

## Monday, June 11, 2012, 18:15-19:45

### O-M1: Disorders 1

Chair: Cornelius Weiller

18:15 - 18:30

**90 MT: EEG-fMRI using the ultra-fast MREG sequence allows the single-trial localization of epileptic spikes**

Pierre LeVan, *University Medical Center Freiburg, Freiburg, Germany*

18:30 - 18:45

**142 MT: Mapping Associations between Kidney Biomarkers, Brain Atrophy and Cognition in ADNI: An N=701 study**

Priya Rajagopalan, *Laboratory of Neuro Imaging, Department of Neurology, UCLA School of Medicine, Los Angeles, United States*

18:45 - 19:00

**119 WTh: Children with fetal alcohol spectrum disorders undergo less developmental cortical thinning**

Sarah Treit, *University of Alberta*

19:00 - 19:15

**145 MT: The Pattern of Regional Homogeneity Determining Outcome of Hand Function after Subcortical Stroke**

Dazhi Yin, *Key Laboratory of Brain Functional Genomics, Shanghai Key Laboratory of Magnetic Resonance, ECNU, Shanghai, China*

19:15 - 19:30

**24 MT: C9ORF72 gene mutation increases functional connectivity in FTLD**

Vesa Kiviniemi, *Department of Diagnostic Radiology, Oulu University Hospital, ,*

19:30 - 19:45

**109 MT: Structural Substrates for resting network disruption in temporal lobe epilepsy**

Natalie Voets, *University of Oxford, Oxford, United Kingdom*

### O-M2: Emotion and Motivation

Chair: Alunit Ishai

18:15 - 18:30

**226 MT: Heart Rate Deceleration Predicts BOLD Activity in Default Mode Regions during Emotion Processing**

Xiao-Fei Yang, *University of Southern California, Los Angeles, United States*

18:30 - 18:45

**233 MT: Loss aversion is under the control of dopaminergic signaling**

Alain Dagher, *McGill University, Montreal, Canada*

18:45 - 19:00

**219 MT: Oxytocin enhances encoding of emotional faces under conditions of limited awareness**

Manuela Sibold, *University of Freiburg, Freiburg, Germany*

19:00 - 19:15

**232 MT: Dopamine-dependent cortico-subcortical network functional connectivity: association with impulsivity**

David Cole, *Imperial College London, London, United Kingdom*

19:15 - 19:30

**1053 WTh: Connectivity-based parcellation of the human right 'temporoparietal junction area' (TPJ)**

Rogier Mars, *University of Oxford, Oxford, United Kingdom*

19:30 - 19:45

**242 MT: Reward risk coding in the orbitofrontal cortex: An intracranial recording study in humans**

Yansong Li, *CNRS, Lyon, France*

## **O-M3: Language**

Chair: Nina Dronkers

18:15 - 18:30

**252 WTh: Functional Changes in Language Areas of Brain Tumor Patients Revealed by fMRI and Group ICA**

Hui Mao, *Emory University, Atlanta, United States*

18:30 - 18:45

**359 MT: Representational Similarity Analysis Reveals Heterogeneous Networks Supporting Speech Motor Control**

Zane Zheng, *Queen's University, Kingston, Canada*

18:45 - 19:00

**352 MT: Auditory–motor interactions during speech production in monolingual and bilingual speakers**

Oiwi Parker Jones, *Wellcome Trust Centre for Neuroimaging, London, United Kingdom*

19:00 - 19:15

**299 MT: Electrophysiological correlate of pre-literate print sensitivity - a predictor for reading outcome?**

Silvia Brem, *Department of Child and Adolescent Psychiatry, University of Zürich, Zürich, Switzerland*

19:15 - 19:30

**330 MT: Distinct Cortical Representations for Intact Audiovisual Speech and the McGurk Effect**

Laura Erickson, *Georgetown University, Washington, DC, United States*

19:30 - 19:45

**346 MT: GABAergic function during speech production**

Arash Fazl, *Mount Sinai Medical School, New York, United States*

## **O-M4: Resting State Networks**

Chair: Michael Greicius

18:15 - 18:30

**665 MT: Edge selection preserving the topological features of brain network**

Hyekyoung Lee, *SNUH, Seoul, Korea, Republic of*

18:30 - 18:45

**80 WTh: The Autism Brain Imaging Data Exchange (ABIDE) consortium: open sharing of autism resting state fMRI**

Adriana Di Martino, *NYU Child Study Center*

18:45 - 19:00

**554 MT: Network Analysis Could Reveal Local And Global Intelligence Fingerprint In Resting State fMRI Data**

Emiliano Santarnecchi, *Department of Neurological and Sensorial Sciences, Siena, Italy*

19:00 - 19:15

**739 MT: Resting state networks are characterized by high frequency BOLD fluctuations**

Erik van Oort, *MIRA Institute, University of Twente, Donders Institute, Radboud University Nijmegen, Nijmegen, Netherlands*

19:15 - 19:30

**476 MT: Tracking whole-brain connectivity dynamics in the resting-state**

Elena Allen, *Mind Research Network, Albuquerque, United States*

19:30 - 19:45

**795 WTh: Establishing homotopic inter-hemispheric regional correspondences via rest functional connectivity**

Marc Joliot, *UMR5296, Université Bordeaux Segalen, CNRS, CEA, Bordeaux, France*

**Tuesday, June 12, 2012, 11:00 – 12:30**

## **O-T1: Modeling and Analysis Methods**

Chair: Niko Kriegeskorte

11:00 - 11:15

**648 MT: Real-time tracking and biofeedback of the default mode network**

R. Cameron Craddock, *Virginia Tech Carilion Research Institution, Blacksburg, United States*

11:15 - 11:30

**625 MT: Model-Based Clustering Using Generative Embedding**

Kay H. Brodersen, *ETH Zurich, Zurich, Switzerland*

11:30 - 11:45

**386 MT: Hierarchical Tree-Guided Brain Disease Classification**

Manhua Liu, *Department of Radiology and BRIC, Chapel Hill, United States*

11:45 - 12:00

**760 MT: Fast and accurate modelling of longitudinal neuroimaging data**

Bryan Guillaume, *University of Warwick, Coventry, United Kingdom*

12:00 - 12:15

**499 MT: Estimating BOLD Signals of Deep Brain Networks From EEG using Canonical correlation Analysis**

Lavi Shpigelman, *IBM, Haifa, Israel*

12:15 - 12:30

**632 MT: Capturing high-order interactions in neuroimaging data**

Sergey Plis, *The Mind Research Network*

## **O-T2: Motor Behavior, Learning & Disorders**

Chair: Geneviève Albouy

11:00 - 11:15

**786 MT: Neuronal network coherent with the kinematics of observed hand movement**

Xavier De Tiège, *Université Libre de Bruxelles, Brussels, Belgium*

11:15 - 11:30

**784 MT: Estimation of three-dimensional movement trajectory from MEG signals**

Hong Gi Yeom, *Seoul National University, Seoul, Korea, Republic of*

11:30 - 11:45

**814 MT: Ventral and Dorsal Stream Dissociation During Action Recognition in the Human Brain**

Giacomo Handjaras, *Laboratory of Clinical Biochemistry and Molecular Biology, University of Pisa, Pisa, Italy*

11:45 - 12:00

**873 WTh: Differential contribution of BA4a and BA4p to motor learning.**

Nikhil Sharma, *NINDS, Bethesda, United States*

12:00 - 12:15

**866 WTh: Motor learning and offline processes of consolidation associated with rapid GABA modulation**

Christel Gudberg, *University of Oxford, Oxford, United Kingdom*

12:15 - 12:30

**279 WTh: Basal ganglia-cortical interactions in Parkinsonian patients**

Andre Marreiros, *University of Oxford*

### **O-T3: Neuroanatomy**

Chair: Chris Lambert

11:00 - 11:15

**884 MT: Two new cytoarchitectonic areas of the human frontal pole**

Sebastian Bludau, *Institute of Neuroscience and Medicine, INM-1, Juelich, Germany*

11:15 - 11:30

**920 MT: The Pathway of the Middle Longitudinal Fasciculus in the human brain**

Yibao Wang, *The First Affiliated Hospital of China Medical University, ShenYang, China*

11:30 - 11:45

**823 MT: Receptor-based parcellation of the human inferior parietal lobule and its implication for function**

Svenja Caspers, *Institute of Neuroscience and Medicine, INM-2, Research Center Juelich, Juelich, Germany*

11:45 - 12:00

**889 MT: Surface Gradient Comparison of Myelin and fMRI: Architectonic and Functional Border Co-localization**

Matthew Glasser, *Washington University in St. Louis, St. Louis, United States*

12:00 - 12:15

**870 MT: A cross-modal, cross-species comparison of connectivity analyses in the primate cortex**

Andrew Reid, *Montreal Neurological Institute, Montreal, Canada*

12:15 - 12:30

**917 MT: Damage to white matter pathways in chronic visuospatial neglect**

Michel Thiebaut de Schotten, *Institute of Psychiatry, London, United Kingdom*

## O-T4: Perception and Attention

Chair: Yanchao Bi

11:00 - 11:15

**940 MT: Efficient Visual Search Elicits Sustained Broadband Gamma Activity in the Dorsal Attention Network**

Tomas Ossandon, *INSERM U1028, CNRS UMR5292, Lyon Neuroscience Research Center, Brain Dynamics and Cognition Team, Ly, Lyon, France*

11:15 - 11:30

**1056 MT: Individually unique representations of particular objects in human inferior temporal cortex**

Ian Charest, *MRC-CBSU, Cambridge, United Kingdom*

11:30 - 11:45

**928 MT: Right Temporo-parietal Junction and Attentional Reorienting**

Chi-Fu Chang, *National Central University, Taoyuan, Chinese Taipei*

11:45 - 12:00

**1066 MT: Callosal connections and surface area of V1 predict subjective experience of binocular rivalry**

Erhan Genc, *Max Planck Institute for Brain Research, Frankfurt am Main, Germany*

12:00 - 12:15

**1072 MT: Is the domain organization of ventral visual pathway independent of visual experience and modality?**

Chenxi He, *State Key Laboratory of Cognitive Neuroscience and Learning, Beijing Normal University, Beijing, China*

12:15 - 12:30

**1069 MT: A Developmental Study of Face Identity Processing Using fMRI Adaptation**

Frank Haist, *UC San Diego, La Jolla, United States*

**Wednesday, June 12, 2012, 11:00-12:30**

**O-W1: Disorders 2**

Chair: Mirella Dapretto

11:00 - 11:15

**90 WTh: Widespread brain hyper-connectivity in children with autism**

Kaustubh Supekar, *Stanford University School of Medicine, Stanford, United States*

11:15 - 11:30

**78 WTh: Robust prediction of autism diagnosis from brain responses to biological motion**

Malin Bjornsdotter, *Yale Child Study Center, New Haven, United States*

11:30 - 11:45

**342 WTh: The neural bases of reversal learning deficits in unmedicated schizophrenia patients**

Florian Schlagenhauf, *Charité Universitätsmedizin Berlin, Berlin, Germany*

11:45 - 12:00

**76 WTh: Underconnectivity of STS predicts socio-cognitive deficits in Autism**

Kaat Alaerts, *Katholieke Universiteit Leuven, ,*

12:00 - 12:15

**334 WTh: Aberrant inter-network connectivity reflects anterior insula activity and psychosis in schizophrenia**

Andrei Manoliu, *Klinikum Rechts der Isar, TU Munich, Munich, Germany*

12:15 - 12:30

**133 WTh: Altered Resting State Functional Connectivity in the Limbic System in Social Anxiety Disorder**

Sheeba Anteraper, *MIT*

**O-W2: Higher Cognitive Functions & Social Neuroscience**

Chair: Jennifer Beer

11:00 - 11:15

**496 WTh: Is it time to say goodbye to the general intelligence factor 'g'?**

Adam Hampshire, *University of Western Ontario, London, Canada*

11:15 - 11:30

**405 WTh: Neural substrate for adaptive learning in dynamic environments**

Chaohui Guo, *Zurich University, Zurich, Switzerland*

11:30 - 11:45

**1100 WTh: Neural mechanisms of human communicative innovations**

Arjen Stolk, *Donders Institute, Nijmegen, Netherlands*

11:45 - 12:00

**421 WTh: Resting State Functional Connectivity Predicts Impulsivity in Economic Decision-making**

Nan Li, *University of Science and Technology of China, Hefei, China*

12:00 - 12:15

**451 WTh: The Functional Neuroanatomic Bases of Bilingual Cognitive Control Advantages in Aging**

Brian Gold, *University of Kentucky*

12:15 - 12:30

**1032 WTh: Functional and Structural Correlates of Social Influence in the Human Brain**

Daniel Campbell-Meiklejohn, *Aarhus University, Aarhus, Denmark*

### **O-W3: Imaging Genetics and Informatics**

Chair: Henrik Walter

11:00 - 11:15

**369 WTh: Increasing Power for Voxel-wise Genome-wide Association Studies**

Tian Ge, *Fudan University and The University of Warwick, Shanghai, China*

11:15 - 11:30

**483 MT: A novel meta-analytic approach: Mining frequent activation patterns in neuroimaging databases**

Julian Caspers, *Research Center Jülich, Jülich, Germany*

11:30 - 11:45

**360 WTh: Genome-wide association analysis of working memory brain activation in a population-based sample**

Gabriella Blokland, *Queensland Institute of Medical Research, Brisbane, Australia*

11:45 - 12:00

**388 WTh: Relationship of Human Brain Anatomy and Gene Expression: Analysis of Allen Human Brain Atlas Data**

Elaine Shen, *Allen Institute for Brain Science, Seattle, United States*

12:00 - 12:15

**386 WTh: Stem-cell signaling pathways and cerebral aging: Transcriptome-wide analysis**

Peter Kochunov, *Maryland Psychiatric Research Center, Baltimore, United States*

12:15 - 12:30

**826 MT: High Resolution Reference Atlases of Pre-natal Human Brain**

John Hohmann, *Allen Institute for Brain Science, Seattle, United States*

## O-W4: Physiology, Metabolism and Neurotransmission

Chair: Biyu He

11:00 - 11:15

**1001 WTh: Low frequency oscillations measured in the periphery are strongly correlated with cerebral signals**

Yunjie Tong, *McLean Hospital, Harvard University, Belmont, United States*

11:15 - 11:30

**729 WTh: Reduced GABA in the Visual Cortex of Patients with NF1 – A New Perspective on the Disease Mechanism**

Ines Violante, *Ibili, Portugal*

11:30 - 11:45

**986 WTh: Energetic Basis of Spontaneous Fluctuations in Neuronal Activity and Neuroimaging Signals**

Fahmeed Hyder, *Yale University, New Haven, United States*

11:45 - 12:00

**719 MT: Metabolic and Hemodynamic Differences Among Resting-State Brain Networks**

Ai-Ling Lin, *University of Texas Health Science Center at San Antonio, San Antonio, United States*

12:00 - 12:15

**990 WTh: Spatiotemporal characteristics of cortical column-specific and -nonspecific BOLD and CBV fMRI signal**

Chan Hong Moon, *University of Pittsburgh, Pittsburgh, United States*

12:15 - 12:30

**994 WTh: Acute and Chronic Effects of Glucose on Brain Metabolism**

Hao Huang, *University of Texas Southwestern Medical Center, Dallas, United States*

**Thursday, June 14, 2012, 14:00-15:30**

### **O-Th1: Brain Stimulation Methods**

Chair: Peter Dechent

14:00 - 14:15

**25 WTh: Role of interhemispheric connectivity in the auditory network: a combined TMS and fMRI study**

*Jamila Andoh, Montreal Neurological Institute, Montreal, Canada*

14:15 - 14:30

**4 WTh: Default Mode Network Functional Structure Predicts Treatment Response of Deep Brain Stimulation**

*Alexandre Franco, Pontificia Universidade Católica do Rio Grande do Sul, Porto Alegre, Brazil*

14:30 - 14:45

**16 WTh: Modulation of resting state and task-related activity induced by dual motor cortex stimulation**

*Robert Lindenberg, Charite University Medicine, Berlin, Germany*

14:45 - 15:00

**33 WTh: MEP predicts motor recovery in chronic stroke patients undergoing 4-weeks of daily physical therapy**

*Fabricio Lima Brasil, Max Planck Research School - University of Tübingen, Tübingen, Germany*

15:00 - 15:15

**119 MT: Daily tDCS induces persistent functional and structural cortical changes in chronic stroke patients.**

*Ugwechi Amadi, University of Oxford, Oxford, United Kingdom*

15:15 - 15:30

**12 WTh: Transcranial Direct Current Stimulation (tDCS) Modulates Connectivity in Human Attention Networks**

*Peter Dechent, MR-Research in Neurology and Psychiatry, Department of Cognitive Neurology, University Medicine, Goettingen, Germany*

### **O-Th2: Imaging Methods**

Chair: Timothy Q. Duong

14:00 - 14:15

**706 WTh: 'Investigating the temporal dynamics of resting state connectivity with MEG'**

*Adam Baker, University of Oxford, Oxford, United Kingdom*

14:15 - 14:30

**534 WTh: Human cortical layers detected with high resolution diffusion MRI at 9.4T**

*Alard Roebroek, Maastricht University, Maastricht, Netherlands*

14:30 - 14:45

**665 WTh: In Vivo Human Brain Measurements of Axon Diameter Using 300 mT/m Maximum Gradient Strengths**

Jennifer McNab, *A.A. Martinos Center for Biomedical Imaging, ,*

14:45 - 15:00

**792 WTh: Quantification of dopamine in the human striatum in anatomical and connectivity derived subdivisions**

Andri Tziortzi, *University of Oxford*

15:00 - 15:15

**653 WTh: Automatic HARDI White Matter Tract Labeling with Multiple Atlas Fusion**

Yan Jin, *University of California, Los Angeles, Los Angeles, United States*

15:15 - 15:30

**595 WTh: Resting State fMRI Predicts Task Activation of Individual Subjects**

Prantik Kundu, *NIMH*

### **O-Th3: Learning and Memory**

Chair: Susan Bookheimer

14:00 - 14:15

**845 WTh: Increased functional connectivity between hippocampus and striatum during memory consolidation**

Daniel Woolley, *KU Leuven, Leuven, Belgium*

14:15 - 14:30

**836 WTh: Sub-Regions in Human Entorhinal Cortex are Domain-Sensitive**

Heidrun Schultz, *Department of Systems Neuroscience, University Medical Center Hamburg-Eppendorf, Hamburg, Germany*

14:30 - 14:45

**887 WTh: Influence of acute bouts of submaximal exercise on working memory: An fMRI - study**

Karl Koschutnig, *Karl-Franzens University, Graz, Austria*

14:45 - 15:00

**829 WTh: The role of classical speech areas in auditory long-term memory**

Anke Karabanov, *Danish Research Center for Magnetic Imaging, Copenhagen, Denmark*

15:00 - 15:15

**870 WTh: Hippocampal and prefrontal reorganization is associated with the maturation of fact retrieval**

Shaoyang Qin, *Stanford University, Stanford, United States*

15:15 - 15:30

**842 WTh: Posterior Hippocampus and Fornix Contributes to Long-Term Memory Consolidation of Contextual Memory**

Sicong Tu, *Neuroscience Research Australia, Sydney, Australia*

**O-Th4: Lifespan Trajectories**

Chair: Simon Eickhof

14:00 - 14:15

**915 WTh: Responsiveness to missed chances in successful aging**

Stefanie Brassen, *University Medical Center Hamburg-Eppendorf, Hamburg, Germany*

14:15 - 14:30

**956 WTh: Individual Change Patterns in Elderly and the Structural Covariance of Decline**

Gabriel Ziegler, *Jena University Hospital, Jena, Germany*

14:30 - 14:45

**955 WTh: Differential lifespan trajectories and associations of human brain structure and function**

Juan Zhou, *Duke-NUS Graduate Medical School, Singapore, Singapore*

14:45 - 15:00

**945 WTh: Supervisory Experience in Midlife Slows Rate of Hippocampal Atrophy in Late Life**

Chao Suo, *UNSW, Randwick, Australia*

15:00 - 15:15

**922 WTh: Sex and Age effects on grey matter loss in late life - A longitudinal study of 1172 healthy elderly**

Fabrice Crivello, *GIN, UMR5296 CNRS-CEA-Bordeaux University, Bordeaux, France*

15:15 - 15:30

**919 WTh: Dopamine modulates episodic memories in old age**

Rumana Chowdhury, *Institute of Cognitive Neuroscience, London, United Kingdom*