AL

Do Cognitively Healthy APOE e2 and e4 Carriers Differ in White Matter Microstructure?
Colleen Lace1, Jake Gjerdalen1, Chantei Mayo1, Jodie Gawryluk1
1University of Victoria, Victoria, British Columbia

Effects of prenatal stress on the amygdala using diffusion tensor imaging
Niloofar Hashempour1, Jetro Tuulari1, Harri Merisaari1, Johi Saunavuo1, Ritva Parkkola1, Tuire Lahaesmk1, Satu Lehtola1, Maria Keskinen1, John D. Lewis1, Noora Scheinin1, Linnea Karlsson1, Hanne Seppi2
1FinnBrain Birth Cohort Study, University of Turku, Turku, Finland, 2Department of Biomedical Engineering, Case Western Reserve University, Cleveland, OH, 3Department of Medical Physics, Turku University Hospital, Turku, Finland, 4Department of Radiology, Turku University Hospital, University of Turku, Turku, Finland, 5Department of Pediatric Neurology, Turku University Hospital, University of Turku, Turku, Finland, 6FinnBrain, University of Turku, Turku, Finland, 7Montreal Neurological Institute, McGill University, Montreal, Montreal

Denoising diffusion-weighted magnetic resonance data using convolutional neural networks
Sophia Vinci-Booher1, Bradley Caron1, Jian Wang1, Sharlene Newman1, Franco Pestilli2, Hu Cheng1
1Indiana University, Bloomington, IN

Prolactin and the Injured Brain: A Longitudinal Diffusion Tensor Imaging Case Study.
Emma Strawderman1, Alejandra Rodriguez2, Ricky Hoang3, Sam Haber4, Benjamin Chernoff5, Colleen Schneider2, Ismat Shafiq6, Zoe Williams7, G. Edward Vates8, Bradford Mahon9, 2David Paul1
1Department of Brain and Cognitive Sciences, University of Rochester, Rochester, NY, 2Department of Rochester School of Medicine and Dentistry, Rochester, NY, 3Department of Neuurosurgery, University of Rochester Medical Center, Rochester, NY, 4Department of Psychology, Carnegie Mellon University, Pittsburgh, PA, 5Department of Endocrinology, University of Rochester Medical Center, Rochester, NY, 6Department of Ophthalmology, University of Rochester Medical Center, Rochester, NY
White Matter Abnormalities in Military Traumatic Brain Injury: Results from ENIGMA Brain Injury
Heather Bouchard1, Delin Sun2, Emily Dennis3,4,5, Seth Disner4, Jeremy Elman2, Annelise Silva6, Carmen Velez7, Mary Newsome5,6, Nicholas Davenport8, Andrei Irimia3,5, Maya Teytonsky2,3, Scott Spyns1, Randall Scheibel6,7, Benjamin Wade1, Carol Franz2, William Kremer1,2,8, Michele Coleman1,2, Wright Williams5,19, Harvey Levin1,2,21, Inga Koerte1, Maheen Adamson1,2, Raul Coimbra1,2, Grant Grant1,2, Loni Shuttle2, Mark George2, Tessa Zafonte2, Thomas McAllister2, Martha Shenton3, Murray Stein10, Elisabeth Wilder14,5, David Tate2,4, Paul Thompson2,23, Aristidis Sotiras34, Rajendra Morey1,2

Duke-UNC Brain Imaging and Analysis Center, Duke University, Durham, NC, "Mid-Atlantic MIRECC, Durham VA Medical Center, Durham, NC, "Department of Neurology, University of Utah, Salt Lake City, UT, "George E. Wahlen Veterans Affairs Medical Center, Salt Lake City, UT, "Imaging Genetics Center, Stevens Neuroimaging & Informatics Institute, Keck School of Medicine of USC, Marina del Rey, CA, "Department of Radiology, Stanford University, Stanford, CA, "Hennepin Healthcare, Minneapolis, MN, "School of Medicine, University of Minnesota Medical School, Minneapolis, MN, "Department of Psychiatry, University of California San Diego, San Diego, CA, "Center for Behavior Genetics of Aging, University of California San Diego, San Diego, CA, "Psychiatry Neuroimaging Laboratory, Brigham & Women’s Hospital, Boston, MA, "H. Ben Taub Department of Physical Medicine and Rehabilitation, Baylor College of Medicine, Houston, TX, "Michael E. DeBakey Veterans Affairs Medical Center, Houston, TX, "Leonard Davis School of Gerontology, University of Southern California, Los Angeles, CA, "Department of Biomedical Engineering, Viterbi School of Engineering, University of Southern California, Los Angeles, CA, "University of Missouri St. Louis, St. Louis, MO, "Amhansohn-Lovelace Brain Mapping Center, Department of Neurology, UCLA, Los Angeles, CA, "Center of Excellence for Stress and Mental Health, VA San Diego Healthcare System, San Diego, CA, "Menninger Department of Psychiatry and Behavioral Sciences, Baylor College of Medicine, Houston, TX, "University Medical Center Utrecht, Utrecht, Utrecht, "Brain Research and Innovation Centre, Ministry of Defence, Utrecht, Netherlands, "Defense and Veterans Brain Injury Center, VA Palo Alto, Palo Alto, CA, "Neurosurgery, Stanford School of Medicine, Stanford, CA, "Department of Surgery, University of California San Diego, La Jolla, CA, "Stanford University Medical Center, Palo Alto, CA, "University of Pittsburgh School of Medicine, Pittsburgh, PA, "Medical University of South Carolina, Ralph H. Johnson VA Medical Center, Charleston, SC, "Spaulding Rehabilitation Hospital, Massachusetts General Hospital, Brigham and Women's Hospital, Boston, MA, "Geisel School of Medicine at Dartmouth, Hanover, NH, "Department of Family Medicine and Public Health, University of California San Diego, La Jolla, CA, "Department of Neurology, University of Utah School of Medicine, Salt Lake City, UT, "Imaging Genetics Center, Keck School of Medicine, University of Southern California, Marina del Rey, CA, "Departments of Neurology, Pediatrics, Psychiatry, Radiology, Engineering, and Ophthalmology, USC, Los Angeles, CA, "Department of Radiology and Institute for Informatics, Washington University St. Louis, St. Louis, MO

Microstructural Alterations Correlate with Exposure to High Magnitude Head Impact in Youth Football
Weihong Yuan1,2, Jed Diesfuss1, Kim Barber Foss3, Jonathan Dudley1, Christopher DiCesare1, Danielle Reddington1, Wen Zhang1, Katherine Nissen1, Jessica Shafer1, James Leach2, Scott Bonneth1, Kelsey Logan1, Jeffery Epstein1, Joseph Clark1, Mekibib Aelaye1, Greg Myers1

"Cincinnati Children’s Hospital Medical Center, Cincinnati, OH, "University of Cincinnati, Cincinnati, OH

MicrostructuralAlterations of Superior Longitudinal and Arcuate Fasciculi in Chronic Schizophrenia
Ruoyu Wang1, Yu Veronica Sui4, Faye McKenna2, Laura Miles3, Mariana Lazar2
"New York University School of Medicine, New York, NY, "New York University Langone Medical Center, New York, NY

Fiber tracking framework for estimating rotationally-invariant with paired-ODF spatial correlations
Ying-Chia Lin1, Steven Boetel2, Xiuyuan Wang1, Fernando Boada2
"NYU School of Medicine, New York, NY

Selective Impact of Maternal Childhood Maltreatment on Different White Matter Pathways
Bao Ahtam1, Al Wern Cheng1, Sommer Jaber2, Juan Perez1, Michaela Sisitsky1, Jennifer Khoury2, Borjan Gagas3, Yangming Ou1, Julianna Standish1, Josephine Wilson3, Michelle Enlow2, Karlen Lyons-Ruth2
"Boston Children’s Hospital, Harvard Medical School, Boston, MA, "Cambridge Hospital, Harvard Medical School, Cambridge, MA

Multi-diffusion and multi-T2 weighted Monte-Carlo simulations.
Jonathan Rafael-Patino1, Gabriel Girard2, Elda Fischl-Gomez2, David Rosmancano4, Thomas Yu5, Marco Pizzolato1, Alonso Ramirez-Manzanares6, Erick Canales Rodriguez1, Jean-Philippe Thiran1
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Mapping out cortical topography of the mid-sagittal corpus callosum
Yirong Xiong1, Chenxi Zhao1, Liyuan Yang1, Goolang Gong1,2
"BNU, Beijing, China, "Beijing Normal University, Beijing, China, "Beijing Normal University, Beijing, AK

Microstructural Stages of Cortex Thinning in Psychotic Spectrum Disorders
Faye McKenna1, Yu Veronica Sui4, Hillary Bertisch1, Donald Goff1, Mariana Lazar2
"New York University School of Medicine, New York, NY, "New York University Langone Medical Center, New York, NY

Prospective Data Harmonization for Multi-site Diffusion MRI Data Analysis
Suheyla Cetin-Karayumak1, Marek Kubicki, Yogesh Rathi2
"Harvard Medical School, Boston, MA

Microstructural Alterations Correlate with Exposure to High Magnitude Head Impact in Youth Football
Weihong Yuan1,2, Jed Diesfuss1, Kim Barber Foss3, Jonathan Dudley1, Christopher DiCesare1, Danielle Reddington1, Wen Zhang1, Katherine Nissen1, Jessica Shafer1, James Leach2, Scott Bonneth1, Kelsey Logan1, Jeffery Epstein1, Joseph Clark1, Mekibib Aelaye1, Greg Myers1

"Cincinnati Children’s Hospital Medical Center, Cincinnati, OH, "University of Cincinnati, Cincinnati, OH

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Yirong Xiong1, Chenxi Zhao1, Liyuan Yang1, Goolang Gong1,2
"BNU, Beijing, China, "Beijing Normal University, Beijing, China, "Beijing Normal University, Beijing, AK
2013 The relationship between motor ability and cognitive control. Marta Topor*, Philip Dean#, Hayley Leonard#, Bertram Opitz*
University of Surrey, Guildford, Surrey

2078 An ERP study of Fz during 3-back task: Comparison of Birth experience JinJu Jung, YeJin Kim, je-hyeop Lee, MiHyun Choi, Soon-Cheol Chung, HyunJun Kim*
Konkuk University, Chungju, Chungcheongbuk-do

2079 Comparison of ERP between Pure EEG and Simultaneous EEG-fMRI Recordings in Sustained Attention Task Yu-Ting Cheng1, Chia-Fen Hsu2, H. Y. Hydra Ng1, Chio-Wei Li4, Chun-Hsiang Chuang3, Chih-Mao Huang4, Yi-Ping Chaol, Changwei Wu3
Graduate Institute of Mind Brain and Consciousness, Taipei Medical University, Taipei City,
Taipei City, Department of Occupational Therapy, Chang Gung University, Taoyuan City, Taiwan,
Graduate Institute of Mind Brain and Consciousness, Taipei Medical University, Taipei City, Taiwan,
Department of Radiology, Wan Fang Hospital, Taipei Medical University, Taipei City, Taiwan,
Department of Computer Science and Technology, National Taiwan Ocean University, Keelung City,
Taiwan, Department of Biological Science and Technology, National Chiao Tung University, Hsinchu City,
Taiwan, Department of Medical Mechatronics, Chang Gung University, Taoyuan City, Taiwan

2080 Subjective Evaluation and EEG Analysis of Electrical Stimulation at Various Frequencies and Intensit Je-Hyeop Lee*, Jin-Ju Jung1, Hyung-Sik Kim1, MiHyun Choi1, Soon-Cheol Chung1
Konkuk University, Chungju, Chungcheongbuk-do

2090 Altered effective cortical network in post-traumatic stress disorder during cognitive processing Misean Shin*, Seung-Hwan Lee1, Han-Jeong Hwang2
Dept. of Medical IT Convergence Engineering, Kumoh National Institute of Technology, Gumi,
Gyeongbuk, Department of Psychiatry, Ilsan Paik, Inje University, Goyang-si, Gyeonggi-do

2094 Working memory training changes contralateral delay activity Yang Li1, Jun Li1
1Beijing Normal University, Beijing, Beijing, 2Beijing Normal University, Beijing, China, 3State Key Laboratory of Cognitive Neuroscience and Learning, Beijing Normal University, Beijing, Beijing

2099 Cortical neurodynamics and aging effects of inhibitory control for saccadic eye movements Martyna Plamecka1, Marius Troenada2, Zofia Bararicuz-Turska2, Christian Pfeiffer, Nicolas Langer1
1University of Zurich, Zurich, Switzerland

2101 Dopaminergic intervention affects hierarchical control for saccadic eye movements Andrea Diaconescu1, Christoph Mathys1, Lars Kasper1, Katharina Wellstein1, Sara Tomiello1, Lilian Weber1, Klara Enna Stephane1
1CAMH, Toronto, Ontario, 2Scuola Internazionale Superiore di Studi Avanzati (SISSA), Trieste, Trieste,
3Translational Neuromodeling Unit, University of Zurich & ETH Zurich, Zurich, Zurich

2116 Impact of Early Childhood Malnutrition on Adult Brain Function: ERP Results during a Go-No-Go Task Kassandra Rogers1, Phetsamone Vannongsa1, Julie Tremblay1, Maria L. Borges Vega1, Corailene Bryce2, Arielle Robinowitz2, Pedro A. Voldes-Sosoa2, Janina Goller5, Anne Gallagher2
1LION Lab, Sainte-Justine University Hospital Research Centre, University of Montreal, Montreal,
Quebec, 2University of Electronics Science and Technology of China, Chengdu, Sichuan, 3Barbados Nutrition Study, Bridgetown, Saint Michael, 4Department of Neurology and Neurosurgery, McGill University, Montreal, Quebec, 5Division of Pediatric Gastroenterology and Nutrition, MassGeneral Hospital for Children, Boston, MA

2162 Quantitative EEG measures for Neurological Prognostication in Patients with Post-Cardiac Arrest Jung Hwa Lee1, Sue Hyun Lee2, Cheaowon Kang3, Sora An4, Yoonkyung Chang2, Seung-Ah Lee5, Eun-Hye Lee1, Yunseo Choi1, Sol-Ah Kim1, Hyeon Jin Kim1, Hyang Woon Lee6
1Ewha Womans University Mokdong Hospital, Seoul, Seoul, 2Departments of Neurology and Medical Science, Ewha Womans University Mokdong Hospital, Seoul, Seoul, 3Ewha womans university, Yongin-si, Gyeonggi-do, 4Ewha Womans University, Seoul, Korea, Republic of, 5Ewha Womans University, Seoul, Seoul, 6Ewha womans university, Seoul, Seoul, 7Ewha Womans University School of Medicine, Boston, MA, 2Ewha Womans University School of Medicine and Ewha Medical Research Institute, Seoul, AK

1992 Investigation of the major depression connectome at rest state using MEG: a preliminary study Yuchi Takel1, Yutaka Kato2, Minami Tagawa4, Tomohiro Suto1, Masakazu Sunaga5, Kazuyuki Fujihara6, Noriko Sakurai7, Masato Fukuda8
1Department of Psychiatry and Neuroscience, Gunma University Graduate School of Medicine, Maebashi, Gunma, 2Tatsuji Mental Hospital, Tatebayashi, Gunma-Prefecture, Japan, 3Department of Psychiatry and Neuroscience, Graduate School of Medicine, Gunma University, Maebashi, Gunma, Japan, 4Gunma Prefectural Psychiatric Medical Center, Maebashi, Iseaka, Japan, 5Department of Genetic and Behavioral Neuroscience, Gunma University Graduate School of Medicine, Maebashi, Gunma, Japan, 6Department of Psychiatry and Neuroscience, Gunma University Graduate School of Medicine, Maebashi, Gunma, Japan

1999 Functional brain network organization predicts cognitive decline in multiple sclerosis Ilse Naut1, Shanna Kulik1, Lucas Breed1, Anand Ejlers1, Eva Strijbis1, Dirk Bertens1, Prejaas Tewarie1, Arjan Hillebrand1, Cornelis Stam1, Linda Douw1, Jeroen Geurts1, Bernard Utdehaog1, Brigit de Jong1, Menno Schoonheim1
1Amsterdam UMC, Vrije Universiteit Amsterdam, Amsterdam, Noord-Holland, 2Radboud University, Nijmegen, Gelderland

2020 A robust processing pipeline for source estimation to MEG spikes Li Zheng1, Pan Liao2, Linlin Zhu1, Jia-Hong Gao1
1Peking University, Beijing, China, 2Beijing Intelligent Brain Cloud Inc, Beijing, China

2028 How cerebral cortex protects itself from interictal spikes: the alpha/beta inhibition hypothesis Giovanni Pellegrino1,2, Christophe Grove2, Eliane Kobayashi3
1IRCCS San Camillo Hospital, Venice, Venice, 2Montreal Neurological Institute and Hospital, McGill University, Montreal, Canada, 3Physics dpt., Concordia University, Montreal, Quebec, 4Montreal Neurological Institute and Hospital, McGill University, Montreal, Quebec

2029 Time-Varying Source Reconstruction (tVSR) Ryan Timms1, Andrew Quinn2, Alexander Skates1, Steve Smith1, Mark Woolrich1
1University of Oxford, Oxford, Oxfordshire

2037 MEG Imaging reveals disrupted directional information flow in epilepsy Kiyamu Kuda1, Hirofumi Morise1, Kamalini Ranasinghe2, Danielle Mairui2, Abhishek Bhutada2, Jessie Chen3, Anne Findlay3, Heidi Kirsch3, Srikanth Nagarajan2
1Medical Imaging Research Department, Ricoh Company Ltd, Kanazawa, Japan, 2Memory and Aging center, Department of Neurology, University of California San Francisco, San Francisco, CA, 3Department of Radiology and Biomedical Imaging, University of California San Francisco, San Francisco, CA
2064 Postoperative oscillatory brain activity as an add-on prognostic marker in diffuse glioma
Vera Belgers1, Tianne Numan1, Shanna Kulik1, Arjan Hillebrand1, Philip de Witt Hamer1, Jeroen Geurts1, Jaap Reijnveld1, Pieter Wesseling1, Martin Klein1, Jolanda Derks1, Linda Douw1
1Amsterdam UMC, Vrije Universiteit Amsterdam, Amsterdam, Noord-Holland

2115 Optimizing Portable Magnetoencephalography for Children with Soft Shielding and Virtual Sensors
Jing Xiang1, Ellen Maue2, Yinan Hu1, Fawen Zhang1, Vishal Shah3, Yang Jiang3
1Cincinnati Children’s Hospital Medical Center, Mason, OH, 2Cincinnati Children’s Hospital Medical Center, Cincinnati, OH, 3University of Cincinnati, Cincinnati, OH. *Department of Radiology and Biomedical Imaging, University of California San Francisco, San Francisco, CA, 4UC Berkeley, Berkeley, CA, 5Memory and Aging Center, Department of Neurology, University of California San Francisco, San Francisco, CA, 6University of California, San Francisco, CA

2139 Distinct effects of amyloid-beta and tau deposition on neural synchrony in Alzheimer’s disease
Kamalini Ranasinghe1, JungHo Cha2, Leonardo Iaccarino1, Leighton Hinkley1, Alexander Beagle1, Julie Pham1, William Jagust2, Bruce Miller2, Katherine Rankin3, Gil Rabinovici4, Keith Vossel5, Srikantan Nagarajan6
1University of California, San Francisco, San Francisco, CA, 2UCSF, San Francisco, CA, 3Department of Radiology and Biomedical Imaging, University of California San Francisco, San Francisco, CA, 4UC Berkeley, Berkeley, CA, 5Memory and Aging Center, Department of Neurology, University of California San Francisco, San Francisco, CA, 6University of California, San Francisco, CA

2165 Automatic Co-registration for On-scalp MEG
Wenyu Gu1, Xingyu Ru2, Dongxu Li2, Jing Xiang1, Ellen Maue2, Yinan Hu1, Fawen Zhang1, Vishal Shah3, Yang Jiang3
1Peking University, Beijing, Beijing, 2Peking University, Beijing, Beijing, 3Center for MRI Research, Academy for Advanced Interdisciplinary Studies, Peking University, Beijing, Beijing, 4Center for MRI Research, Academy for Advanced Interdisciplinary Studies, Peking University, Beijing

MR Spectroscopy

2001* Dynamically Acquired 1H MRS for Detection of 13C Labeled Cerebral Glucose Metabolism In-vivo
Masoumeh Dehghani1,2, Pedro Rosa-Neto1,4, Pierre Etienne5, Steven Zhang6, Chathura Kumaramagame6, Jamie Near2
1Centre d’Image Cébral, Douglas Mental Health University, Montreal, Quebec, Canada, 2Dept of Psychiatry, McGill University, Montreal, Quebec, Canada, 3Translational Neuroimaging Laboratory, Douglas Research Institute, Montreal, Quebec, Canada, 4Dept of Neurology and Neurosurgery, McGill University, Montreal, Quebec, Canada, 5Clinical Research Division, Montreal, Quebec, Canada, 6Dept of Neuroscience, McGill University, Montreal, Quebec, Canada, 7Dept of Radiology and Biomedical Imaging, Yale University, New Haven, CT, US

2010 A Preliminary MRS Analysis of Effects of Olanzapine vs. Placebo in Remitted Psychotic Depression
Hideaki Tan1, Iska Maxon-Emrell1, Natalie Forde2, Nicholas Neufeld2, Kathleen Bingham3, Ellen Whyte4, Barnett Meyers5, George Alexopoulos6, Matthew Hoptman7, Anthony Rothschild8, Hiroyuki Uchida9, Aloastar Flint10, Benoit Mulsant11, Aristotelis Voinokeskoi12
1Centre for Addiction and Mental Health, Toronto, ON, 2University Health Network Centre for Mental Health, Toronto, ON, 3Western Psychiatric Institute and Clinic, Department of Psychiatry, University of Pittsburgh School of Medicine, Pittsburgh, PA, 4Weill Medical College of Cornell University and New York Presbyterian Hospital, White Plains, NY, 5Nathan S. Kline Institute for Psychiatric Research, Orangeburg, NJ, 6University of Massachusetts Medical School and UMass Memorial Health Care, Worcester, MA, 7Department of Neuropsychiatry, Keio University School of Medicine, Tokyo, Tokyo, 8UHN - Toronto General Hospital, Toronto, ON

2035 Reproducibility of in vivo Cortical GABA & Glx with MEGA-PRESS: Comparing 8 & 32 Channel Head Coils
Peter Truong1, Napapon Saisutara2, Sofia Chavez3
1Centre for Addiction and Mental Health, Toronto, Ontario, 2Centre for Addiction and Mental Health (CAMH), Toronto, ON

2056* Simultaneous mapping of T2* and major neurotransmitters using MRSI at 3T
Fatimah Almomen1, Pingyu Xia1, Xiaopeng Zhou1, Mark Chiew2, Adam Steel3, Albert Thomas4, Ulrike Dydak5, Uzay Emir6
1Purdue University, West Lafayette, IN, 2Oxford University, Oxford, Oxford, 3Dartmouth College, Hanover, NH, 4David Geffen School of Medicine at UCLA, Los Angeles, CA

2075 Metabolic profile of the Heschl's Gyrus in Schizophrenia Spectrum Disorders
Pradeep Kumar Gupta1, Hilary Bertisch2, Oded Gonen3, Donald Goff4, Mariana Lazar4
1Center for Biomedical Imaging, Department of Radiology, New York University School of Medicine, New York, NY, 2Department of Rehabilitation Medicine, New York University School of Medicine, New York, NY, 3Department of Psychiatry, New York University School of Medicine, New York, NY

2124* Osprey: Open-Source Processing, Reconstruction & Estimation of Magnetic Resonance Spectroscopy Data
Georg Oeltzschner1,2, Helge Zülner1,2, Richard Edden1,2
1Russell H. Morgan Department of Radiology and Radiological Science, Johns Hopkins University, Baltimore, MD, 2F. M. Kirby Research Center for Functional Brain Imaging, Kennedy Krieger Institute, Baltimore, MD

2126 Test-retest reproducibility of brain temperature derivations using echoplanar spectroscopic imaging
Ayushe Sharma1, Rodolphe Nenert1, Christina Mueller1, Andrew Maudsley2, Jarred Younger2, Jerzy Szafarski3
1University of Alabama at Birmingham, Birmingham, AL, 2University of Miami, Miami, FL

2148 Essential tremor and dystonic tremor: an MR Spectroscopy study
Patrick Bédard1, Pattama Panyakaew2, Jan Willem van der Veen1, Mark Halliet3, Silvina Horovitz1,4
1Human Motor Control Section, MNB, NINDS, NIH, Bethesda, MD, 2Chulalongkorn University and King Chulalongkorn Memorial Hospital, Bangkok, Bangkok, 3MRS core, NIMH, NIH, Bethesda, MD

Multi-Modal Imaging

2003 Enhanced regional functional connectivity indicates seizure onset zone
Jiango Su1, Nicolas Ellenrieder1, Hui Shen1, Dewen Hu1, Jian Gotman1
1National University of Defense Technology, Changsha, Hunan, 2McGill University, Montreal, Quebec

2007 Automated Pipeline for EEG Artifact Reduction (APPEAR) Recorded during fMRI
Kaylee Henry1,2, Ahmad Mayeli1,2, Chung ki Wong1, Obada Al Zoubi1, Evan White1, Qingfei Luo1, Vadim Zotev1, Hazem Refai1, Jerzy Bodurka2, Tulsa 1000 Investigators1
1Lorente Institute for Brain Research, Tulsa, OK, 2Department of Biomedical Engineering, University of Arkansas, Fayetteville, AR, 3Electrical and Computer Engineering, University of Oklahoma, Tulsa, OK, 4Stephenson School of Biomedical Engineering, University of Oklahoma, Tulsa, OK
2031 Repeatability and reproducibility of quantitative synthetic MRI across vendors and field strengths.

2032 Towards a resource for harmonisation of structural, diffusion and functional MRI across scanners

2033 Macroscale and Microcircuit Dissociation of Focal and Generalized Human Epilepsies

2034 A pipeline for MEG/fMRI co-processing to examine dynamic brain activity during associative learning

2035 Investigate Brain Structure and Functional Variation of Heavy Cannabis Use with Multimodal MRI data

2036 Neurotic Architecture Relates to Functional Brain Activity

2037 Towards a resource for harmonisation of structural, diffusion and functional MRI across scanners

2038 A pipeline for MEG/fMRI co-processing to examine dynamic brain activity during associative learning

2039 Evolution of structural-functional coupling in clinically isolated syndrome

2040 Community-level Environmental Burden Tracks Individual Variability in Brain Morphology

2041 Parallel ICA patterns of white matter lesions and cortical atrophy predicted progression in early MS

2042 Evolution of structural-functional coupling in clinically isolated syndrome

2043 Classification of Schizophrenia using Multimodal MRI and Machine Learning.

2044 Quantitative, multimodal cell and fiber mapping in full primate brain sections

2045 Signal preservation during EEG-fMRI: BCG artifact residuals bias EEG-informed fMRI results

2046 Investigate Brain Structure and Functional Variation of Heavy Cannabis Use with Multimodal MRI data

2047 Thinking about integrating fMRI with dMRI tractography?: we help you think

2048 Investigate Brain Structure and Functional Variation of Heavy Cannabis Use with Multimodal MRI data

2049 Evolution of structural-functional coupling in clinically isolated syndrome

2050 Signal preservation during EEG-fMRI: BCG artifact residuals bias EEG-informed fMRI results

2051 Parallel ICA patterns of white matter lesions and cortical atrophy predicted progression in early MS

2052 EEG Microstates Temporal Dynamics Associations with fMRI Signals
2015* Cross-modal synchronization of intracranial EEG and fMRI during natural movie viewing
Tiankang Xie1, Jin Hyun Cheong1, Amanda Brandt1, Krzysztof Bujarski1, Luke Chang1
1Dartmouth College, Hanover, NH, 2Dartmouth-Hitchcock Medical Center, Lebanon, NH

2169 Integrated Multimodal MRI of Cerebral Blood Flow and Brain structure in Adolescent Bipolar Disorder
Kody Kennedy1, Anahit Grigorian2, Nicholas Lucivi2, Bradley MacIntosh2, Benjamin L Goldstein Goldstein2
1University of Toronto, Toronto, AZ, 2University of Toronto, Toronto, ON, 3Department of Psychiatry, University of Toronto, Toronto, Ontario

2009* LIONirs toolbox design for fNIRS data analysis.
Paola Diatort1, Bradley Osterman1, Elisa Rossiagn2, Kassandra Roger2, Laurie Décoranie-Labbe1, Anne Gallagher1
1University of Montréal, Montréal, Québec, 2Santé-Juste University Hospital Center, Montréal, Québec, 3Université de Montréal, Montréal, Québec, 4CHU Sainte-Justine, Montréal, Québec, 5CHU Sainte-Justine affiliated with University of Montreal, Montréal, Québec, 6CHU Sainte-Justine University of Montreal, Montréal, Québec, 7CHU Sainte-Justine Research Center, University of Montreal, Montréal, Quebec

1986 Altered cerebral language networks in children with temporal or frontal lobe epilepsy
Alejandro Hüsser1, Phetsamone Vannasing2, Julie Trembloy1, Philippe Major1, Anne Lortie6, Paolo Diatort1, Bradley Osterman1, Elisa Rossiagn2, Kassandra Roger2, Laurie Décoranie-Labbe1, Anne Gallagher1
1Université de Montréal, Montréal, Québec, 2Santé-Juste University Hospital Center, Montréal, Québec, 3Université de Montréal, Montréal, Québec, 4CHU Sainte-Justine, Montréal, Québec, 5CHU Sainte-Justine, Montréal, Québec, 6University of Montréal, Montréal, Québec, 7Université de Montréal, Montréal, Quebec

2153* Cross-modal synchronization of intracranial EEG and fMRI during natural movie viewing
Tiankang Xie1, Jin Hyun Cheong1, Amanda Brandt1, Krzysztof Bujarski1, Luke Chang1
1Dartmouth College, Hanover, NH, 2Dartmouth-Hitchcock Medical Center, Lebanon, NH

2012 An fNIRS protocol for the study of numeracy in women with Turner syndrome
Jongkwan Choi1, Jae-Myoung Kim1, Yune Song Lee2, Do-Joon Yi1, Soyon Eom4
1Optical Brain Electronics Laboratory, Seoul, Seoul, 2The Ohio State University, Columbus, OH, 3Yonsei University, Seoul, Seoul, 4Yonsei University College of Medicine, Seoul, Seoul

2120 Cerebral NIRS monitoring in relation to neurological exam at term-equivalent age in preterm infants
Gabriel Cote Correia1, Olivia Beaulieu1, Rasheda Chawdhury1, Marie-Michèle Gagnon1, Melanie Gagnon1, Marie-Noëlle Simard2, Thuy Mai Luu1, Mathieu Dehaes8
1CHU Sainte-Justine, University of Montreal, Montreal, Quebec, 2University of Montreal, Montreal, Montreal, 3CHU Sainte-Justine affiliated with University of Montreal, Montreal, Quebec, 4CHU Sainte-Justine, Montreal, Quebec, 5CHU Sainte-Justine University of Montreal, Montreal, Quebec, 6CHU Sainte-Justine Research Center, University of Montreal, Montreal, Quebec

2012 Can survivors of stroke use neuroimaging at home? Usability testing of a wireless fNIRS device.
Tony Ingram1, Chris Friessen1, Michael Lawrence1, Shaun Boe1
1Dalhousie University, Halifax, Nova Scotia

2020 Hb State-Flux Measures Yield Disease-Sensitive Michaelis-Menten Type Behaviors
Can survivors of stroke use neuroimaging at home? Usability testing of a wireless fNIRS device.
Tony Ingram1, Chris Friessen1, Michael Lawrence1, Shaun Boe1
1Dalhousie University, Halifax, Nova Scotia
2016 Relationship between apathy and the prefrontoocaudate tract injury in patients with mTBI

Sung Ho Jang1, Yousung Seo2, Eunbi Choi2
1College of Medicine, Yeungnam University, Daegu, Daegu, 2Yeungnam Univ. Hospital, DAEGU, 3Yeungnam Univ. Hospital, Daegu, .

2019 MR Facility Quality Assurance: A publicly available protocol

John Pyles1, Timothy Verstynen1, Joerg Magerkurth1, Nikolaus Weiskopf1, Xavier Golay2, Ben Inglis3
1BRIDGE Center, Dept. of Psych. and CMNI, Carnegie Mellon University, Pittsburgh, PA, USA, 2Birkbeck-UCL Centre for Neuroimaging, University College London, London, UK, 3Dept. of Neurophysics, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany.

2025* Fast, quantitative myelin maps: Macromolecular pool fraction (MPF) using an optimized protocol

Kimberly Desmond1, Tobias Wood2, Sofia Chavez3
1Centre for Addiction and Mental Health (CAMH), Toronto, Ontario, Canada, 2King’s College, London, United Kingdom

2030 Reproducibility Assessment of Neuromelanin-Sensitive MRI Protocols for ROI and Voxelwise Analyses

Kenneth Wengler1, Xiong He2, Anissa Abi-Dargham2, Guillerma Horga1
1Columbia University, New York, NY, 2Stony Brook University, Stony Brook, NY

2059 Regulating subliminal neural activity in the fusiform face area: an fMRI-based neurofeedback study

Lucas Peek1, Patrik Vuilleumier2
1University of Geneva, Geneva, Geneva

2060 Real-Time Z-Shimming for Magnetic Resonance Imaging of the Spinal Cord

Eva Alonso-Ortiz1, Cyril Tous1, Ryan Topper1, Julien Cohen-Adad2
1NeuroPoly Lab, Ecole Polytechnique, Montreal, Quebec, 2Multimodal Functional Imaging Lab, Department of Physics and PERFORM Centre, Concordia University, Montreal, Quebec

2071 Dissimilarity of Functional Connectivity Reflects Effect of Participant’s Motion in fMRI Study

Lejian Huang1, Lili Yang2, Bo Wu1, Linyu Fan1, Shishi Huang4, Andrew Vogtsky3, Marwan Baliki1, Zhihan Yan1, A. Vania Apkarian2
1Northwestern University, Chicago, IL, 2Wenzhou Medical University, Wenzhou, Zhejiang, 3Shirley Ryan AbilityLab, Chicago, IL

2085 Post-traumatic fatigue due to injury of the lower ventral ARAS in mild TBI

Sung Ho Jang1, Mi Young Lee2, Young Hyeon Kwon2
1College of Medicine, Yeungnam University, Daegu, Daegu, 2Daegu Haany University, Gyeongsansu, North Gyeongsang Province, 3Yeungnam University Hospital, Daegu, Daegu

2086 The neural networks between the medial PFC and the PCC and precuneus in the human brain: a DTT study

Sung Ho Jang1, Jeong Pyo Seo2, Min Kyeong Cho3
1College of Medicine, Yeungnam University, Daegu, Daegu, 2Dankook University, Daegu, 3College of Medicine, Yeungnam University, Daegu

2087 Attention impairment due to injury of the ventrolateral prefrontal cortex in patients with mild TBI

Sung Ho Jang1, Han Do Lee2, Eun Bi Choi3
1College of Medicine, Yeungnam University, Daegu, Daegu, 2Ulsan University of Science and Technology, Ulsan, Ulsan, 3Department of Physical Medicine and Rehabilitation, College of Medicine, Yeungnam University, Daegu, Daegu
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Christine Chouinard-Lechleiter1, Simona Manescu1, Johannes Frasnelli1, Franco Lepore1
1Université de Montréal, Montreal, Québec, 2Université du Québec à Trois-Rivières, Trois-Rivières, Québec

Chemical Senses: Olfaction, Taste

2216 Insula as the cortical gate of consciousness: a task fMRI study in propofol-anesthetized rats
Behzad Irvani1, Artin Arshamia2, Johan Lundström2,3
Karolinska Institutet, Stockholm, Sweden, 1Monell Chemical Sense Center, Philadelphia, PA, 2Stockholm University Brian Imaging Center, Stockholm, Sweden

2227 Microstructural Profiles of Thalamocortical Connection in Patients with Disorder of Consciousness
Weihao Zheng1, Xuefei Tan2, Yi Zhang2, Benyan Luo2, Dan Wu1
1Zhejiang University, Hangzhou, Zhe Jiang, 2The First Affiliated Hospital of Zhejiang University, Hangzhou, Zhe Jiang

2282 Temporal Windows for Selective Integration of Internal and External Information in Conscious Brain
Minkyung Kim1,2, Hyoung-Kyu Kim1,2, Zirui Huang1,2, UnCheol Lee1,2
1University of Michigan Medical School, Ann Arbor, MI, 2Center for Consciousness Science, University of Michigan, Ann Arbor, MI

2291 A Novel Template-based ICA Approach Reveals Psilocybin-Induced Changes in Thalamic Connectivity
Andrew Gaddis1, Mary Beth Nebel2, Amanda Mejia3, Stewart Mastofsky4, Roland Griffiths4, Frederick Barrett1
1Johns Hopkins University School of Medicine, Department of Psychiatry and Behavioral Sciences, Baltimore, MD, 2Kennedy Krieger Institute, Baltimore, MD, 3Indiana University, Bloomington, IN, 4Center for Psychedelic and Consciousness Research, Johns Hopkins University, Baltimore, MD

2307 Topographic Brain Network Properties Predict Emergence from Disorders of Consciousness
Danielle Nadir1,2, Catherine Duclos2,1, Yacine Mahdidi2,1, Alexander Rokos2,1, Mohamed Badawy2,1, Justin Letourneau1,2, Caroline Arbouëris1,2, Gilles Plourde1,2, Stefanie Blain-Moraes2,1
McGill University, Montreal, QC, Canada, 2McGill University Health Centre, Montreal, QC, Canada, 3Centers for the Neurosurgical and Anesthesiology, Johns Hopkins University, Baltimore, MD

2314 Network Principles of Various Induction and Recovery during General Anesthesia
Hyungkyu Kim1, Minkyung Kim2, UnCheol Lee1
1University of Michigan, Ann Arbor, MI, 2University of Michigan Medical School, Ann Arbor, MI

2014 Alterations of brain gray matter and olfactory bulb volumes in early blind individuals
Christine Chouinard-Lechleiter1, Simona Manescu1, Johannes Frasnelli1, Franco Lepore1
1Université de Montréal, Montreal, Québec, 2Université du Québec à Trois-Rivières, Trois-Rivières, Québec

2028 Functional connectivity impairment of the olfactory-trigeminal network in Parkinson’s disease.
Cécilia Tremblay1, Behzad Irvani2, Emilie Lafontaine1, Florian Fischmeister1, Jason Steffener1, Johan Lundström1, Johannes Frasnelli1,3
1Université du Québec à Trois-Rivières, Trois-Rivières, Québec, Canada, 2Karolinska Institutet, Stockholm, Sweden, 3University of Graz, Graz, Austria

2035 Reconfiguration of network hubs under anesthesia may predict recovery of consciousness
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1McGill University, Montreal, Quebec, Canada, 2McGill University Health Centre, Montreal, Quebec, Canada, 3Centre intégré de santé et de services sociaux du Nord-de-l’Île-de-Montréal, Montreal, Quebec, Canada

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1University of Cambridge, Cambridge, United Kingdom, 2University of Oxford, Oxford, United Kingdom, 3Aarhus University, Aarhus, Denmark, 4University of California - Berkeley, Berkeley, CA

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Shoko Yamamoto1, Tomoyuki Hiyorayasu1, Satoru Hiiwa1
1Department of Biomedical Sciences and informatics, Doshisha University, Kyotanabe, Kyoto, Japan

2066 Insula as the cortical gate of consciousness: a task fMRI study in propofol-induced unresponsiveness
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1Department of Anesthesiology and Center for Consciousness Science, University of Michigan, Ann Arbor, MI

2076 Temporal Windows for Selective Integration of Internal and External Information in Conscious Brain
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1Zhejiang University, Hangzhou, Zhe Jiang, 2The First Affiliated Hospital of Zhejiang University, Hangzhou, Zhe Jiang

2096 Weak Connections in Functional Brain Networks Improve Classification of Consciousness States.
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JASON DA COSTA CASTAñER1,2, Lucrezia Liuzzi3,2, George Mashour1
1McGill University, Montreal, Quebec, Canada, 2Montreal General Hospital, Montreal, Quebec, Canada, 3McGill University, Montreal, Quebec, 4University of Nottingham, Nottingham, UK, 5McGill University, Montreal, Quebec, 6Sir Peter Mansfield Imaging Centre, Nottingham, Nottinghamshire, UK, 7Center for Consciousness Science and Department of Anesthesiology University of Michigan Medical School, Ann Arbor, MI
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1Radiology, Harvard Medical School, Boston, MA, 2Athinoula A. Martinos Center for Biomedical Imaging, MGH, Boston, MA, 3Systems and Biomedical Engineering, Cairo University, Cairo, Egypt, 4Thomas J. Watson Research Center, Yorktown, NY, 5Watson Research Center, Yorktown, NY, 6Icahn School of Medicine at Mount Sinai, New York City, 7Yale University, New Haven, CT, 8Yale School of Medicine, New Haven, CT, 9Department of Psychiatry in University of Rochester, Rochester, NY

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1Dalhousie University, Halifax, Nova Scotia

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1Dalhousie University, Halifax, Nova Scotia

2254  Individual variability of regional multivariate patterns in pain prediction
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1Sungkyunkwan University, Suwon, Gyeonggi-do, 2Dartmouth College, Hanover, NH, 3Center for Neuroscience Imaging Research, Institute for Basic Science, Suwon, Gyeonggi-do

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1University of Oldenburg, Oldenburg, Germany

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1University of Michigan, Ann Arbor, MI

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1University of Florida, Gainesville, FL

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Noah Walker1, Semra Aytur1, Kimberly Ray2, Donald Robin1
1University of New Hampshire, Durham, NH, 2Department of Psychology, University of Texas, Austin, TX

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1Dartmouth College, Hanover, NH, 2NIH, Bethesda, MD, 3Insead Fontainebleau & ICM Paris, Paris, Île-de-France, 4University of Miami, Miami, FL, 5McGill University, Montreal, Quebec, 6Center for Neuroscience Imaging Research, Institute for Basic Science, Suwon, Gyeonggi-do

2293  Functional connectivity between the amygdala and pain-related brain regions in youth with FAPD
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1Michigan State University, Grand Rapids, MI, 2Cincinnati Children’s Hospital Medical Center, Cincinnati, OH, 3Cincinnati Children’s Hospital, Cincinnati, OH

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Hyerang Jin1, Bart Witjes2, Mathieu Roy2, Sylvain Baillet1, Cecile de Vos2
1McConnell Brain Imaging Centre, Montreal Neurological Institute, McGill University, Montreal, Canada, 2Erasmus University Medical Centre, Rotterdam, The Netherlands, 3Department of Psychology, McGill University, Montreal, Canada

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Anna Zamorano1, Federico Arguissaint1, Boris Kleber2, Peter Vuust2, Herto Flor2, Thomas Graven-Nielsen1
1Center for Neuroplasticity and Pain, Department of Health Science and Technology, Aalborg University, Denmark, 2Center for Music in the Brain, Dept.Aarhus University & The Royal Academy of Music Aarhus/Aalborg, Aarhus University, Denmark, 3Department of Cognitive and Clinical Neuroscience, Central Institute of Mental Health, Mannheim, Germany

2308  Age-related changes in pain processing and resting state functional connectivity
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1University of Florida, Gainesville, FL
2190 Progression of visual pathway white matter degeneration in glaucoma
Shereif Haykral, Nomdo Jansonius, Frans Cornelissen
1Department of Ophthalmology, University Medical Center Groningen, the Netherlands

2191 Representational distinction of numbers, letters, and novel characters in the “number form area”
Darren Yed1,2, Courtney Pollack1, Rebecca Merkley2, Daniel Ansari, Gavin Price1
1Vanderbilt University, Nashville, TN, USA, 2Nanyang Technological University, Singapore, Singapore,
3Boston College, Boston, MA, USA, 4Carleton University, Ottawa, ON, Canada, 5University of Western
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1Sungkyunkwan University, Suwon, Gyeonggi-do, Korea, Republic of, 2Center for Neuroscience
Imaging Research, Institute for Basic Science, Suwon, Gyeonggi-do, Korea, Republic of, 3Stanford
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Anna Truzzi1, Rhodri Cusack1
1Trinity College Dublin, Dublin

2232 Experimental achromatopsia treatment reveals the extent of cortical recovery in adulthood
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2258 Face and body emotion perception across development and associated white
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2261 fMRI reveals anterior V1 activation in a retinitis pigmentosa patient
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2288 The Comparison of LLL and Electrical Stimulation Induced Brain Activations: a rodent fMRI study
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2279 Anticipatory responses to cross-category predictive cues: fMRI on face and place sensitive areas
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2284 Neuroimaging data from multiple sources in PROTo v3.0: spatiotemporal patterns of
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Isabel David1,2, Jessica Schrouff, Tong Wu1,3, Konstantinos Tsirilis, Gilles Pourtois4, Christophe Phillips5,
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2285 Predicting conscious perception in patients with striate cortex lesions: A MEG study
Vanessa Hadidi1, Annalisa Pascarella1, Tarek Lajnef1, Michele MacLean1, Dang K. Nguyen2, Karim
Jerbi1, Franca Lepore1
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2286 Rhythmic sampling of visual features in the brain during object recognition
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2290 Population receptive fields in V1 are altered in glaucoma
Melissa Wright1, Krishna Singh1, Simon Rushon1, D. Samuel Schwarzkopf2, James Morgan1, Sławomir
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2298* Genetic influence is linked to cortical morphology in category-selective areas of visual cortex
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2301 Shared experience drives non-prototypical spatial signals
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2304 Recurrent Neural Pathways in Motion and Shape Visual Perception: a TMS Study
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2306 Visual cortex activation in subjects with artificially impaired vision: a model of optic neuritis
Pavel Hol1, Jan Kremlaček1, Tereza Svrčínová1, František Odstrčil1, Irena Šínová2, Martina
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2309* The brainlife.io cloud services for human visual-field mapping & population receptive field estimate
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2312 N170 as a brain representation for generic real-world visual expertise: a review and meta-analysis
Minghao Dong1, Yifei Chen1, Xuewei Xie1
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2313 Differential roles of the two face networks in processing identity and social information
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2315 Reconstruction of continuous motion direction from fMRI data
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Sleep and Wakefulness

2179 BOLD & Physiological Correlates of Microsleeps and Awakening
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2189 A daytime nap benefits spatial and motor skills but a night of sleep enhances cognitive strategies
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2206 Toward a Complete Taxonomy of Resting State Networks Across Wakefulness and Sleep
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The Royal’s Institute of Mental Health Research, Ottawa, Ontario, 4University of Western Ontario,
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2208* Non-REM Sleep Network Connectivity Represents an Altered, Not a Reduced State of Consciousness
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2213 Alterations in overnight changes of Glutamate+Glutamine levels in children and adolescents with ADHD
Corina Voikl, Valeria Jaramillo, Melanie Furrer, Mirjam Studier, Ruth O’Gorman Tuura, Reto Huber
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2214 Shared genetic etiology between sleep duration, behavior, and cortical thickness
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2225 Extracting Beat Information in Sleeping Brain
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2229 Concurrent fMRI-EEG to study maintenance of wakefulness in healthy and sleep-prone subjects
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2234* The impact of sleep deprivation on cortical functional integration and cognition.
Nathan Cross, Florence Pomares, Aude Jegou, Alex Nguyen, Aurore Perrault, Dylan Smith, Umit Aydin, Christophe Grova, Thien-Thanh Dang-Vu
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2245 Exploring how auditory stimulation during sleep affects brain activity using MEG
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2249 Altered Cognitive Control Activations After Moderate Sleep Loss
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2262 Increased Default-Mode Network Connectivity with Fatigue and Sleepiness Following a Brain Injury
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2263 Dynamic functional maps capture new features of information integration and consciousness in sleep
Anjali Tarunt, Danyal Wainstein, Virginie Sterpenich, Laurence Bayer, Lampros Perogamvros, Nikolai Axmacher, Sophie Schwartz, Dimitri Van De Ville
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2264 Continuous enhancement of default mode network activity during deep sleep
Lang Qin, Su Shu, Shuqin Zhou, Jing Xu, Yanin Yin, Qihong Zou, Jia-Hong Gao
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2280 EEG and behavioural correlates of mild sleep deprivation and vigilance
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2296 EEG scaling patterns in individuals with high vs low dream recall: A machine learning study
Tarek Lajnef, Thomas Thiery, Louis Leconte, Golnoush Alamian, Jean Marc Linan, Jean-Baptiste Echenlaub, Marie Perrine Ruby, Karim Jerbi
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2302 The relationship between cognitive ability and BOLD activation across sleep-wake states.
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2303 Towards a characterization of the loss of wakefulness using a time varying connectivity approach
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2305 A sequence of activity across thalamic nuclei occurs at arousal from NREM sleep
Beverly Setzer, Nina Fultz, Giorgio Bonmassar, Laura Lewis
Boston University, Boston, MA, Massachusetts General Hospital, Harvard Medical School, Boston, MA
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2194 Changes in resting-state functional connectivity by cognitive fatigue
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2209 Electroacupuncture alters insular cortical functional connectivity in obesity patients during food-cue
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2219 Cortical processing of interoceptive prediction errors using inspiratory resistive loads
Olivia Foul6, Sebastian Rieger1, Stephanie Marin1, Laura Nanzi2, Roger Luechinger3, Franciszek Henne6, Klaas Pruessman4, Lars Kasper1, Sandra Igleias2, Klaas Enno Stephan3
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2223 Functional Connectivity of Amygdala in a Simple and Short Picture Viewing Task
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2224 Connectivity Dynamics of the Right Anterior Insula Revealed by fMRI-constrained EEG Source Analysis
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2316 Quantification of Brain Oxygen Extraction Fraction (OEF) Using QSM and a Hyperoxic Challenge
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2017 Modified resting state fMRI protocol for improved denoising and assessment of vascular function
Rachael Stickland1, Apoorva Ayyagari2, Kristina Zvolanek2, Stefano Moia3, Molly Bright1
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2207 Whole Brain Aerobic Glycolysis Indices Measured with MRI and 18FDG PET: Preliminary Validation
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2320 Effect of vascular oxygen heterogeneity on the BOLD fMRI signal: a simulation study
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2325 How to Best Model the fMRI Carbon Dioxide Response Function: A Comparison of Three Methods
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2326 Regional and depth-dependence variations of cortical blood-flow assessed with high-resolution ASL
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2327 Non-linear characteristics of the negative blood oxygen-level dependent response in human brain
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2328* Metabolic basis of human brain network nodes in resting-states of eyes-closed and eyes-open
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1Yale University, New Haven, CT

2332 Multi-session CVR variability within functional networks
Stefano Moia1, Vicente Ferrer Gallardo2, Rachael Stickland3, Eneko Ururuela1, Maite Termenon2, César Caballero-Gaudes4, Molly Bright1
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2333 Interaction between Electroencephalographic and Cerebral Metabolic Activity in Neonatal Asphyxia
Rasheda Chowdhury1, Zamzam Mahdi2, Beatrice Desnouss1, Bohdana Maranduk2, Imen Benhmida3, Guylaine Aubert1, Elana Pincherksy1, Alia Bircol2, Mathieu Deheus2
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2334 Cortical silencing results in paradoxical fMRI over-connectivity
Carola Canetti1, Federico Rocchi2, Shahryar Noei2, Daniel Gutierrez-Barragan3, Ludovica Coletta1, Alberto Garbusero1, Marco Pagan1, Massimo Pasqualetti4, Alessandro Gozzi3
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2335 Changes in Brain Hemodynamics and Metabolism in Preterm Infants Born at 29-36 Weeks
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2333 Irregular heart rhythms unmask cardiac modulation of BOLD signal from respiratory influences
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2341 Dexmedetomidine, used for studying neurovascular coupling, induces seizures in rats but not in mice.
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2332 BOLD signal-based perfusion lag mapping in monkey brain
Tosihiko Aso1, Chihiro Yokoyama2, Takuya Hayashi1
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2342 Changes in Brain Hemodynamics and Metabolism in Preterm Infants Born at 29-36 Weeks of Gestation
Olivia Beaulieu1, Gabriel Cote Corriveau1, Rasheda Chowdhury2, Marie-Michèle Gagnon3, Melanie Gagnon4, Marie-Noëlle Simard5, Thuy Mai Luu6, Mathieu Dehaes7
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2322 Neurophysiology of Imaging Signals
BOLD signal-based perfusion lag mapping in monkey brain
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2321 Cortical silencing results in paradoxical fMRI over-connectivity
Carola Canetti1, Federico Rocchi2, Shahryar Noei2, Daniel Gutierrez-Barragan3, Ludovica Coletta1, Alberto Garbusero1, Marco Pagan1, Massimo Pasqualetti4, Giuliano Iurilli2, Stefano Panzeri1, Alessandro Gozzi3
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2330 A physiologically-based computational model to study brain lactate exchanges
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2328 The role of glutamate in the cerebral blood flow response to poikilocapnic hypoxemic hypoxia
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2329 Hemodynamic changes of common EEG patterns in critically ill patients: a pilot EEG-FNIRS study
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2331 Interaction between Electroencephalographic and Cerebral Metabolic Activity in Neonatal Asphyxia
Rasheda Chowdhury1, Zamzam Mahdi2, Beatrice Desnouss1, Bohdana Maranduk2, Imen Benhmida3, Guylaine Aubert1, Elana Pincherksy1, Alia Bircol2, Mathieu Deheus2
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OT downregulates rewarding of novel metaphorical compliments in ovulation via dACC-OFC connectivity
Zhao Gao, Xiaole Ma, Xinqi Zhou, Benjamine Becker, Fei Xin, Lei Xu, Feng Zhou, Keith Kendrick
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Compact co-alignment of cortical spatiotemporal spontaneous events and evoked responses
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The influence of biofeedback on cardiac regulation and prefrontal functional connectivity at rest
Andy Schumann, Feliberto De la Cruz, Stefanie Köhler, Lisa Brotte, Karl-Jürgen Bar
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