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Organization for Human Brain Mapping

Schedule of Poster Presentations and List of Posters

*Indicates poster will also be presented during an Oral Session.
Information listed below appears as author submitted.

Schedule of Poster Presentations and List of Posters **Monday, June 16, 2008**

11:30 – 12:30 *You Yangs Hall (Level 3)*

COGNITION & ATTENTION
Attention (auditory, tactile, motor)

COGNITION & ATTENTION
Attention (visual)

doi:10.1016/j.neuroimage.2008.04.008

COGNITION & ATTENTION
Cognitive Aging

COGNITION & ATTENTION
Cognitive Development

COGNITION & ATTENTION
Perception, Imagery, Awareness

DISORDERS OF THE NERVOUS SYSTEM
Mood & Anxiety Disorders

EEG alpha activity reflects hypofrontality in schizophrenia, *Maria G. Knyazeva[1,2], Mahdi Jalili[3], Reto Meuli[2], Martin Hasler[3], Oscar De Feo[4], Kim Q. Do[5], [1]Dept of Neurology, Centre Hospitalier Universitaire Vaudois and University of Lausanne, Lausanne, Switzerland, [2]Dept of Radiology, Centre Hospitalier Universitaire Vaudois and University of Lausanne, Lausanne, Switzerland, [3]École Polytechnique Fédérale de Lausanne (EPFL), School of Computer and Communication Sciences, IC-LANOS, Lausanne, Switzerland, [4]4Department of Microelectronic Engineering, University College Cork, Cork City, Ireland, [5]Center for Psychiatric Neuroscience, Dept of Psychiatry, Centre Hospitalier Universitaire, Lausanne, Switzerland* 217 M-AM

Morphological abnormalities of the cerebral cortical thickness in schizophrenia, *Tao Liu[1], Feng Shi[2], Yuan Zhou[2], Wanlin Zhu[4], Lei Lin[2], Jesse Jin[1], Tianzi Jiang[2], Suhuai Luo[1], Mira Park[1], Paul Rasser[3], Ulrich Schall[3], [1]School of Design, Communication & I.T, The University of Newcastle, Callaghan NSW, Australia, [2]National Laboratory of Pattern Recognition, Institute of Automation, Chinese Academy of Sciences, Beijing, China, [3]Schizophrenia Research Institute, Sydney, Australia, Priority Centre for Brain & Mental Health Research, University of Newcastle, Newcastle, Australia, Hunter Medical Research Institute, Newcastle, Australia, [4]Neuropsychiatric Institute, Prince of Wales Hospital, Randwick NSW, Australia* 221 M-AM

LINKING CEREBRAL GREY MATTER AND MISMATCH NEGATIVITY (MMN) IN SCHIZOPHRENIA, *Paul E. Rasser[1,2], Juanita Todd[1,2], Paul M. Thompson[3], Patricia T. Michie[1,2], Philip B. Ward[4], Patrick Johnston[5], Katrin Helmbold[2,6], Vanessa Case[2], Paul A. Tooney[1,2], Ulrich Schall[1,2], [1]Schizophrenia Research Institute, Sydney, Australia, [2]Priority Centre for Brain & Mental Health Research, University of Newcastle, Newcastle, Australia, [3]Laboratory of Neuro Imaging, University of California Los Angeles, Los Angeles, USA, [4]Schizophrenia Research Unit, Liverpool Hospital, University of New South Wales, Sydney, Australia, [5]Brain Sciences Institute, Swinburne University of Technology, Melbourne, Australia, [6]Department of Psychology, University of Konstanz, Konstanz, Germany* 225 M-AM

3D Pattern of Brain Abnormalities in Chronic Schizophrenia Visualized Using Tensor-Based Morphometry: a Multi-Site Structural Imaging Study, *Theo G.M. van Erp[1], Ming-Chang Chiang[2], Daqiang Sun[1], Molly E. Hardt[1], Jeremy H. Bockholt[3], Jessica A Turner[4], Vince D. Calhoun[3,5,6], Hans J. Johnson[7], Doug N, Greve[8], Greg G. Brown[9], Judith M. Ford[10], Steven G. Potkin[4], Tyrone D. Cannon[11], Paul M. Thompson[2], Arthur W. Toga[2], F. BIRN[1], [1]Department of Psychology, University of California Los Angeles, Los Angeles, USA, [2]Lab of Neuroimaging and Department of Neurology, University of California Los Angeles, Los Angeles, USA, [3]The Mind Research Network, Albuquerque, USA, [4]Department of Psychiatry and Human Behavior, University of California Irvine, Irvine, USA, [5]Department of Electrical and Computer Engineering, University of New Mexico, Albuquerque, USA, [6]Department of Psychiatry, Yale University, New Haven, USA, [7]Iowa Mental Health Clinical Research Center, The University of Iowa Hospitals and Clinics, Iowa City, USA, [8]Department of Radiology, Massachusetts General Hospital, Boston, USA, [9]Psychology Services, Veterans Administration San Diego Healthcare System, and Psychiatry Department, University of San Diego, San Diego, USA, [10]Department of Psychiatry, Yale University School of Medicine, West Haven, USA, [11]Departments of Psychology and Psychiatry and Biobehavioral Sciences, University of California Los Angles, Los Angeles, USA* 229 M-AM

EMOTION & MOTIVATION

Reward

Anterior Cingulate and Vulnerability to Depression; Blunted Response to Incongrous Feedback in a Novel Reward-Related Task., *Darragh Downey[1], Shane McKie[2], JFW Deakin[2], Ian Anderson[2], Rebecca Elliott[2], [1]Imaging Science and Biomedical Engineering, University of Manchester, Manchester, United Kingdom, [2]Neuroscience and Psychiatry Unit, University of Manchester, Manchester, United Kingdom* 233 M-AM*

The roles of expectation and dopamine release in the mechanism of the placebo effect in Parkinson's disease: A high-resolution PET study with [11C] raclopride, *Sarah Lidstone[1], Katherine Dinelle[2], Stephan Blinder[1], Tom Ruth[3], Vesna Sossi[2], Jon Stoessl[1], [1]Pacific Parkinson's Research Centre, Vancouver, Canada, [2]Department of Physics & Astronomy, Vancouver, Canada, [3]TRIUMF, Vancouver, Canada* 237 M-AM

Neural Activity in a Delay Discounting Task Correlates with Interindividual Differences in Impulsivity and Self-Control, *Lioba Schmitz, Corinna Nuesser, Susanne Erk, Dina Schardt, Henrik Walter, Dept. of Psychiatry, Div. of Medical Psychology, University of Bonn, Bonn, Germany* 241 M-AM

EMOTION & MOTIVATION
Sexual Behavior

EMOTION & MOTIVATION
Social Behavior

GENETICS

IMAGING TECHNIQUES & CONTRAST MECHANISM
EEG

IMAGING TECHNIQUES & CONTRAST MECHANISM
Functional MRI

IMAGING TECHNIQUES & CONTRAST MECHANISM
MEG

LANGUAGE
Language Acquisition

MEMORY & LEARNING
Working Memory

MODELING & ANALYSIS
Bayesian Modeling

11:30 – 12:30 Corryong Hall (Level 2)

MODELING & ANALYSIS
Classification & Predictive Modeling

Classification of Resting State fMRI Scans using Temporal Network Associations in Schizophrenic and Normal Patients, *Ariana Anderson[1], Mark Cohen[2], Ivo Dinov[1,3], Javier Quintana[4], Jon Sherin[4], Alan Yuille[1], [1]Department of Statistics, University of California, Los Angeles, Los Angeles, USA, [2]Psychiatry & Behavioral Sciences, University of California, Los Angeles, Los Angeles, USA, [3]Center for Computation Biology, Los Angeles, USA, [4]West Los Angeles Veterans Administration, UCLA, Los Angeles, USA* 453 M-AM

Gaussian smoothing and brain area activation relationship – determination of optimal filter size through ROC curves, *Lilian Contin[1], João Sato[1], Griselda Garrido[2], [1]NIF/LIM44 Institute of Radiology - University of São Paulo, São Paulo, Brazil, [2]Instituto Israelita de Ensino e Pesquisa, São Paulo, Brazil* 461 M-AM

An investigation of the visual coding of faces using kernel canonical correlation analysis, *Nicholas Furl[1], David Hardoon[1], Janaina Mourão-Miranda[2], Nikolaus Weiskopf[1], John Shaw-Taylor[1], Raymond Dolan[1], [1]University College London, London, United Kingdom, [2]Kings College London, London, United Kingdom* 465 M-AM

Feature Analysis of Event-related Brain Potentials by Statistical Classification: Application of Naive Bayes Method and Principal Component Analysis to Predicting Auditory Stimuli, *Yasuyuki Inoue[1], Akitoshi Ogawa[2], Kota Arai[3], Hidehiko Matsumoto[3], Atsuhito Toyomaki[4], Hiroshige Takeichi[2], Takashi Omori[4], Sachiko Koyama[4], Takashi Morotomi[3], Michiteru Kitazaki[1], [1]Toyohashi University of Technology, Toyohashi-shi, Japan, [2]RIKEN, Wako-shi, Japan, [3]Sakushin Gakuin University, Utsunomiya-shi, Japan, [4]Hokkaido University, Sapporo-shi, Japan* 469 M-AM

Profiling brain function for source imaging in EEG and MEG: A similarity ranking method for evaluating individual activation, *Yannick Marchand[1,2,3,4], Ryan D'Arcy[1,2,5], Vanessa Versteeg[1,2], Erin Mazerolle[1,2], [1]Institute for Biodiagnostics (Atlantic), National Research Council Canada, Halifax, Canada, [2]Department of Psychology, Dalhousie University, Halifax, Canada, [3]Faculty of Computer Science, Dalhousie University, Halifax, Canada, [4]School of Human Communication Disorders, Dalhousie University, Halifax, Canada, [5]Department of Radiology, Dalhousie University, Halifax, Canada* 473 M-AM

Neuroimaging Platform for Neuroinfomatics: NIMG-PF, *Ryouji Suzuki[1], Kazuhisa Niki[2], Norio Fujimaki[3], Shinobu Masaki[4], Kazuhisa Ichikawa[1], Shiro Usui[5], [1]Kanazawa Institute of Technology, Kanazawa, Japan, [2]Neuroscience Research Institute, National Institute of Advanced Industrial Science and Technology, Tsukuba, Japan, [3]National Institute of Information and Communications Technology, Kobe, Japan, [4]Brain Activity Imaging Center, ATR-Promotions, Kyoto, Japan, [5]RIKEN Brain Science Institute,, Wako, Japan* 477 M-AM

Classifying Cortical Surface Folding: An Adaptive Filter based on Spatial and Frequency Curvature Properties, *Rudolph Pienaar[1,2], Bruce Fischl[1,2], Nasser Al Dossary[3], Nikos Makris[1,2], P Ellen Grant[1,2], [1]Harvard Medical School, Boston, USA, [2]Massachusetts General Hospital, Boston, USA, [3]King Faisal Specialist Hospital and Research Centre, Riyadh, Saudi Arabia* 481 M-AM

Quantitative Multiscale Brain Modeling: Toward a Large-Scale "Working Brain" Model, *Peter Robinson, Andrew Phillips, Parry Chen, Anthony Krensel, Peter Drysdale, Christopher Rennie, University of Sydney, Sydney, Australia* 485 M-AM

Sex Differences in Short Brain Waves: Where and When., *Akaysha Tang[1,2], Peng Sun[3], Zhen Yang[1], Amy Korzekwa[1], Matthew Sutherland[1], [1]Department of Psychology, Albuquerque, USA, [2]Department of Neurosciences, Albuquerque, USA, [3]Department of Electrical and Computer Engineering, Albuquerque, USA* 489 M-AM

Decoding unconscious determinants of human decisions in real-time, *Martin Weygandt[1], Chun Siong Soon[1,2], John-Dylan Haynes[1,2], [1]Bernstein Center for Computational Neurosciences Berlin, Berlin, Germany, [2]Max Planck Institute for Cognitive and Brain Sciences, Leipzig, Germany* 493 M-AM

MODELING & ANALYSIS
Motion Correction/Spatial Normalization, Atlas Construction

MODELING & ANALYSIS
Univariate Modeling, Linear, & Nonlinear

Manfred Kitzbichler[2], Levent Sendur[2], Ed Bullmore[2], John Suckling[2], [1]Imaging Sciences Department, Imperial College, MRC Clinical Sciences Centre, Hammersmith Campus, London, United Kingdom, [2]Brain Mapping Unit, Department of Pyschiatry, Addenbrooke's Hospital, Hills Road, Cambridge, United Kingdom

MOTOR BEHAVIOR
Hand Movements

MOTOR BEHAVIOR
Motor-Premotor Cortex/Motor Cortical Functions

NEUROANATOMY
Anatomical Studies

Australia, [2]Alfred Psychiatry Research Centre, Monash University, Melbourne, Australia, [3]Alfred Psychiatry Research Centre, Monash University, Melbourne, Australia, [4]Centre for Addiction and Mental Health, Toronto, Canada

Accelerated aging in type 1 diabetes demonstrated with voxel-based analyses of volume and T2 images, *Gaby Pell[1], Ashleigh Lin[2], Mark Wellard[3], Debbie Rankins[2], George Werther[4], Fergus Cameron[4], Graeme Jackson[1], Elisabeth Northam[2], [1]Brain Research Institute, Melbourne, Australia, [2]Murdoch Childrens Research Institute, Melbourne, Australia, [3]Queensland University of Technology, Brisbane, Australia, [4]Royal Children's Hospital, Melbourne, Australia* 637 M-AM

Age-related thinning of cortical grey matter, *Rolf Kötter[1,2], Andrew Reid[1,2], Anouk van Norden[3], Karlijn de Laat[3], Lucas van Oudheusden[3], Alan Evans[4], Frank-Erik de Leeuw[3], [1]UMC Radboud Nijmegen Department of Cognitive Neuroscience, Nijmegen, Netherlands, [2]C & O Vogt Institute for Brain Research, University Clinics Düsseldorf, Düsseldorf, Germany, [3]UMC Radboud Nijmegen Department of Neurology, Nijmegen, Netherlands, [4]McConnell Brain Imaging Center, Montreal Neurological Institute, McGill University, Montreal, Canada* 641 M-AM

BrainVisa Plugin for Automated Measurements of Sulcal Length and Depth, *Bill Rogers[1], Peter Kochunov[1], David Glahn[1], Jeff Rogers[2], Peter Fox[1], [1]University of Texas Health Science Center, San Antonio, USA, [2]Southwest Foundation for Biomedical Research, San Antonio, USA* 645 M-AM

Gender differences in the neuroanatomical correlates of the affective startle reflex, *Sarah Whittle[1,3], Jonathan Kettle[1,3], Laurie O'Brien-Simpson[3], Murat Yucel[1,2], Julian Simmons[1], Nicholas Allen[1,3], [1]ORYGEN Research Centre, University of Melbourne, Melbourne, Australia, [2]Melbourne Neuropsychiatry Centre, University of Melbourne, Melbourne, Australia, [3]Department of Psychology, University of Melbourne, Melbourne, Australia* 649 M-AM

PHYSIOLOGY, METABOLISM, & NEUROTRANSMISSION

Effects of aging on blood flow, oxygen metabolism and blood oxygenation level dependent (BOLD) responses to visual stimulation, *Beau Ances, Christine Liang, Oleg Leontiev, Joanna Perthen, Adam Fleisher, Amy Lansing, Richard Buxton, University of California San Diego, La Jolla, USA* 653 M-AM

Effects of Levodopa on the neural mechanisms of meaning suppression: A 4T fMRI study, *David Copland[1], Greig De Zubicaray[2], Katie McMahon[2], [1]School of Health and Rehabilitation Sciences, The University of Queensland, Brisbane, Australia, [2]Centre for Magnetic Resonance, The University of Queensland,, Australia* 657 M-AM

Neural integration of baroreflex and cognitive/sensory processing shapes central regulation of beat-to-beat blood pressure, *Marcus Gray[1], Karin Rylander[2], Neil Harrison[3], Mikael Elam[2], B. Gunnar Wallin[2], Hugo Critchley[1,3], [1]CISC, Brighton Sussex Medical School, The University of Sussex, Brighton, United Kingdom, [2]Institute of Clinical Neurosciences, Unit of Clinical Neurophysiology Sahlgren University Hospital, Goteborg, Sweden, [3]Institute of Cognitive Neuroscience, Alexandra House, University College London, London, United Kingdom* 661 M-AM

Imaging of Glucose Metabolic Response in Human Brain Induced by Stimulation of Acupoint ST 36: A FDG PET Study, *Xianglan Jin[1], Yilong Ma[2], Jintao Zhang[3], Yigen Wu[4], Baoci Shan[5], Dayi Yin[3], Jinping Sun[3], Xian Shi[3], Jiahe Tian[3], Shulin Yao[3], Bo Yu[1], Ling Yin[3], [1]Neurology Department, 202nd Hospital of PLA, Shenyang, China, [2]Department of Neurology, New York University School of Medicine, New York, USA, [3]1Neuroinformatics Center, PLA General Hospital, Beijing, China, [4]Wuhan Institute of Physics and Mathematics, Chinese Academy of Sciences, Wuhan, China, [5]Institute of High Energy Physics, Chinese Academy of Sciences, Beijing, China* 665 M-AM

Imaging oxygen consumption with Near-Infrared Spectroscopy and fMRI simultaneously, *Rickson Mesquita[1,2], Harsha Radhakrishnan[2], Joseph Mandeville[2], Theodore Huppert[3], Maria Franceschini[2], Roberto Covolan[1], David Boas[2], [1]Universidade Estadual de Campinas, Campinas, Brazil, [2]Massachusetts General Hospital, Charlestown, USA, [3]University of Pittsburgh, Pittsburgh, USA* 669 M-AM*

Understanding your inhibitions: neuropharmacological perturbations of GABAergic systems, metabolic outcomes and network correlations., *Caroline Rae[1,2], Fatima Nasrallah[1,2], Julian Griffin[3], Vladimir Balcar[4], [1]Prince of Wales Medical Research Institute, Randwick,* 673 M-AM

Australia, [2]The University of New South Wales, Sydney, Australia, [3]The University of Cambridge, Cambridge, United Kingdom, [4]The University of Sydney, Sydney, Australia

Resting State Networks - Neither Low Frequency Nor Anticorrelated?, *Stephen Smith[1], Rami Niazy[2], Christian Beckmann[3,1], Karla Miller[1], [1]FMRIB, Oxford University, Oxford, United Kingdom, [2]CUBRIC, Cardiff University, Cardiff, United Kingdom, [3]Imperial College London, London, United Kingdom* 677 M-AM

Caffeine is not a universal BOLD contrast booster, *Lucie Yang, Merideth Addicott, Ann Peiffer, Robert Kraft, Joseph Maldjian, Jonathan Burdette, Luke Burnett, Michael Chen, Paul Laurienti, Wake Forest University School of Medicine, Winston-Salem, USA* 681 M-AM

Functional Connectivity within the Human Thalamocortical System, *Dongyang Zhang, Abraham Snyder, Michael Fox, Mark Sansbury, Joshua Shimony, Marcus Raichle, Washington University, Saint Louis, USA* 685 M-AM

SENSORY SYSTEMS
Multisensory & Crossmodal

Cross-modal temporal processing in dyslexia assessed with Biological Parametric Mapping, *W. David Hairston[1], Ramon Casanova[1], Jonathan Burdette[1], Frank Wood[2], Joseph Maldjian[1], [1]ANSIR Lab, Dept of Radiology, Wake Forest University School of Medicine, Winston-salem, USA, [2]Section of Neuropsychology, Wake Forest University School of Medicine, Winston-salem, USA* 689 M-AM

Audiovisual interactions during access to speech meaning in cochlear implantees: A $H_2{}^{15}O$-PET study, *Hyo-Jeong Lee[1,2], Michael Gaebler[1], Eric Truy[3,4], Anne-Lise Giraud[1], [1]Inserm U742, Laboratoire de Neurosciences Cognitives, Département d'Etudes Cognitives, ENS, Paris, France, [2]Department of Otolaryngology, Hallym University College of Medicine, Anyang, South Korea, [3]Département d'ORL, de Chirurgie Cervico-Maxillo-Faciale et d'Audiophonologie, Hôpital Edouard Herriot, Lyon, France, [4]CNRS UMR 5020, Université Claude Bernard Lyon1, Lyon, France* 693 M-AM

SENSORY SYSTEMS
Pain & Autonomic Function

Differentiating Pain Encoding in Neuropathic Pain Patients, *Lino Becerra[1,2], Gautam Pendse[1], David Borsook[1,2], [1]P.A.I.N. Group McLean Hospital, Belmont, USA, [2]Harvard Medical School, Boston, USA* 701 M-AM

High-Resolution fMRI of heat pain perception at 7T in Humans, *Li Min Chen, Christopher Gatenby, Elzabeth Stringer, Robert Friedman, Feng Wang, John Gore, Vanderbilt University, Nashville, USA* 705 M-AM

Activation of the Trigeminal Principal Sensory Nucleus by Orofacial Muscle Pain, *Paul Nash[1], Vaughan Macefield[2], Iven Klineberg[3], Greg Murray[3], Luke Henderson[1], [1]Dept Anatomy and Histology, University of Sydney, Sydney, Australia, [2]School of Medicine, University of Western Sydney, Sydney, Australia, [3]Jaw Function and Orofacial Pain Research Unit, Faculty of Dentistry, The University of Sydney, Sydney, Australia* 709 M-AM

No evidence for central hypersensitivity in post-operative pain: a serial fMRI study, *Ron Kupers[1,2], Fabien Schneider[3], Rune Christensen[1], Henrik Kehlet[2], [1]PET Unit, Copenhagen, Denmark, [2]Dept. Surgical Pathophysiology, Copenhagen, Denmark, [3]Dept. Radiology, Saint-Etienne, France* 713 M-AM

Supraspinal response of mechanically induced osteoarthritic knee pain, *Albert Leung[1,3], Dan Muhtar[1], Jeng-Ren Duann[2], Artour Torossi[4], Tony Yaksh[1], [1]The University of California, San Diego, School of Medicine, La Jolla, USA, [2]The University of California, San Diego, Institutue for Neurocomputation, La Jolla, USA, [3]VA San Diego Healthcare System, La Jolla, USA, [4]The University of California, San Diego, La Jolla, USA* 717 M-AM

Lateralization of Pain Matrix Areas related or unrelated to the side of stimulation, *Kai Lutz[1], Michael Meier[1], Mike Bruegger[1], Thierry Keller[2], Ashley Barlow[3], Roger Luechinger[4], Lutz Jancke[1], Dominik Ettlin[5], [1]Department of Neuropsychology, Institute for Psychology, University of* 721 M-AM

Zürich, Zürich, Switzerland, [2]Automatic Control Laboratory, Swiss Federal Institute of Technology, Zürich, Switzerland, [3]GlaxoSmithKline, Consumer Healthcare, Weybridge, United Kingdom, [4]Institute of Biomedical Engineering, Swiss Federal Institute of Technology and the University of Zürich, Zürich, Switzerland, [5]Center for Dental and Oral Medicine and Cranio-maxillofacial Surgery, Clinic for Removable Prosthodontics, Masticatory Disorders and Special Care Dentistry, University of Zürich, Zürich, Switzerland

Cerebral response to acute pain correlates with degree of diabetic neuropathy, *Iain Wilkinson, Rajiv Gandhi, Dinesh Selvarajah, Mike Hunter, Ceila Emery, Paul Griffiths, Solomon Tesfaye, University of Sheffield, Sheffield, United Kingdom* 725 M-AM

13:45 – 14:45 *You Yangs Hall (Level 3)*

COGNITION & ATTENTION
Attention (auditory, tactile, motor)

Keeping track of emerging rules: The neural circuitry of dynamic auditory change detection, *Alexandra Bendixen[1], Urte Roeber[1], Nelson J. Trujillo-Barreto[2], Erich Schröger[1], [1]University of Leipzig, Leipzig, Germany, [2]Cuban Neuroscience Center, Havana, Cuba* 2 M-PM

Simultaneous ERP and fMRI in an oddball paradigm with standard and deviant conceptual pairs, *Ilan Laufer, Michiro Negishi, Nallakkandi Rajeevan, Cheryl Lacadie, R. Todd Constable, Yale University School of Medicine, Department of Diagnostic Radiology, New Haven, USA* 6 M-PM

Characteristics and EEG spectral dynamics of behavioural microsleeps in a Mock-MRI scanner, *Govinda Poudel[1,2], Richard Jones[1,2,3,4], Carrie Innes[1,3], Philip Bones[1,4], [1]Van der Veer Institute for Parkinson's and Brain Research, Christchurch, New Zealand, [2]Medicine, University of Otago, Christchurch, New Zealand, [3]Medical Physics and Bioengineering, Christchurch Hospital, Christchurch, New Zealand, [4]Electrical and Computer Engineering, University of Canterbury, Christchurch, New Zealand* 10 M-PM

Prominent dysfunction of neural network associated with sustained attention in the patients with schizophrenia compared to the patients with major depression and the healthy controls, *Jeong-Ho Seok[1], Jae-Jin Kim[2], Jong-Doo Lee[3], Jeonghun Ku[4], Hae-Jeong Park[3], Sang Joon Son[2], Hyeongrae Lee[4], Hye-Sun Kim[2], Maeng-Keun Oh[3], [1]Department of Psychiatry, Hallym University Sacred Heart Hospital, Anyang, Korea, [2]Department of Psychiatry, Yonsei University, College of Medicine, Seoul, Korea, [3]Department of Diagnostic Radiology, Yonsei University, College of Medicine, Seoul, Korea, [4]Department of Biomedical Engineering, Hanyang University, Seoul, Korea* 14 M-PM

Neural substrates of warning effect: a functional MRI study, *Hisakazu T. Yanaka[1,2,3], Daisuke N. Saito[1], Norihiro Sadato[1,2,3,4], [1]Division of Cerebral Integration, Department of Cerebral Research, National Institute for Physiological Sciences, Okazaki, Japan, [2]Department of Physiological Sciences, The Graduate University for Advanced Studies (Sokendai, Okazaki, Japan, [3]Research Institute of Science and Technology for Society (RISTEX), Japan Science and Technology Agency (JST), Tokyo, Japan, [4]Department of Functional Neuroimaging, Faculty of Medical Sciences, University of Fukui, Fukui, Japan* 18 M-PM

COGNITION & ATTENTION
Attention (visual)

Attentional effect on emotional Chinese word processing in the human brain: An event-related fMRI study, *Hsin-Mei Chen[1], Su-Ling Yeh[1], Kuan-Ming Chen[1], Jyh-Horng Chen[2], [1]Department of Psychology, National Taiwan University, Taipei, Taiwan, [2]Interdisciplinary MR lab, Department of Electrical Engineering, National Taiwan University, Taipei, Taiwan* 22 M-PM

Modulation of FFA activation by attention and processing demands, *Daniel Grupe[2], Robert Schultz[1], Elinora Hunyadi[1], [1]Center for Autism Research, Children's Hospital of Philadelphia, Philadelphia, USA, [2]Yale University Child Study Center, New Haven, USA* 26 M-PM

The Different Roles of Posterior Parietal Cortex and Frontal Eye Field in Control of Visual Selection: *Effects of Repetitive Transcranial Magnetic Stimulation on Partial Report Analyzed* 30 M-PM

COGNITION & ATTENTION
Cognitive Aging

COGNITION & ATTENTION
Cognitive Development

DTI parameters in the superior longitudinal fasciculus associated with spatial working memory performance in children, *Martin Vestergaard Hansen[1], Kathrine Skak Madsen[1,2], Lisser Rye Ejersbo[4], Christian Gerlach[4], Thomas Z. Ramsøy[1], Olaf B. Paulson[1,2], Terry L. Jernigan[1,2,3], [1]Danish Research Centre for MR, Copenhagen University Hospital, Hvidovre, Denmark, [2]Center for Integrated Molecular Brain Imaging, Copenhagen, Denmark, [3]Laboratory of Cognitive Imaging, University of California, San Diego, USA, [4]Learning Lab Denmark, Danish School of Education, University of Aarhus, Copenhagen, Denmark* 70 M-PM

Age-related changes in face induced gamma oscillations, *Natasa Kovacevic[1], Roxane Itier[1], Anthony McIntosh[1,2], [1]Rotman Research Institute, Toronto, Canada, [2]Department of Psychology, University of Toronto, Toronto, Canada* 74 M-PM

Effects of bilingualism on numerical neurocognition in a paediatric population. An fMRI investigation, *Katrien Mondt[1], Esli Struys[1], Danielle Balériaux[2], Piet Van de Craen[1], [1]Department of Linguistics, Vrije Universiteit Brussel, Brussels, Belgium, [2]MR Unit, Université Libre de Bruxelles, Brussels, Belgium* 78 M-PM

Music and the infant brain: a fMRI study in newborns, *Maria Cristina Saccuman[1], Paola Scifo[2,3], Guido Andreolli[1], Danilo Spada[5], Federica Navarra[2,3], Cristina Baldoli[3,4], Stefan Koelsch[6], Daniela Perani[1,2,3], [1]Vita-Salute San Raffaele University, Milan, Italy, [2]Department of Nuclear Medicine, Scientific Institute San Raffaele, Milan, Italy, [3]CERMAC San Raffaele Scientific Institute, Milan, Italy, [4]Department of Neuroradiology, Scientific Institute San Raffaele, Milan, Italy, [5]Psychology Institue, School of Medicine, Universita' degli Studi, Milan, Italy, [6]Max-Planck-Institute for Neuropsychology, Leipzig, Germany* 82 M-PM

COGNITION & ATTENTION
Executive Function

Unconscious formation of free intentions: functional dissociation between regions in prefrontal cortex, *Chun Siong Soon[1], Anna He[1], John-Dylan Haynes[1,2], [1]Max Planck Institute for Cognitive and Brain Sciences, Leipzig, Germany, [2]Bernstein Center for Computational Neuroscience Berlin, Berlin, Germany* 86 M-PM

COGNITION & ATTENTION
Perception, Imagery, Awareness

Motor familiarity modulates mirror neurons system activity during auditory action recognition in sighted and congenitally blind individuals, *Daniela Bonino[1,2], Emiliano Ricciardi[1,3], Lorenzo Sani[1], Tomaso Vecchi[2], Mario Guazzelli[4], James Haxby[5], Luciano Fadiga[6], Pietro Pietrini[1], [1]Laboratory of Clinical Biochemistry and Molecular Biology, University of Pisa, Pisa, Italy, [2]Department of Psychology, University of Pavia, Pavia, Italy, [3]MRI Lab, Institute of Clinical Physiology, C.N.R. Research Area, Pisa, Italy, [4]Psychology Chair, University of Pisa, Pisa, Italy, [5]Department of Psychology, Princeton University, Princeton, USA, [6]Department of Biomedical Sciences and Advanced Therapy – Physiology Section, University of Ferrara, Ferrara, Italy* 90 M-PM*

Specificity of neural responses to observed and executed actions revealed with fMR-adaptation, *Trevor Chong[1,2], Ross Cunnington[2], Mark Williams[1], Nancy Kanwisher[3], Jason Mattingley[2], [1]Macquarie University, Sydney, Australia, [2]The University of Queensland, St Lucia, Australia, [3]Massachusetts Institute of Technology, Cambridge, USA* 94 M-PM*

Hearing moves seeing: converging psychophysical and fMRI evidence of auditory-driven visual apparent motion, *Elliot Freeman[1], Su Watkins[2], Jon Driver[2], Geraint Rees[2], [1]Brunel University, Uxbridge, United Kingdom, [2]University College London, London, United Kingdom* 98 M-PM

Restless Minds – A relation between rest and the self in the brain - A deep-TMS study, *Michal Gruberger[1,2,3], Talma Hendler[1,3,4], Eran-Vadim Harel[2,4], Hagai Harari[2,4], Levkovitz Yechiel[2,4], Abraham Zangen[5], [1]Department of Psychology, Tel-Aviv University, Tel-Aviv, Israel, [2]The Emotion-Cognition Research Center, Shalvata Mental Health Center, Hod-Hasharon, Israel, [3]Functional Brain Center, Tel-Aviv Sourasky Medical Center, Tel-Aviv, Israel, [4]Sackler Faculty of Medicine, Tel-Aviv University, Tel-Aviv, Israel, [5]Department of Neurobiology, The Weizmann Institute of Science, Rehovot, Israel* 102 M-PM

3D Mapping of Brain Atrophy in Alzheimer's Disease and Mild Cognitive Impairment with Tensor-Based Morphometry, *Xue Hua[1], Alex Leow[1], Suh Lee[1], Neelroop Parikshak[1], Andrea Klunder[1], Arthur Toga[1], Natasha Lepore[1], Yi-Yu Chou[1], Caroline Brun[1], Ming-Chang Chiang[1], Marina Barysheva[1], Clifford Jack Jr[2], Michael Weiner[3], Paul Thompson[1], [1]Laboratory of Neuro Imaging, Dept. of Neurology, UCLA School of Medicine, Los Angeles, USA, [2]Mayo Clinic College of Medicine, Rochester, USA, [3]Dept. Radiology, Medicine and Psychiatry, UC San Francisco, San Francisco, USA* 150 M-PM

Use of MetaROIs and Minimal Deformation Templates to identify FDG PET Biomarker Regions in Alzheimer's Disease, *Cindee Madison[1], Susan Landau[1], Rayhan Lal[1], Connie Cheung[1], Norman Foster[3], Eric Reiman[4], Robert Koeppe[5], Michael Weiner[2], Willam Jagust[1], [1]UC Berkeley, Berkeley, USA, [2]UC San Francisco, San Francisco, USA, [3]University of Utah, Salt Lake City, USA, [4]Banner Alzheimer's Institute, Salt Lake City, USA, [5]University of Michigan, Ann Arbor, USA* 154 M-PM

Cognitive decline associated with loss of hippocampal activation on longitudinal fMRI in non-demented older subjects, *Kelly O'Keefe[1], Jacqueline O'Brien[1], Amy DeLuca[1], Peter LaViolette[2], Bradford Dickerson[2], Ali Atri[2], Deborah Blacker[2], Maija Pihlajamaki[1], Keith Johnson[2], Reisa Sperling[1,2], [1]Brigham and Women's Hospital, Boston, USA, [2]Massachusetts General Hospital, Boston, USA* 158 M-PM*

Brain functional activity predicts subsequent structural atrophy in Alzheimer's disease but not normal aging, *Benjamin Shannon[1], Abraham Snyder[1,2], Cindy Lustig[3], Randy Buckner[4,5], Marcus Raichle[1,2], [1]Department of Radiology, Washington University, Saint Louis, USA, [2]Department of Neurology, Washington University, Saint Louis, USA, [3]Department of Psychology, University of Michigan, Ann Arbor, USA, [4]Department of Psychology, Harvard University, Cambridge, USA, [5]Howard Hughes Medical Institute, Chevy Chase, USA* 162 M-PM

DISORDERS OF THE NERVOUS SYSTEM
Mood & Anxiety Disorders

State or Trait? The effect of stressful-experience on brain activation correlates with neuroticism, *Roee Admon[1,2], Orit Stern[1], Keren Rosenberg[1,2], Gadi Lubin[4], Talma Hendler[1,2,3], [1]Functional Brain Center, Wohl Institute for Advanced Imaging, Tel Aviv Sourasky Medical Center, Tel Aviv, Israel, [2]Physiology Dept, Tel Aviv University, Tel Aviv, Israel, [3]Psychology Dept, Tel Aviv University, Tel Aviv, Israel, [4]Mental Health Section, Israeli Defense Forces, Israel* 166 M-PM*

Reduced cortico-limbic connectivity in remitted recurrent depression, *Naranjargal Dashdorj[1], Neil Nixon[2], Graham Worwood[2], Mario Liotti[2], Elena Georgiadi[2], Dorothee Auer[1], Peter Liddle[2], [1]Academic Radiology, School of Medical and Surgical Sciences, University of Nottingham, Nottingham, United Kingdom, [2]Division of Psychiatry, School of Medical and Surgical Sciences, University of Nottingham, Nottingham, United Kingdom* 170 M-PM

Cortical thickness and depression in a population-based sample of adolescents, *Marije Jansen[1], Gabriel Leonard[2], Michel Perron[3,4], Bruce Pike[2], Louis Richer[5], Roberto Toro[1], Suzanne Veillette[3,4], Zdenka Pausova[1,3], Tomas Paus[1,2], [1]Brain & Body Centre, University of Nottingham, Nottingham, United Kingdom, [2]Montreal Neurological Institute, McGill University, Montreal, Canada, [3]Université de Montréal, Montreal, Canada, [4]Groupe ECOBES, CEJEP Jonquiere, Jonquiere, Canada, [5]Department of Psychology, University of Quebec in Chicoutimi, Chicoutimi, Canada* 174 M-PM

SELF-REPORTED RUMINATION AS TRAIT MARKER FOR DEPRESSION: EVIDENCE FROM FUNCTIONAL NEUROIMAGING, *Danilo Arnone, Emma Pegg, Shane McKie, Darragh Downey, Rebecca Elliott, Bill Deakin, Ian Anderson, Neuroscience and Psychiatry Unit, University of Manchester, Manchester, United Kingdom* 178 M-PM

Longitudinal assessment of brain structural alterations in major depressive disorder, *Carles Soriano-Mas[1], Rosa Hernández-Ribas[1,2], Narcís Cardoner[1,2], Mikel Urretavizcaya[2], Joan Deus[1,3], Héctor Ortiz[1,4], Marina López-Solà[1,5], Ben J. Harrison[1,6], José M. Menchón[2], Julio Vallejo[2], Jesús Pujol[1], [1]Institut d'Alta Tecnologia–PRBB, CRC Corporació Sanitària, Barcelona, Spain, [2]Department of Psychiatry, Hospital Universitari Bellvitge, Barcelona, Spain, [3]Department of Clinical and Health Psychology, Universitat Autònoma de Barcelona, Barcelona, Spain, [4]Electronic Engineering Department, Technical University of Catalonia (UPC), Barcelona, Spain, [5]Clinical Sciences Departament, Faculty of Medicine, University of Barcelona, Barcelona, Spain, [6]Melbourne Neuropsychiatry Centre, Department of Psychiatry, The University of Melbourne, Melbourne, Australia* 182 M-PM

DISORDERS OF THE NERVOUS SYSTEM
Parkinson's Disease & Other Basal Ganglia

DISORDERS OF THE NERVOUS SYSTEM
Schizophrenia

Cerebral Asymmetry and Functional Laterality in Psychosis, *Clare Mackay[1], Neil Roberts[2], Roozbeh Rezaie[2], Tom Barrick[3], Digby Quested[1], Guy Goodwin[1], Julie Connell[1], Manaan Kar Ray[1], Tim Crow[1], [1]Department of Psychiatry, University of Oxford, Oxford, United Kingdom, [2]University of Liverpool, Liverpool, United Kingdom, [3]St Georges Hospital Medical School, London, United Kingdom* 222 M-PM

Abnormal white matter microstructure in schizophrenia: a voxelwise analysis of axial and radial diffusivity., *Marc Seal[1], Murat Yücel[1,2], Alex Fornito[1], Stephen Wood[1], Ben Harrison[1,3], Mark Walterfang[1], Gaby Pell[1,4], Christos Pantelis[1], [1]Melbourne Neuropsychiatry Centre, The University of Melbourne, Victoria, Australia, [2]ORYGEN Research Centre, Victoria, Australia, [3]Institut d'Alta Tecnologia-PRBB, CRC Corporació Sanitària, Barcelona, Spain, [4]Brain Research Institute, Austin Health, Victoria, Australia* 226 M-PM

EMOTION & MOTIVATION
Reward

Brain responses to hunger and its satiation: an arterial spin labeling study, *Michael Farrell[1,2], John Dixon[3], Julie Playfair[3], Maureen Dixon[3], Maria Gavrilescu[1], Michael McKinley[1], Melissa Hayden[3], Derek Denton[4], Paul O'Brien[3], Gary Egan[1,2], [1]Howard Florey Institute, University of Melbourne, Parkville, Australia, [2]Centre for Neuroscience, University of Melbourne, Parkville, Australia, [3]Centre for Obesity Research and Education, Monash University, Prahran, Australia, [4]Baker Heart Research Institute, Alfred Hospital, Prahran, Australia* 234 M-PM

Common and distinct brain regions involved in processing different nature of positive and negative reinforcements during uncertain situations, *Elise METEREAU, Jean-Claude DREHER, 'Reward and decison making' team, Centre de Neuroscience Cognitive, CNRS - Université de Lyon 1, Lyon, France* 238 M-PM

The medial orbitofrontal cortices and the nucleus accumbens contribute to reward processing under passive situations for monetary gain and loss, *Atsushi Sekiguchi[1,2], Motoaki Sugiura[3,1], Naho Ikuta[1], Shigeru Sato[4], Kaoru Horie[4], Ryuta Kawashima[1], [1]Department of Functional Brain Imaging, IDAC, Tohoku University, Sendai, Japan, [2]Department of Psychosomatic Medicine, Kyushu University, Fukuoka, Japan, [3]Department of Cerebral Research, NIPS, Okazaki, Japan, [4]Graduate School of International Cultural Studies, Tohoku University, Sendai, Japan* 242 M-PM

Effects of visual cues related to the beginning and the end of smoking on the brains of deprived and non-deprived smokers, *Bastian Stippekohl, Rudolf Stark, Dieter Vaitl, Bender Institute of Neuroimaging, Giessen, Germany* 246 M-PM

An fMRI study of normal-weight restrained versus unrestrained eaters, *Jason van Steenburgh[1], Maria Coletta[1], Deborah Green[1], Feroze Mohamed[3], Steve Platek[2], Schweta Moonat[3], Michael Lowe[1], [1]Drexel University, Philadelphia, USA, [2]University of Liverpool, Liverpool, United Kingdom, [3]Temple University, Philadelphia, USA* 250 M-PM

EMOTION & MOTIVATION
Social Behavior

Empathy for Pain is Modulated by the Social Context: An Event-related fMRI Investigation, *Yuko Akitsuki[1,2], Jean Decety[1], [1]Departments of Psychology and Psychiatry and Center for Cognitive and Social Neuroscience, The University of Chicago, Chicago, USA, [2]Department of Functional Brain Imaging, Institute of Development, Aging and Cancer (IDAC), Tohoku University, Sendai, Japan* 254 M-PM

Facial emotion recognition and amygdala activation across the menstrual cycle, *Birgit Derntl[1,2,3], Christian Windischberger[1,4], Simon Robinson[5], Elisabeth Lamplmayr[2], Ilse Kryspin-Exner[2], Ruben Gur[6], Ewald Moser[1,4,6], Ute Habel[3], [1]MR Centre of Excellence, Medical University of Vienna, Vienna, Austria, [2]Institute for Clinical, Biological and Differential Psychology, Faculty of Psychology, University of Vienna, Vienna, Austria, [3]Department of Psychiatry and Psychotherapy, University of Aachen RWTH, Aachen, Germany, [4]Centre for Biomedical Engineering and Physics, Medical University of Vienna, Vienna, Austria, [5]Center of Mind/Brain Studies, University of Trento, Matarello, Italy, [6]Department of Psychiatry, University of Pennsylvania, Philadelphia, USA* 258 M-PM

GENETICS

IMAGING TECHNIQUES & CONTRAST MECHANISM
EEG

Martinos Ctr. for Biomed. Imaging, Charlestown, USA, [3]Harvard-MIT division for Hlth. Sci. and Technology, Cambridge, USA, [4]Radiology, MGH, Boston, USA, [5]Anesthesiology, MGH, Boston, USA

IMAGING TECHNIQUES & CONTRAST MECHANISM
Functional MRI

MEMORY & LEARNING
Plasticity (normal & following pathology)

MEMORY & LEARNING
Working Memory

Pawluk[1], Laszlo Erdodi[1], Renee Lajiness-O'Neill[1,2], Susan Bowyer[2,3,4], [1]Eastern Michigan University, Ypsilanti, USA, [2]Henry Ford Hospital, Detroit, USA, [3]Oakland University, Rochester, USA, [4]Wayne State University, Detroit, USA

Efficiency & trial-to-trial variance of spatial working memory performance is manifest across overlapping load-dependent networks, *Michael Valenzuela[1,2], Nicole Kochan[1,2], Melissa Slavin[1], Julian Trollor[1,2], Perminder Sachdev[1,2], Anthony McIntosh[3], Michael Breakspear[1,4], [1]School of Psychiatry, University of NSW, Sydney, Australia, [2]Neuropsychiatric Institute, Prince of Wales Hospital, Sydney, Australia, [3]Rotman Research Institute, Baycrest Centre, Toronto, Canada, [4]Black Dog Institute, Sydney, Australia* 430 M-PM

MODELING & ANALYSIS
Bayesian Modeling

Bayesian Brain Source Imaging based on combined MEG/EEG and fMRI using MCMC, *Sung C. Jun[1,2], John S. George[1], Juliana Par´e-Blagoev[3], Sergey Plis[4], Doug M. Ranken[1], David M. Schmidt[1], [1]Applied Modern Physics Group, MS-D454, Los Alamos, USA, [2]Department of Information and Communications, Gwangju Institute of Science and, Gwangju, South Korea, [3]The MIND Institute, Albuquerque, USA, [4]Department of Computer Science, University of New Mexico, Albuquerque, USA* 434 M-PM

Graph partitioned spatial priors for imaging, *Lee Harrison, William Penny, Guillaume Flandin, Karl Friston, Wellcome Trust Centre for Neuroimaging, London, United Kingdom* 438 M-PM

Spatiotemporal Noise Covariance for Unified Analysis of MEG AND EEG DATA, *SUNG JUN[1], SERGEY PLIS[2], [1]Gwangju Inst. of Science & Technology, Gwangju, Korea, [2]University of New Mexico, Albuquerque, USA* 442 M-PM

Combining ICA and GLM for FMRI data analysis, *Salima Makni[1], Christian Beckmann[1,2], Steve Smith[1], Mark Woolrich[1], [1]FMRIB, Oxford, United Kingdom, [2]Department of Clinical Neurosciences, ICL, London, United Kingdom* 446 M-PM

Neuroimaging of human face processing by Bayesian MCMC method, *Gokcen Yildiz[1,2], A. Deniz Duru[3], Ahmet Ademoglu[3], [1]Katholieke Universiteit Leuven, Leuven, Belgium, [2]Galatasaray University, Istanbul, Turkey, [3]Bogazici University, Istanbul, Turkey* 450 M-PM

11:30 – 12:30 Corryong Hall (Level 2)

MODELING & ANALYSIS
Classification & Predictive Modeling

Phase effect of spontaneous alpha rhythm on the visual evoked potential, *Robert Becker[1], Petra Ritter[1], Robert Schmidt[2], Richard Kempter[2], Arno Villringer[1,3], [1]Berlin NeuroImaging Center, Dept. of Neurology, Charité, Universitätsmedizin, Berlin, Germany, [2]Theoretical Neuroscience Lab, ITB, Humboldt-University, Berlin, Germany, [3]Max-Planck-Institute for Human Cognitive and Brain Science, Leipzig, Germany* 454 M-PM

Beyond Prediction: More Robust Sparse fMRI Models Reveal Distributed Clusters of Local Activity, *Melissa Carroll[1], Guillermo Cecchi[2], Irina Rish[2], Rahul Garg[2], Ravi Rao[2], [1]Princeton University Computer Science Department, Princeton, USA, [2]IBM TJ Watson Research Center, Yorktown Heights, USA* 458 M-PM

Predicting EEG power oscillations using fMRI, *Federico De Martino, Giancarlo Valente, Rainer Goebel, Elia Formisano, Department of Neurocognition, University of Maastricht, Maastricht, Netherlands* 462 M-PM*

Total variation approach for high temporal resolution event detection in fMRI, *Mostafa Ghannad Rezaie, Luis Hernandez-Garcia, University of Michigan, Ann Arbor, USA* 466 M-PM

An Informatics System for the Management of Distributed Neuroimaging Research Data, *Neil Killeen[1], Jason Lohrey[2], Wee Siong Soh[3], Wilson Liu[1,3], Steve Melnikoff[4], Gary Egan[1,3], [1]Centre for Neuroscience, the University of Melbourne, Melbourne, Australia, [2]Arcitecta,* 470 M-PM

Melbourne, Australia, [3]Howard Florey Institute, the Florey Neuroscience Institutes, Melbourne, Australia, [4]Victorian E-Research Strategic Initiative, Melbourne, Australia

Probabilistic classification models for Brain Computer Interfaces, *Jérémie Mattout[1,2], Guillaume Gibert[1,2], Virginie Attina[1,2], Emmanuel Maby[1,2], Olivier Bertrand[1,2], [1]Brain Dynamics and Cognition, U821 INSERM, Lyon, France, [2]Lyon 1 - Université Claude Bernard, Lyon, France* 474 M-PM

Comparison of small clinical samples with Voxel-Based Morphometry: a quantitative approach to the analysis of outliers effects by means of virtual phantoms, *Federico Nocchi[1,2], Tiziana Franchin[1,3], Elisabetta Genovese[4], Daniela Longo[5], Giuseppe Fariello[5], Vittorio Cannatà[4], [1]Clinical Engineering Service, Bambino Gesù Children's Hospital, Rome, Vatican City, [2]Philips Medical Systems, Monza, Italy, [3]Department of Bioengineering, Polytechnic of Milan, Milan, Italy, [4]Health Physics, Bambino Gesù Children's Hospital, Rome, Vatican City, [5]Department of Paediatric Radiology, Bambino Gesù Children's Hospital, Rome, Vatican City* 478 M-PM

Contribution of cortical thickness measurement to the prediction of fast conversion from Mild Cognitive Impairment to Alzheimer's Disease, *Olivier QUERBES[1,2], Jean-Albert LOTTERIE[1,2], Jérémie PARIENTE[1,2], Isabelle BERRY[1,2], Jean-Claude FORT[2,3], Florent AUBRY[1,2], Pierre CELSIS[1,2], [1]INSERM U825, Toulouse, France, [2]University Toulouse III Paul Sabatier, Toulouse, France, [3]Laboratoire de Statistiques et probabilités, Toulouse, France* 482 M-PM

Automatic Classification of Human Brain Constituents including Crossing Fibres using HARDI and a Support Vector Machine, *Susanne Schnell[1], Björn Kreher[1], Jürgen Hennig[1], Hans Burkhardt[2], Valerij Kiselev[1], [1]Medical Physics, Dept. of Diagn. Radiology, University Hospital Freiburg, Freiburg, Germany, [2]Chair in Pattern Recognition and Image Processing, Institute of Computer Science, University of Freiburg, Freiburg, Germany* 486 M-PM

A NEW TRIANGULATION METHOD TO LOCALIZE FUNCTIONAL ACTIVITY ON THE CORTICAL SURFACE, *Alan Tucholka[1,2], Bertrand Thirion[1,2], Philippe Pinel[3], Jean-Baptiste Poline[1], Jean-François Mangin[1], [1]CEA Saclay, Neurospin/LNAO, Bat 145, 91191, Gif-suf-Yvette, France, [2]INFIA Futurs, Parietal, Paris, France, [3]INSERM UNICOG, Neurospin, Paris, France* 490 M-PM

Estimating Structural Complexity Changes in Alzheimer's Disease and Frontotemporal Dementia, *Karl Young[1,3], An-Tao Du[3], Joel Kramer[2], Howard Rosen[2], Bruce Miller[2], Michael Weiner[1,3], Norbert Schuff[1,3], [1]Department of Radiology, University of California San Francisco, San Francisco, USA, [2]Department of Neurology, University of California San Francisco, San Francisco, USA, [3]Center For Imaging of Neurodegenerative Diseases, Department of Veterans Affairs Medical Center, San Francisco, USA* 494 M-PM*

MODELING & ANALYSIS
Motion Correction/Spatial Normalization, Atlas Construction

Affine and nonlinear spatial normalization techniques using derivatives of brain magnetic resonance images, *Jia-Xiu Liu[1], Yong-Sheng Chen[1], Li-Fen Chen[2,3], [1]Department of Computer Science, National Chiao Tung University, Hsinchu, Taiwan, [2]Institute of Brain Science, National Yang-Ming University, Taipei, Taiwan, [3]3Integrated Brain Research Laboratory, Taipei Veterans General Hospital, Taipei, Taiwan* 498 M-PM

SLICE TIMING CORRECTION IN BOLD FMRI DATA, *Rute Martins[1], Alexandre Andrade[2], Patricia Figueiredo[1], [1]School of Engineering, Technical University of Lisbon, Lisbon, Portugal, [2]Institute of Biophysics and Biomedical Engineering University of Lisbon, Lisbon, Portugal* 502 M-PM

Structural differences can affect functional interpretation: Differences between modulated and unmodulated fMRI in healthy aging, *Jonathan Peelle, Murray Grossman, Department of Neurology, University of Pennsylvania, Philadelphia, USA* 506 M-PM

Comparison of Registration Techniques on Inter-subject Variation of Diffusion Tensor Imaging, *Xiujuan Geng[1], Hong Gu[1], Thomas Ross[1], Gary Christensen[2], Yihong Yang[1], [1]Neuroimaging Research Branch, National Institute on Drug Abuse, NIH, Baltimore, USA, [2]University of Iowa, Iowa City, USA* 510 M-PM

MODELING & ANALYSIS
Univariate Modeling, Linear, & Nonlinear

Optimizing Kernel Size for the Smoothed Variance t-test, *Hui Zhang[1], Timothy Johnson[1], Jeffery Fessler[1], Kent Kiehl[4], Thomas Nichols[2,3,1], [1]University of Michigan, Ann Arbor, USA, [2]GlaxoSmithKline Clinical Imaging Centre, London, United Kingdom, [3]FMRIB Centre, Oxford, United Kingdom, [4]University of New Mexico, Logan, USA* 550 M-PM

MOTOR BEHAVIOR
Hand Movements

Somatosensory areas 3a and 4p are activate during motor imagery in patients with hemiparetic stroke, *Andrew Butler[1], Linda Confalonieri[2], Giuseppe Pagnoni[3], Lawrence Barsalou[4], [1]Department of Rehabilitation Medicine, Emory University, Atlanta, USA, [2]CESCOM, University of Milan Bicocca, Milan, Italy, [3]Department of Psychiatry and Behavioral Sciences, Emory University, Atlanta, USA, [4]Department of Psychology, Emory University, Atlanta, USA* 554 M-PM

Gender and Handedness Effects on Corticospinal and Spinothalamic Tracts: A structural asymmetry study using diffusion spectrum imaging, *Su-Chun Huang[1], Fang-Chen Yeh[1], Hsiao-Lan Wang[3], V. J. Wedeen[4], Wen-Yih Isaac Tseng[1,2], [1]Center for Optoelectronic Biomedicine, National Taiwan University College of Medicine, Taipei, Taiwan, [2]Department of Medical Imaging, National Taiwan University Hospital, Taipei, Taiwan, [3]Faculty of Education, Centre for Neuroscience in Education, University of Cambridge, Cambridge, United Kingdom, [4]MGH Martinos Center for Biomedical Imaging, Harvard Medical School, Charlestown, USA* 558 M-PM

Planning to grasp haptically experienced objects reactivates the lateral occipital complex, *Gregory Kroliczak[1], Scott H. Frey[1,2], [1]Department of Psychology, University of Oregon, Eugene, USA, [2]Lewis Center for Neuroimaging, University of Oregon, Eugene, USA* 562 M-PM

Touch typing performance correlates with white matter integrity in specific regions of the motor system, *Jan Scholz, Heidi Johansen-Berg, FMRIB Centre, Oxford, United Kingdom* 566 M-PM*

MOTOR BEHAVIOR
Locomotion

Functional potential demonstrated by Diffusion Tensor Tractography in hemiplegic patients with cerebral palsy, *Su Min Son[1], Sung Ho Jang[2], Ho Lee[1], In Kyu Yu[3], Seung Yeon Kim[4], Han Ku Moon[5], [1]Dept of PM&R, college of medicine,Eulji university, Daejeon, Korea, [2]Dept of PM&R, college of Medicine, Yeungnam univeristy, Daegu, Korea, [3]Dept of diagnostic radiology, college of medicine, Eulji university, Daejeon, Korea, [4]Dept of Pediatrics,college of medicine, Eulji university, Daegeon, Korea, [5]Dept of Pediatrics, college of medicine, Yeungnam university, Daegu, Korea* 570 M-PM

MOTOR BEHAVIOR
Motor-Premotor Cortex/Motor Cortical Functions

Physiological Correlates of Motion Sickness Induced by Dynamic Virtual Reality Environment, *Chin-Teng Lin[1,2], Yu-Chieh Chen[1,2], Chun-Ling Lin[1,2], Chih-Feng Chao[1], Jeng-Ren Duann[1,3], Tzyy-Ping Jung[1,3], [1]Brain Research Center, University System of Taiwan, Hsinchu, Taiwan, [2]Department of Electrical and Control Engineering, National Chiao-Tung University, HsinChu, Taiwan, [3]Institute for Neural Computation, University of California, San Diego, USA* 574 M-PM

Resting-state connectivity of the motor network in acute stroke patients, *Woo-Kyoung Yoo[1], Chang-hyun Park[1,2], Suk Hoon Ohn[1], Sung H. Yoo[3], Myoung-Hwan Ko[4], Sung Tae Kim[5], Kwang Ho Lee[6], Yun-Hee Kim[1], [1]Department of Physical Medicine and Rehabilitation, Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, Korea, [2]Department of Physics, Korea Advanced Institute of Science and Technology, Daejeon, Korea, [3]Department of Physical Therapy, Yonsei University, Wonju, Korea, [4]Department of Physical Medicine and Rehabilitation, Chonbuk National University Medical School, Jeonju, Korea, [5]Department of Radiology, Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, Korea, [6]Department of Neurology, Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, Korea* 578 M-PM

Central limitation of muscle force mediated by posterior insula in a fatiguing grip force task, *Kai Lutz[1], Lea Hilty[2], Mike Brügger[1], Roger Luechinger[3], Lutz Jancke[1], [1]Department* 582 M-PM

Neuropsychology, Institute for Psychology, University Zürich, Zürich, Switzerland, [2]Exercise Physiology, Institute for Human Movement Sciences, Swiss Federal Institute of Technology and Institute of Physiology, University of Zurich, Zürich, Switzerland, [3]Institute of Biomedical Engineering, Swiss Federal Institute of Technology and the University of Zurich, Zürich, Switzerland

Local and Remote Changes in Cerebral Blood Flow During Motor Task Following a Single Session of 5Hz rTMS Applied to the Primary Motor Cortex, *Shalini Narayana[1], Wei Zhang[1], Crystal Franklin[1], Joseph Panzarella[1], Peter Fox[1,2], [1]Research Imaging Center, UT Health Science Center, San Antonio, USA, [2]South Texas Veterans Health Care Center, San Antonio, USA* 586 M-PM

A gradient for neuroplastic capacity within the primary motor cortex: Indications from a case report post hemispherectomy, *Jakob Rath[1], Robert Schmidhammer[2], Thomas Steinkellner[1], Nicolaus Klinger[1], Alexander Geißler[1], Roland Beisteiner[1], [1]Study Group Clinical fMRI, MR Center of Excellence, Department of Neurology, Medical University of Vienna, A-1090 Vienna, Austria, [2]Ludwig Boltzmann Institute for Experimental and Clinical Traumatology, Research Center for Traumatology, A-1200 Vienna, Austria* 590 M-PM

Probing ipsilateral premotor-to-motor connectivity during movement selection, *Sergiu Groppa[1], Boris Schlaag[1], Oliver Granert[1], Bart van Nuenen[1,2], Gesa Hartwigsen[1], Thomas Weyh[3], Hartwig Siebner[1], [1]Department of Neurology, Christian-Albrechts-University, Kiel, Germany, [2]Department of Neurology, Radboud University Nijmegen Medical Centre, Nijmegen, Netherlands, [3]Institute for Medical Electronics, University of Technology Munich, Munich, Germany* 594 M-PM

I did this! brain response to visually presented hand actions reveals recently perfomed acts, *Alon Talmor[1], Hezy Yeshurun[1], Talma Hendler[2,3], [1]School of Computer Science, Sackler Faculty of Exact Sciences, Tel Aviv University, Israel, Tel Aviv, Israel, [2]2 Functional Brain Center, Wohl Institute for Advanced Imaging, Tel Aviv Sourasky Medical Center, Israel, Tel Aviv, Israel, [3]Psychology Department, Sackler Faculty of Medicine, Tel Aviv University, Israel, Tel Aviv, Israel* 598 M-PM

The changes of both gray matter density and white matter integrity in pianist's brain: a combined structural and diffusion MRI study, *Ying Han[1], Hong Yang[2], Ya-Ting Lv[3], Chao-Zhe Zhu[1], Yong He[4], He-Han Tang[2], Qi-Yong Gong[2], Yue-Jia Luo[1], Yu-Feng Zang[1], Qi Dong[1], [1]State Key Laboratory of Cognitive Neuroscience and Learning, Beijing Normal University, Beijing, China, [2]Huaxi MR Research Center (HMRRC), Department of Radiology, West China Hospital of Sichuan University, Chengdu, China, [3]National Laboratory of Pattern Recognition, Institute of Automation, Chinese Academy of Sciences, Beijing, China, [4]McConnell Brain Imaging Center, Montreal Neurological Institute, McGill University, Montreal, Canada* 602 M-PM

NEUROANATOMY
Anatomical Studies

Effects of hypertension on grey matter volumes over 4 years in healthy adults aged 60-64: a voxel based morphometry study, *Xiaohua Chen[1,2], Wei Wen[1,2], Perminder Sachdev[1,2], Kaarin Anstey[3], [1]School of Psychiatry, University of New South Wales, Sydney, Australia, [2]Neuropsychiatric Institute, Prince of Wales Hospital, Sydney, Australia, [3]Centre for Mental Health Research, Australian National University, Canberra, Australia* 606 M-PM

Optimized high-resolution mapping of magnetisation transfer at 3 Tesla reveals substructures in the human thalamus in clinically feasible measurement time, *Peter Dechent[1], Tabea Gringel[1,2], Erck Elolf[2], Walter Schulz-Schaeffer[3], Gunther Helms[1], [1]MR-Research in Neurology and Psychiatry, University Medical Center, Göttingen, Germany, [2]Department of Neuroradiology, University Medical Center, Göttingen, Germany, [3]Department of Neuropathology, University Medical Center, Göttingen, Germany* 610 M-PM

Transmitter receptor mapping reveals hierarchy and input specificity in human primary somatosensory cortex, *Valentina Garibotto[1,2], Simon B. Eickhoff[1], Nicola Palomero-Gallagher[1], Karl Zilles[1,3], [1]Institute of Neuroscience and Biophysics, INB-3 Medicine, Research Centre, Jülich, Germany, [2]San Raffaele Scientific Institute, Milan, Italy, [3]C.&O. Vogt-Institute of Brain Research, University, Düsseldorf, Germany* 614 M-PM*

PHYSIOLOGY, METABOLISM, & NEUROTRANSMISSION

K. Dietmar Merboldt[4], Jens Frahm[4], [1]MR-Research in Neurology and Psychiatry, University Medical Center, Göttingen, Germany, [2]Department of Neuroradiology, University Medical Center, Göttingen, Germany, [3]Department of Neurology, University Medical Center, Göttingen, Germany, [4]Biomedizinische NMR Forschungs GmbH am Max-Planck-Institut für biophysikalische Chemie, Göttingen, Germany

SENSORY SYSTEMS
Multisensory & Crossmodal

SENSORY SYSTEMS
Pain & Autonomic Function

EVOKED MAGNETIC BRAIN RESPONSES IN TRAUMATIC PERIPHERAL NEUROPATHIC PAIN (before and after a local block), *P.J. Theuvenet[1], B.W. van Dijk[1], Maria J. Peters[1], F.L. Lopes da Silva[1], J.M. van Ree[1], Andrew C.N. Chen[2], [1]Dept. of Anesthesiology, Alkmaar Medical Center,, Alkmaar, Netherlands, [2]Center for Higher Brain Functions, Capital Medical University, Beijing, China* 706 M-PM

Cortical Activation during the Urge to Cough in Healthy Volunteers, *Lisan Ho[1], Kevin McGuinness[2], Douglas R Corfield[3], Graham Kemp[1], Sandy Jack[4], John Earis[4], Peter Calverley[5], Neil Roberts[1], Ashley Woodcock[2], Jacky Smith[2], [1]Magnetic Resonance & Image Analysis Research Centre (MARIARC), University of Liverpool, Pembroke Place, Liverpool, United Kingdom, [2]Respiratory Research Group, University of Manchester, Manchester, United Kingdom, [3]Institute of Science & Technology in Medicine, Keele University, Keele, United Kingdom, [4]University Hospital Aintree, Liverpool, United Kingdom, [5]School of Infection and Immunity, University of Liverpool, Liverpool, United Kingdom* 710 M-PM

Augmented cerebral activation by lumbar mechanical stimulus in chronic low back pain patients – an fMRI study, *Jiro Kurata[1], Yoshitaka Kobayashi[2], Mika Kokubun[3], Takashi Akaishizawa[3], Miho Sekiguchi[2], Shin-ichi Konno[2], Shin-ichi Kikuchi[2], [1]Department of Anesthesia, Teikyo University School of Medicine, Itabashi, Japan, [2]Department of Orthopaedic Surgery, Fukushima Medical University School of Medicine, Fukushima, Japan, [3]Department of Radiology, Southern Tohoku General Hospital, Koriyama, Japan* 714 M-PM

Mapping brain response to pain in fibromyalgia patients using temporal analysis of fMRI, *Marina López-Solà[1], Jesús Pujol[1,2], Hector Ortiz[1,3], Joan Carles Vilanova[4], Benjamin Harrison[1,5], Murat Yücel[5], Carles Soriano-Mas[1], Narcís Cardoner[1,6], Carme Busquets[7], Rosa Hernández-Ribas[1,6], Joan Deus[8], [1]Institut d'Alta Tecnologia-PRBB, CRC Corporació Sanitària, Barcelona, Spain, [2]Clinical Sciences Departament. Faculty of Medicine. University of Barcelona, Barcelona, Spain, [3]Department of Electronic Engineering, Technical University of Catalonia, Barcelona, Spain, [4]Magnetic Ressonance, Girona Clinic, Girona, Spain, [5]Melbourne Neuropsychiatry Centre, Department of Psychiatry, Melbourne, Australia, [6]Department of Psychiatry, Bellvitge University Hospital, Barcelona, Spain, [7]Pain Unit, Girona Universitary Hospital Doctor Josep Trueta, Girona, Spain, [8]Department of Clinical and Health Psychology, Autonomous University of Barcelona, Barcelona, Spain* 718 M-PM

Perceptual and activation differences between experimental muscle and cutaneous pain, *Heather Cameron[1], Arshad Zaman[1], Neil Roberts[1], Turo Nurmikko[1,2], [1]University of Liverpool, Liverpool, United Kingdom, [2]The Walton Centre for Neurology and Neurosurgery NHS Trust, Liverpool, United Kingdom* 722 M-PM

EMOTION & MOTIVATION
Emotional Perception

Regulation of Vagal Tone by Medial Prefrontal Cortex Varies By Emotional Valence, *Richard D. Lane[1], Kateri McCrae[1,2], Eric M. Reiman[1,3,4], Carolyn L. Fort[1], Julian F. Thayer[5], [1]Department of Psychiatry, University of Arizona, Tucson, USA, [2]Department of Psychology, Stanford University, Palo Alto, USA, [3]Translational Genomics Research Institute, Phoenix, USA, [4]Banner Alzheimer Institute, Banner Positron Emission Tomography Center, Banner Good Samaritan Medical Center, Phoenix, USA, [5]Department of Psychology, Ohio State University, Columbus, USA* 726 M-PM

Schedule of Poster Presentation and List of Posters **Tuesday, June 17, 2008**

11:30 – 12:30 *You Yangs Hall (Level 3)*

COGNITION & ATTENTION
Attention (auditory, tactile, motor)

Neural mechanisms underlying error correction and spatial realignment during adaptation to optical wedge prisms, *Heidi Chapman[1], Ranmalee Eramudugolla[2], Mark Strudwick[3], Andrea Loftus[4], Ross Cunnington[2], Jason Mattingley[2], [1]Department of Psychology, University of Melbourne, Melbourne, Australia, [2]Queensland Brain Institute, University of Queensland, Brisbane, Australia, [3]Centre for Magnetic Resonance, University of Queensland, Brisbane, Australia, [4]Department of Psychology, University of Western Australia, Perth, Australia* 3 T-AM

An exploration of the cortical sources of the P3a, P3b and Novelty P3 sub-components of the ERP., *Jacqueline Rushby[1,2], Robert Barry[1], Thomas Weickert[2], [1]Brain & Behaviour Research Institute and School of Psychology, University of Wollongong, Wollongong, Australia, [2]Prince of Wales Medical Research Institute and School of Psychiatry, University of NSW, Randwick, Australia* 11 T-AM

Dance floor in the brain, *Karsten Specht[1,2], Berge Osnes[1], Kenneth Hugdahl[1,3], [1]Department of Biological and Medical Psychology, University of Bergen, Bergen, Norway, [2]Clinical Engineering Department, Haukeland University Hospital, Bergen, Norway, [3]Division of Psychiatry and Bergen Mental Health Center, Haukeland University Hospital, Bergen, Norway* 15 T-AM

COGNITION & ATTENTION
Attention (visual)

Effect of endogenous attention on the human brain response to illusory line motion, *Tomoaki Ayabe[1,2,4], Tomohiro Ishizu[3], Tomokazu Urakawa[1], Yoshiki Kaneoke[1], Ryusuke Kakigi[1], [1]National Institute for Physiological Science, Okazaki, Japan, [2]The Graduate University for Advanced Studies, Okazaki, Japan, [3]Keio University, Tokyo, Japan, [4]Japan Sciety for Promotion of Science, Tokyo, Japan* 19 T-AM

The neurocognitive effects of donepezil on visual short-term memory capacity following 24 h of sleep deprivation, *Lisa Chuah[1], Annette Chen[1], Delise Chong[1], Rekshan William[1], Jiat-Chow Tan[1], Martin Pan[2], Robert Lai[2], Vincenzo Libri[2], Michael Chee[1], [1]Cognitive Neuroscience Lab, Duke-NUS Graduate Medical School, Singapore, Singapore, [2]Neurology Centre of Excellence of Drug Discovery, GlaxoSmithKline, Harlow, United Kingdom* 23 T-AM

Neuroanatomical correlates of performance enhancement by nicotine under conditions of selective attention, divided attention and stimulus detection, *Britta Hahn[1], Thomas J. Ross[1], Frank A. Wolkenberg[1], Diaa M. Shakleya[2], Marilyn A. Huestis[2], Elliot A. Stein[1], [1]National Institute on Drug Abuse, Neuroimaging Research Branch, Baltimore, USA, [2]National Institute on Drug Abuse, Chemistry and Drug Metabolism Section, Baltimore, USA* 27 T-AM

Early attention: local modulations and network changes, *Andreas A. Ioannides[1], Vahe Poghosyan[2], Marotesa Voultsidou[2], [1]RIKEN, Brain Science Institute (BSI), Laboratory for Human Brain Dynamics, Wako-shi, Japan, [2]AAI Scientific and Cultural Services Limited, Laboratory for Human Brain Dynamics, Nicosia, Cyprus* 31 T-AM

Change of ERP features with respect to the task difficulty of visual oddball task, *Kyung Hwan Kim, Ja Hyun Kim, Jin Yun, Department of Biomedical Engineering Yonsei University, Wonju, South Korea* 35 T-AM

Activation in V1 reflects the local saliency of pop-out stimuli, *Lucia Melloni[1,2], Sara van Leeuwen[1,2], Arjen Alink[2,3], Notger Müller[1,2], [1]Cognitive Neurology Unit, Johann Wolfgang Goethe-University, Frankfurt am Main, Germany, [2]) Brain Imaging Center, Frankfurt am Main, Germany, [3]) Department of Neurophysiology, Max Planck Institute for Brain Research, Frankfurt am Main, Germany* 39 T-AM

Conflict resolution in a focused visual attentional task. A MEG study, *Carmen Santisteban[1,2], Jesus M. Alvarado[1,2], Manuel Cortijo[1,3], [1]Instituto de Estudios Biofuncionales, Madrid, Spain, [2]Facultad de Psicologia, Madrid, Spain, [3]Facultad de Farmacia, Madrid, Spain* 43 T-AM

EMOTION & MOTIVATION
Emotional Learning

COGNITION & ATTENTION
Cognitive Aging

COGNITION & ATTENTION
Cognitive Development

COGNITION & ATTENTION
Perception, Imagery, Awareness

Manuel Schabus[5], Melanie Pelegrini[3], Audrey Vanhaudenhuyse[1], Genevieve Albouy[4], Evelyne Balteau[4], Christophe Phillips[4], Virginie Sterpenich[4], Gilles Vandewalle[4], Andre Luxen[4], Steven Laureys[1,2], Habib Benali[3], Pierre Maquet[2,4], [1]Coma Science Group, Cyclotron Research Center, University of Liège, Liège, Belgium, [2]Neurology Department, CHU Sart Tilman Hospital, University of Liège, Liège, Belgium, [3]Inserm, U678 and Pierre et Marie Curie University, Faculty of medicine Pitie-Salpetriere, Paris, France, [4]Cyclotron Research Center, University of Liège, Liège, Belgium, [5]Department of Psychology, University of Salzburg, Salzburg, Austria

COGNITION & ATTENTION
Reasoning & Problem Solving

COGNITION & ATTENTION
Space, Time, & Number Coding

DISORDERS OF THE NERVOUS SYSTEM
Alzheimer & Dementia

DISORDERS OF THE NERVOUS SYSTEM
Mood & Anxiety Disorders

DISORDERS OF THE NERVOUS SYSTEM
Parkinson's Disease & Other Basal Ganglia

DISORDERS OF THE NERVOUS SYSTEM
Schizophrenia

EMOTION & MOTIVATION
Reward

EMOTION & MOTIVATION
Social Behavior

GENETICS

IMAGING TECHNIQUES & CONTRAST MECHANISM
MEG

LANGUAGE
Language Acquisition

LANGUAGE
Production

MEMORY & LEARNING
Plasticity (normal & following pathology)

MEMORY & LEARNING
Working Memory

Perceptual memory representations studied in delayed discrimination of spatial frequency - behavioral and fMRI evidence for high-fidelity visual stores in early visual cortex, *Oliver Baumann[1,2,3], Tor Endestad[3], Svein Magnussen[3], Mark Greenlee[2], [1]University of Queensland, Brisbane, Australia, [2]University of Regensburg, Regensburg, Germany, [3]University of Oslo, Oslo, Norway* 411 T-AM

Inefficient recruitment of working memory updating networks in post-traumatic stress disorder, *Richard Clark[1], Kathryn Moores[1], Alexander McFarlane[2], [1]Flinders University, Adelaide, Australia, [2]Adelaide University, Adelaide, Australia* 415 T-AM

Increase of Alpha Coherence in a Working Memory Network: An MEG Study, *Hyojin Park[1,2], June Sic Kim[4], Chun-Kee Chung[1,4], Dong Soo Lee[1,2], Eunjoo Kang[3], [1]Interdisciplinary Program in Cognitive Science, Seoul National University, Seoul, South Korea, [2]Department of Nuclear Medicine, Seoul National University Hospital, Seoul, South Korea, [3]Department of Psychology, Kangwon National University, Chuncheon, South Korea, [4]MEG Center, Department of Neurosurgery, Seoul National University Hospital, Seoul, South Korea* 419 T-AM

Prefrontal cortex and basal ganglia control access to working memory, *Fiona McNab, Torkel Klingberg, Stockholm Brain Institute, Karolinska Institutet, Stockholm, Sweden* 423 T-AM

A TMS "ping" during fMRI reveals physiological consequences of functional connectivity and dissociates multivariate from univariate maps of working memory storage, *Bradley Postle[1,2], Eva Feredoes[1,3], Todd Woodward[3], Giulio Tononi[2], [1]Univ. of Wisconsin Psychology, Madison, USA, [2]Univ. of Wisconsin Psychiatry, Madison, USA, [3]Univ. of British Columbia Psychiatry, Vancouver, Canada* 427 T-AM

MODELING & ANALYSIS
Bayesian Modeling

Observing the Observer : a nested Bayesian approach to studies of learning and decision making, *Jean Daunizeau[1], Mathias Pessiglione[2], Klaas Stephan[1], Hanneke Den Ouden[1], Karl Friston[1], [1]Welcome Trust Centre for Neuroimaging, London, United Kingdom, [2]INSERM U610, Paris, France* 431 T-AM

Combined spatial and non-spatial Gaussian process prior for fMRI analysis, *Adrian Groves, Mark Woolrich, FMRIB Centre, Oxford, United Kingdom* 435 T-AM

The choice of forward model in MEG localisation, *Richard Henson[1], Jeremie Mattout[2], Karl Friston[3], [1]MRC CBU, Cambridge, United Kingdom, [2]Brain Dynamics and Cognition, U821 INSERM, Lyon, France, [3]FIL, London, United Kingdom* 439 T-AM

How Should Anatomical Connectivity Be Defined?, *Enrico Kaden, Alfred Anwander, Thomas R. Knösche, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany* 443 T-AM

A Unified Bayesian Framework for MEG/EEG Source Imaging, *David Wipf[1], Hagai Attias[2], Kensuke Sekhara[3], Srikantan Nagarajan[1], [1]UCSF, San Francisco, USA, [2]Golden Metallic, San Francisco, USA, [3]Tokyo Metropolitan University, Tokyo, Japan* 447 T-AM*

11:30 – 12:30 *Corryong Hall (Level 2)*

MODELING & ANALYSIS
Classification & Predictive Modeling

A multivariate approach to fMRI activation detection using pattern recognition and information entropy on tactile data, *Malin C.B. Åberg, Line Löken, Johan Wessberg, Department of neuroscience and physiology, Göteborg University, Göteborg, Sweden* 451 T-AM

Exploiting EEG inverse problem in an asynchronous BCI experiment, *Michel Besserve, Jacques Martinerie, Line Garnero, Laboratoire de Neurosciences Cognitives et Imagerie Cérébrale, CNRS UPR 640 LENA & UPMC Univ Paris 06, Paris, France* 455 T-AM

MODELING & ANALYSIS
Motion Correction/Spatial Normalization, Atlas Construction

Center for Biomedical Imaging at MGH, Boston, USA, [4]Computer Science and Arti¯cial Intelligence Laboratory, Massachusetts Institute of Technology, Boston, USA, [5]Department of Psychology, Center for Brain Science, Harvard University, Boston, USA

MODELING & ANALYSIS
Univariate Modeling, Linear, & Nonlinear

MOTOR BEHAVIOR
Brain-machine Interface

MOTOR BEHAVIOR
Hand Movements

Düsseldorf, Germany, [2]Institute of Neuroscience and Biophysics, INB-3 Medicine, Research Centre Jülich, Jülich, Germany, [3]Brain Imaging Center West (BICW), Jülich, Germany, [4]Max-Planck-Institut for Neurological Research, Cologne, Germany

fMRI in patients with writer's cramp treated by repetitive transcranial magnetic stimulation (rTMS) of the primary somatosensory cortex, *Robert Jech[1], Petra Havrankova[1], Nolan Walker[1], Jana Tauchmanova[2], Josef Vymazal[3], Evzen Ruzicka[1], [1]Department of Neurology, 1st Medical Faculty, Charles University, Prague, Czech Republic, [2]Department of Control Engineering, Faculty of Electrical Engineering, Czech Technical University, Prague, Czech Republic, [3]Na Homolce Hospital, Prague, Czech Republic* 559 T-AM

Dissociating networks of delayed imitation by independent component analysis, *Mareike M. Menz, Kathrin Reetz, Adam McNamara, Ferdinand Binkofski, Department of Neurology and NeuroImage Nord, University of Luebeck, Luebeck, Germany* 563 T-AM

Neural correlates of improved visuomotor functions following stimulation of the noradrenergic system in humans, *Ling E. Wang[1,2], Gereon R. Fink[1,3], Manuel Dafotakis[1], Christian Grefkes[1,3,4], [1]Cognitive Neurology Section, Institute of Neuroscience and Biophysics – Medicine, Research Centre Juelich, Juelich, Germany, [2]International Graduate School of Neuroscience, Ruhr University Bochum, Bochum, Germany, [3] Department of Neurology, University of Cologne, Cologne, Germany, [4]Neuromodulation & Neurorehabilitation Section, Max-Planck-Institute of Neurological Research, Cologne, Germany* 567 T-AM

MOTOR BEHAVIOR
Motor-Premotor Cortex/Motor Cortical Functions

Neural correlates of action prediction in sports: How important is expertise?, *Ana Maria Abreu[1,2], Emiliano Macaluso[1], Paola Cesari[3], Cosimo Urgesi[4], Salvatore Maria Aglioti[2], [1]Neuroimaging Laboratory, Santa Lucia Foundation, Rome, Italy, [2]Department of Psychology, University of Rome 'La Sapienza', Rome, Italy, [3]Department of Neurological and Visual Sciences, University of Verona, Verona, Italy, [4]Scientific Institute Eugenio Medea, San Vito al Tagliamento, Pordenone, Italy* 571 T-AM

Premotor mirror neuron activation in schizophrenia, *Peter Enticott[1], Kate Hoy[1], Sally Herring[1], Patrick Johnston[2], Paul Fitzgerald[1], [1]Alfred Psychiatry Research Centre, Monash University, Melbourne, Australia, [2]Brain Sciences Institute, Swinburne University of Technology, Melbourne, Australia* 575 T-AM

The Enhancement of Cortical Excitability by Transcranial Direct Current Stimulation in Human Brain, *Yong Hyun Kwon[1], Sung Ho Jang[2], Sang Ho Ahn[2], [1]Department of Physical Therapy, Yeungnam College of Science & Technology, Daegu, South Korea, [2]Department of Physical Medicine and Rehabilitation, School of Medicine, Yeungnam University, Daegu, South Korea* 579 T-AM

Making EMG recordings during fMRI work: experiences from fundamental and applied studies of the motor system, *N.M. Maurits[1,2], R.J. Renken[2], J.H. van der Hoeven[1], A.F. van Rootselaar[3], [1]Department of Neurology, University Medical Center Groningen, Groningen, Netherlands, [2]BCN-NeuroImaging Center, University Medical Center Groningen, University of Groningen, Groningen, Netherlands, [3]Department of Neurology and Clinical Neurophysiology, Academic Medical Center Amsterdam, Amsterdam, Netherlands* 583 T-AM

Normal variation in representation area of thenar and tibial muscles in healthy motor cortex: navigated transcranial magnetic stimulation study, *Eini Niskanen[1,2], Laura Säisänen[1], Petro Julkunen[1], Ritva Vanninen[3], Mervi Könönen[1,3], [1]Department of Clinical Neurophysiology, Kuopio University Hospital, Kuopio, Finland, [2]Department of Physics, University of Kuopio, Kuopio, Finland, [3]Department of Radiology, Kuopio University Hospital, Kuopio, Finland* 587 T-AM

An Image-Guided, Robotic, Transcranial Magnetic Stimulation (irTMS) Virtual Lesion Study of Speech, *Donald Robin[1, 2], Frank Guenther[3], Shalini Narayana[1], Adam Jacks[1], Jason Tourville[3], Amy Ramage[1], Jack Lancaster[1], Crystal Franklin[1], Peter Fox[2], [1]Research Imaging Center, University of Texas Health Science Center at San Antonio, San Antonio, USA, [2]Honor's College, University of Texas, San Antonio, San Antonio, USA, [3]Center for Neurocomputation, Boston University, Boston, USA* 591 T-AM

Observing multiple people acting: Separability of cortical processing streams associated with each person's actions, *Jeremy I. Skipper[1], Ekaterina Dobryakova[2], Natalie Sebanz[3], [1]Sackler Institute for Developmental Psychobiology, Weill-Cornell Medical College, New York, USA, [2]Rutgers University, Newark, USA, [3]University of Birmingham, Birmingham, United Kingdom* 595 T-AM

EEG spectrum power and EEG –EMG coherence mapping during voluntary movement in children aged 7 to 10 years with different attention and impulsivity, *Alexander Trembach[1], Yanina Bugaez[2], Maxim Beljaev[3], Katrin Vitko[1], Eduard Moskalev[1], [1]Department of Adaptive Training and Physical Rehabilitation, Kuban State University of Physical Education, Sport and Tourism, Krasnodar, Russia, [2]Department of Physiology, Kuban University of Physical Education, Sport and Tourism, Krasnodar, Russia, [3]Department of Biomechanics, Kuban State University of Physical Education, Sport and Tourism, Krasnodar, Russia, [4]Department of Adaptive Training and Physical Rehabilitation, Kuban State University of Physical Education, Sport and Tourism, Krasnodar, Russia, [5]Department of Adaptive Training and Physical Rehabilitation, Kuban State University of Physical Education, Sport and Tourism, Krasnodar, Russia* 599 T-AM

NEUROANATOMY
Anatomical Studies

Nerve Fiber Mapping in Histological Sections of the Human Brain by Means of Polarized Light, *Markus Axer[1], Jürgen Dammers[1], David Gräßel[1], Katrin Amunts[1,2], Uwe Pietrzyk[1,3], Karl Zilles[1,4], [1]Institute of Neurosciences and Biophysics 3 - Medicine, Research Center Jülich, Jülich, Germany, [2]Department for Psychiatry and Psychotherapy, RWTH Aachen University, Aachen, Germany, [3]Department of Physics, University of Wuppertal, Wuppertal, Germany, [4]C. and O. Vogt Institute of Brain Research, University of Düsseldorf, Düsseldorf, Germany* 603 T-AM

A comparison of manual tracing and automated measure of hippocampal volume in a large community-based sample, *Nicolas Cherbuin[1], Kaarin J. Anstey[1], Chantal Meslin[1], Perminder S. Sachdev[2], [1]Centre for Mental Health Research, Australian National University, Canberra, Australia, [2]School of Psychiatry, University of New South Wales, Sydney, Australia* 607 T-AM

Delineation of the subthalamic nucleus (STN) on high-resolution maps of R2*, *Peter Dechent[1], Erck Elolf[2], Tabea Gringel[1,2], Michael Knauth[2], Gunther Helms[1], [1]MR-Research in Neurology and Psychiatry, University Medical Center, Göttingen, Germany, [2]Department of Neuroradiology, University Medical Center, Göttingen, Germany* 611 T-AM

Congestive heart failure is associated with changes in grey matter volume that cannot be entirely explained by cardiovascular disease, *Griselda Garrido[1], Leon Flicker[2], Christopher Beer[2], Nicola Lautenschlager[2], Leonard Arnolda[3], Andrew Campbell[4], Nat Lenzo[5], Osvaldo Almeida[2], [1]Serviço de Informática Médica, Instituto do Coração, Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo, São Paulo, Brazil, [2]Western Australia Centre for Health & Ageing, University of Western Australia, Perth, Australia, [3]School of Medicine and Pharmacology, University of Western Australia, Perth, Australia, [4]Department of Medical Engineering and Physics, Royal Perth Hospital, Perth, Australia, [5]Department of Nuclear Medicine, Royal Perth Hospital, Perth, Australia* 615 T-AM

New structural brain findings in maltreated children with PTSD using deformation tensor morphometry: a preliminary report, *Andrea Jackowski[1,2], Colin Studholme[3], Heather Douglas-Palumberi[2], Joan Kaufman[2,4], [1]LiNC, Universidade Federal de Sao Paulo, Sao Paulo, Brazil, [2]Child Study Center, Yale University, New Haven, USA, [3]Radiology, University of California, San Francisco, USA, [4]Psychiatry, Yale University, New Haven, USA* 619 T-AM

Can regional structural MRI measurement of cerebral health explain age-related cognitive change?, *Peter Kochunov[1,2], Donald Robin[1], Anita Schlosser[1], Valeria Kochunov[1], Jack Lancaster[1,2], Peter Fox[1,2], [1]Research Imaging Center, University of Texas Health Science Center at San Antonio, san antonio, USA, [2]International Consortium for Brain Mapping (ICBM),, USA* 623 T-AM

Laterality Differences in Klinefelter's Syndrome: A voxel-based morphometry study, *Francois Lalonde[1], Gregory Ihrie[2], Gregory Wallace[3], Liv Clasen[1], Jay Giedd[1], [1]Child Psychiatry Branch, NIMH, NIH, Bethesda, USA, [2]University of Maryland, College Park, USA, [3]Laboratory of Brain and Cognition, NIMH, NIH, Bethesda, USA* 627 T-AM

PHYSIOLOGY, METABOLISM, & NEUROTRANSMISSION

Hospital, University of Montreal, Montreal, Canada, [2]Department of Psychiatry, Faculty of Medicine, University of Montreal, Montreal, Canada, [3]Centre Esquirol, Université de Basse Normandie, CHU Cote de Nacre, Caen, France, [4]Centre Cyceron, Caen, France

Use of FDG-PET to Evaluate the Limbic-Pituitary-Adrenal Axis During Estrogen Challenge: A Preliminary Analysis, *William Ottowitz[1], Martin Lindquist[2], Darin Dougherty[3], Alan Fischman[4], Janet Hall[5], [1]GSAS, Columbia University, New York, USA, [2]Dept Statistics, Columbia University, New York, USA, [3]MGH Psychiatric Neuroscience Program, Boston, USA, [4]MGH Dept of Nuclear Medicine, Boston, USA, [5]Reproductive Endocrinology, Boston, USA* 671 T-AM

Prospective Neurochemical Characterization of Child Offspring of Parents with Bipolar Disorder, *Manpreet Singh[1], Kiki Chang[1], Daniel Spielman[2], [1]Stanford University School of Medicine, Stanford, USA, [2]Richard Lucas Center for Magnetic Resonance Spectroscopy and Imaging, Stanford, USA* 675 T-AM

Regional distribution of aerobic glycolysis in the resting human brain, *S. Neil Vaishnavi, Andrei Vlassenko, Melissa Rundle, Abraham Snyder, Mark Mintun, Marcus Raichle, Dept. Radiology, Washington Univ. School of Medicine, St. Louis, USA* 679 T-AM*

BOLD Response in Lateral Geniculate Nucleus (LGN) at Very Short Stimulus Durations, *Barış Yeşilyurt[1], Kamil Uğurbil[1,2], Kamil Uludağ[1], [1]Max-Planck-Institute for Biological Cybernetics, High-Field Magnetic Resonance Center, Tübingen, Germany, [2]Center for Magnetic Resonance Research, Department of Radiology, University of Minnesota Medical School, Minneapolis, USA* 683 T-AM

SENSORY SYSTEMS
Multisensory & Crossmodal

An electrophysiological study of the development of multisensory facilitation in children., *Ayla Barutchu[1], Hamish Innes-Brown[1], Mohit N. Shivdasani[1], Sheila Crewther[2], Tony G. Paolini[1 & 2], [1]Auditory Clinical Neuroscience Unit, The Bionicear Institute, Melbourne, Australia, [2]School of Psychological Sciences, Melbourne, Australia* 687 T-AM

Sound-induced illusory flashes: issues for a psychophysiological investigation., *Hamish Innes-Brown[1,2], David Crewther[2], [1]Bionic Ear Institute, Melbourne, Australia, [2]Brain Sciences Institute, Swinburne University, Melbourne, Australia* 691 T-AM

Neural correlates of sensory feedback loops in reaching, *Alexandra Reichenbach[1,2], Jean-Pierre Bresciani[2], Angelika Peer[3], Kamil Uludag[1], Heinrich Bülthoff[2], Axel Thielscher[1], [1]Max-Planck Institute for Biological Cybernetics, High-Field Magnetic Resonance Center, Tübingen, Germany, [2]Max-Planck Institute for Biological Cybernetics, Dept. for Cognitive and Computational Psychophysics, Tübingen, Germany, [3]Technische Universität München, Institute of Automatic Control Engineering, Munich, Germany* 695 T-AM

SEGREGATED VISUO-HAPTIC PROCESSING OF TEXTURE AND LOCATION, *Gregory Gibson[1,2], Randall Stilla[2], Krish Sathian[1,2], [1]Rehabilitation R&D Center of Excellence, Atlanta VAMC, Decatur, USA, [2]Department of Neurology, Emory University, Atlanta, USA* 699 T-AM

SENSORY SYSTEMS
Pain & Autonomic Function

Cola-bottle Tonic Pain Test (C-TPT) on EEG Default Mode Spectral Field Power Mapping, *Andrew CN Chen*, Liping Song, Li Du, Yanling Luo, Center for Higher Brain Functions, Capital Medical University, Beijing, China* 703 T-AM

Enhanced functional connectivity of the dorsolateral prefrontal cortex during intermittent pain in patients with Alzheimer's disease, *Leonie Cole[1,2,3], Maria Gavrilescu[1], Stephen Gibson[3,4,5], Michael Farrell[1,2,3], Gary Egan[1,2], [1]Howard Florey Institute, Florey Neurosciences Institute, Parkville, Australia, [2]Centre for Neuroscience, University of Melbourne, Parkville, Australia, [3]National Ageing Research Institute, Parkville, Australia, [4]Department of Medicine, University of Melbourne, Parkville, Australia, [5]Caulfield Pain Management and Research Centre, Caulfield, Australia* 707 T-AM

Illness Behaviour in Chronic Low Back Pain Patients is Associated with Reduced Insular Cortex Volume, *Sioban Kelly[1,2], Donna Lloyd[3], Gordon Findlay[4], John Downes[2], Turo Nurmikko[1], Neil Roberts[5], [1]Pain Research Institute, Liverpool, United Kingdom, [2]School of Psychology, University of Liverpool, Liverpool, United Kingdom, [3]School of Psychology, University of Manchester, Manchester, United Kingdom, [4]The Walton Centre for Neurology and Neurosurgery, Liverpool, United Kingdom, [5]Magnetic Resonance Image Analysis Research Centre, University of Liverpool, Liverpool, United Kingdom* 711 T-AM

Brain responses to visceral pain – influence of central serotonin signaling, *Jennifer Labus[1], Michiel van Nieuwenhoven[3], Shin Fukudo[2], Emeran Mayer[1], [1]Center for Neurobiology of Stress, Brain Research Institute, Depts of Psychiatry and Biobehavioral Sciences and Medicine at the University of California, Los Angeles, Los Angeles, USA, [2]Behavioral Medicine, Tohoku University Graduate School of Medicine, Sendai, Miyagi, Japan, Sendai, Miyagi, Japan, [3]Gastroenterology, University Hospital Maastricht, The Netherlands, Maastricht, Netherlands* 715 T-AM*

NMDA-antagonist and morphine reduce pain and fMRI-activation of pain areas in CRPS, *Anja Schwarz[1], Sylvia Gustin[1], Niels Birbaumer[1], Nektarius Sinis[2], Ralf Veit[1], Wolfgang Larbig[1], Herta Flor[3], Martin Lotze[4], [1]Institute of Medical Psychology and Behavioral Neurobiology, Tuebingen, Germany, [2]Traumatology Hospital of the University of Tuebingen, Tuebingen, Germany, [3]Department of Clinical and Cognitive Neuroscience at the University of Heidelberg, Central Institute of Mental Health, Mannheim, Germany, [4]Functional Imaging Institute for Diagnostic Radiology and Neuroradiology, University of Greifswald, Greifswald, Germany* 719 T-AM

Acupuncture Mediated Brain Activity Demonstrated with fMRI at 4 Tesla, *Mark Strudwick[1], Katie McMahon[1], Stephen Wilson[2], Greig DeZubicaray[1], [1]Centre for Magnetic Resonance, University of Queensland, Brisbane, Australia, [2]School of ITEE, University of Queensland, Brisbane, Australia* 723 T-AM

13:45 – 14:45 *You Yangs Hall (Level 3)*

COGNITION & ATTENTION
Attention (auditory, tactile, motor)

The "VP1": an early voice-preferential electrophysiological response, *Ian Charest[1], Cyril Pernet[2], Guillaume Rousselet[1], Sarah Fillion-Bilodeau[3], Pascal Belin[1, 4], [1]Centre for Cognitive Neuroimaging, Department of Psychology, University of Glasgow, Glasgow, United Kingdom, [2]SFC Brain Imaging Research Center, Department of Clinical Neurosciences, University of Edinburgh, Edinburgh, United Kingdom, [3]Département de Psychologie, Université de Montréal, Montréal, Canada, [4]International Laboratory for Brain, Music and Sound Research, Université de Montréal and McGill University, Montréal, Canada* 4 T-PM

Examining the Pharmacology of Mismatch Negativity: Electrophysiological Investigations in Healthy Subjects, *Sumie Leung[1], Rodney Croft[1], Torsten Baldeweg[2], Barry O'Neill[1], Pradeep Nathan[3], [1]Biological Psychiatry Research Unit, Brain Sciences Institute, Faculty of Life and Social Sciences, Swinburne University of Technology, Melbourne, Australia, [2]Institute of Child Health (University College London) and Great Ormond Street Hospital for Children NHS Trust, London, United Kingdom, [3]Department of Psychiatry, University of Cambridge, Cambridge, United Kingdom* 8 T-PM

Top-down and bottom-up control of auditory attention: A combined fMRI and probabilistic tractography study, *Juha Salmi[1,2,3], Teemu Rinne[1], Sonja Koistinen[1,3], Tuomas Neuvonen[2,3], Synnöve Carlson[2,4,5], Oili Salonen[6], Kimmo Alho[1], [1]Department of Psychology, University of Helsinki, Finland, [2]Neuroscience Unit, Institute of Biomedicine/physiology, University of Helsinki, Finland, [3]Advanced Magnetic Imaging Centre, Helsinki University of Technology, Finland, [4]Medical School, University of Tampere, Finland, [5]Brain Research Unit, Helsinki University of Technology, Finland, [6]Helsinki Medical Imaging Center, Helsinki University Central Hospital, Finland* 12 T-PM*

Schizophrenia-associated deficits of mismatch negativity reflect stimulus presentation and auditory feature with special focus on emotional prosody, *Heike Thoennessen[1], Mikhail Zvyagintsev[1], Frank Boers[2], Juergen Dammers[2], Christine Norra[3], Klaus Mathiak[1,4], [1]Dept. of Psychiatry and Psychotherapy, RWTH Aachen University, Aachen, Germany, [2]Institute of Medicine,* 16 T-PM

Research Center Jülich, Juelich, Germany, [3]Max-Planck-Institute of Experimental Medicine, Goettingen, Germany, [4]Institute of Psychiatry King´s Colllege London, London, United Kingdom

COGNITION & ATTENTION
Attention (visual)

Right Parietal Cortex and Top-Down Visuospatial Attention: Combined on-line rTMS and fMRI, *Felix Blankenburg[1], Christian Ruff[2,3], Sven Bestmann[2], Oliver Josephs[2], Ralf Deichmann[4], Otto Bjoertomt[2,3], Jon Driver[2,3], [1]Bernstein Center for Computational Neuroscience, Charite, Berlin, Germany, [2]Institute of Cognitive Neuroscience, University College London, London, United Kingdom, [3]Wellcome Trust Centre for Neuroimaging at UCL, Institute of Neurology, London, United Kingdom, [4]University Hospital, Brain Imaging Center, Frankfurt, Germany* 20 T-PM*

Attentional Modulation of Multisensory Audiovisual Integration during Speech Perception, *Scott Fairhall, Emiliano Macaluso, Santa Lucia Foundation, Rome, Italy* 24 T-PM

Probing the link between sources and targets of attentional control: a concurrent TMS-fMRI study of visuospatial selection, *Klaartje Heinen[1], Christian Ruff[1], Sven Bestmann[2], Bertram Schenkluhn[1], Felix Blankenburg[3], Otto Bjoertomt[1], Vincent Walsh[1], Jon Driver[1], Chris Chambers[1], [1]Institute of Cognitive Neuroscience, UCL, London, United Kingdom, [2]Wellcome Trust Centre for Neuroimaging, London, United Kingdom, [3]Department of Neurology and Neuroscience Research Center, Charité, Berlin, Germany* 28 T-PM

Brain responses to direct gaze: An optical topography study, *Yuko Isogaya[1], Akiko Obata[2], Hiroki Sato[2], Atsushi Maki[2], Takao Sato[1], Norito Kawakami[1], [1]The University of Tokyo, Tokyo, Japan, [2]Advanced Research Laboratory, Hitachi, Ltd, Saitama, Japan* 32 T-PM

EFFECTS OF TRANSCRANIAL ANODAL DIRECT CURRENT STIMULATION OVER THE RIGHT PARIETAL CORTEX ON UNILATERAL NEGLECT IN STROKE PATIENTS, *Myoung-Hwan Ko[1], Sang-Hyoung Han[1], Jeong-Hwan Seo[1], Yun-Hee Kim[2], [1]Chonbuk National University Medical School & Hospital, Jeonju, South Korea, [2]Sungkyunkwan University School of Medicine, Samsung Medical Center, Seoul, South Korea* 36 T-PM

Selective guidance of attention by items in working memory: converging fMRI and ERP results, *Judith Peters[1,2], Pieter Roelfsema[3,4], Rainer Goebel[1,2], [1]Cognitive Neuroscience Dept, Faculty of Psychology, Maastricht University, Maastricht, Netherlands, [2]Brain Imaging Center (M-BIC), Maastricht University, Maastricht, Netherlands, [3]Department of Vision and Cognition, Netherlands Institute for Neuroscience, an institute of the Royal Netherlands Academy of Arts and Sciences (KNAW), Amsterdam, Netherlands, [4]Department of Experimental Neurophysiology, Center for Neurogenomics and Cognitive Research, Vrije Universiteit, Amsterdam, Netherlands* 40 T-PM*

Working Memory Consolidation Delays Perceptual Processing in Visual Cortex: A Time-Resolved fMRI Study, *Paige Scalf[1], Paul Dux[2], Rene´ Marois[2], [1]Beckman Institute, University of Illinois at Urbana-Champaign, Urbana, USA, [2]Department of Psychology, Vanderbilt Vision Research Center, Center for Integrative and Cognitive Neuroscience, Vanderbilt University, Nashville, USA* 44 T-PM

Lapses in attention during sleep deprivation: more than meets the eye, *Michael WL Chee[1], Jiat Chow Tan[1], Hui Zheng[1], Parimal Sarayu[1], Weismann H Daniel[2], Zagorodnov Vitali[3], David F Dinges[4], [1]Cognitive Neuroscience Laboratory, Duke-NUS Graduate Medical School, Singapore, Singapore, [2]Department of Psychology, University of Michigan, Michigan, USA, [3]School of Computer Engineering, Nanyang Technological University, Singapore, Singapore, [4]Unit for Experimental Psychiatry, niversity of Pennsylvania School of Medicine, Pennsylvania, USA* 48 T-PM*

COGNITION & ATTENTION
Cognitive Aging

Structural consequences of chronic insomnia: a voxel-based morphometric study, *Ellemarije Altena[1,2], Hugo Vrenken[2], Ysbrand Van der Werf[1,2], Eus Van Someren[1,2], [1]Netherlands Institute for Neuroscience, Amsterdam, Netherlands, [2]VU University Medical Center, Amsterdam, Netherlands* 52 T-PM

Age-Related Neural Inefficiency and Compensation Across Multiple Cognitive Domains, *Cheryl Grady, Andrea Protzner, Magda Wojtowicz, Darryl Bannon, Randy McIntosh, Rotman Research Institute, Toronto, Canada* 56 T-PM

Cognitive training impacts functional brain activity and cerebral blood flow of healthy older adults in a randomized controlled trial, *Jennifer Mozolic[1,2], Ashley Morgan[1], Paul Laurienti[1], [1]Department of Radiology, Wake Forest University School of Medicine, Winston-Salem, USA, [2]Graduate Program in Neuroscience, Wake Forest University School of Medicine, Winston-Salem, USA* 60 T-PM

COGNITION & ATTENTION
Cognitive Development

The development of white matter tracts and response inhibition examined using diffusion tensor imaging, *Jessica Cohen[1], Fred Sabb[2], Robert Bilder[1,2], Susan Bookheimer[2,3,4,5], Barbara Knowlton[1,3,4], Robert Asarnow[2], Russell Poldrack[1,3,4], [1]UCLA Department of Psychology, Los Angeles, USA, [2]UCLA Department of Psychiatry, Los Angeles, USA, [3]UCLA Brain Research Institute, Los Angeles, USA, [4]UCLA Interdepartmental Neuroscience Program, Los Angeles, USA, [5]UCLA Brain Mapping Center, Los Angeles, USA* 64 T-PM

Early Development of Cortical Brain Responses to Rapidly Presented Auditory Stimulation: a Magnetoencephalographic Study, *Carolin Sheridan[1,2], Rossitza Draganova[3], Hubert Preissl[1,2], Eric Siegel[1], Rathinaswamy Govindan[1], Hari Eswaran[1], Curtis Lowery[1], [1]University of Arkansas for Medical Sciences, Little Rock, USA, [2]University of Tuebingen, Tuebingen, Germany, [3]University of Muenster, Muenster, Germany* 68 T-PM

Development of Default Mode and Task Positive Network Integrity and Interactions from Childhood to Young Adulthood, *AM Clare Kelly[1], Lucina Uddin[1], Zarrar Shezad[1], Dylan Gee[1], Daniel Margulies[1,2], Adriana Di Martino[1], F Xavier Castellanos[1], Michael Milham[1], [1]Phyllis Green and Randolph Cowen Institute for Pediatric Neuroscience, NYU Child Study Center, New York, USA, [2]Berlin School of Mind and Brain, Humboldt-Universität zu Berlin, Berlin, Germany* 72 T-PM

Basal Perfusion in Adolescents at Risk for Alcohol Use Disorders, *Ai-Ling Lin[1], David Glahn[1], Rene Olvera[2], Peter Fox[1], Ahmad Hariri[3], Douglas Williamson[4], [1]Research Imaging Center, University of Texas Health Science Center, San Antonio, USA, [2]Department of Psychiatry, University of Texas Health Science Center, San Antonio, USA, [3]Department of Psychiatry, University of Pittsburgh, Pittsburgh, USA, [4]Department of Psychiatry, Epidemiology and Biostatistics, University of Texas Health Science Center, San Antonio, USA* 76 T-PM

Emotion, cognition and its interaction in adolescent-onset schizophrenia: an fMRI study, *Katharina Pauly[1], Nina Seiferth[1], Thilo Kellermann[1], Timo Vloet[2,3,4], N. Jon Shah[3,4,5], Frank Schneider[1,3,4], Ute Habel[1], Tilo Kircher[1,3,4], [1]Department of Psychiatry and Psychotherapy, RWTH Aachen University, Aachen, Germany, [2]Department of Child and Adolescent Psychiatry and Psychotherapy, RWTH Aachen University, Aachen, Germany, [3]Brain Imaging Center West, Juelich, Germany, [4]Institute of Neuroscience and Biophysics – Medicine, Research Center Juelich, Juelich, Germany, [5] Institute of Physics, University of Dortmund, Dortmund, Germany* 80 T-PM

COGNITION & ATTENTION
Perception, Imagery, Awareness

Components in Continuous Meditation. An fMRI Investigation, *Klaus B. Bærentsen[1,2], Bo Sommerlund[1], Johannes Damsgaard-Madsen[1,2], Mark Fosnæs[1], Pernille Bruhn[1,2], Hans Stødkilde-Jørgensen[2], [1]Department of Psychology, University of Aarhus, Aarhus, Denmark, [2]MR ResearchCenter, Aarhus University Hospital, Aarhus, Denmark* 84 T-PM

Resting state connectivity integrity in the default network reflects the level of consciousness impairment in brain-injured patients. An fMRI study in brain death, coma, vegetative state, minimally conscious state and locked-in syndrome, *Melanie Boly[1,2], Audrey Vanhaudenhuyse[1], Luaba Tshibanda[3], Marie-Aurelie Bruno[1], Pierre Boveroux[1,4], Quentin Noirhomme[1], Caroline Schnakers[1], Athena Demertzi[1], Didier Ledoux[1,4], Bernard Lambermont[5], Gustave Moonen[2], Robert-Ferninand Dondelinger[3], Christophe Phillips[1], Pierre Maquet[1,2], Steven Laureys[1,2], [1]Coma Science Group, Cyclotron Research Center, University of Liège, Liège, Belgium, [2]Neurology Department, CHU Sart Tilman Hospital, University of Liège, Liège, Belgium, [3]Radiology Department, CHU Sart Tilman Hospital, University of Liège, Liège, Belgium, [4]Anesthesiology, Department, CHU Sart Tilman Hospital, University of Liège, Liège, [5]Internal Medicine Department, CHU Sart Tilman Hospital, University of Liège, Liège,* 88 T-PM*

COGNITION & ATTENTION
Reasoning & Problem Solving

COGNITION & ATTENTION
Space, Time, & Number Coding

DISORDERS OF THE NERVOUS SYSTEM
Alzheimer & Dementia

Cunnington[4], Gary Egan[1], [1]Howard Florey Institute, University of Melbourne, Melbourne, Australia, [2]Experimental Neuropsychology Research Unit, School of Psychology, Psychiatry and Psychological Medicine, Monash University, Melbourne, Australia, [3]Alzheimer's Australia, Melbourne, Australia, [4]Cognitive Neuroscience Laboratory, The Queensland Brain Institute, Brisbane, Australia

Amyloid deposition related to cortical thinning, *J. Alex Becker[1], Jeremy Carmasin[1], Bruce Fischl[1], Doug Greve[1], Amy DeLuca[1], Pete LaViolette[1], Jacqueline O'Brien[1], Kelly O'Keefe[1], Alan Fischman[1], Dorene Rentz[2], Reisa Sperling[1, 2], Keith Johnson[1, 2], [1]Massachusetts General Hospital, Boston, USA, [2]Brigham and Women's Hospital, Boston, USA* 140 T-PM

Reduced resting state activity in dorsal visual-spatial attention system in Alzheimer's disease, *Jessica Damoiseaux[1], Christian Beckmann[2], Ernesto Sanz Arigita[1], Cornelis Stam[1], Frederik Barkhof[1], Stephen Smith[2], Philip Scheltens[1], Serge Rombouts[3], [1]VU University Medical Center, Amsterdam, Netherlands, [2]Oxford Centre for Functional Magnetic Resonance Imaging of the Brain, Oxford, United Kingdom, [3]Leiden Institute for Brain and Cognition (LIBC), Leiden University Medical Center, Institute for Psychological Research, Leiden University, Leiden, Netherlands* 144 T-PM

Cholinergic dysfunction in subcortical ischemic vascular dementia: a transcranial magnetic stimulation study, *Stefan Golaszewski[1,3], Raffaele Nardone[2], Juergen Bergmann[1,7], Christian Siedentopf[3,4], Florian Koppelstaetter[3,4], Eugen Gallasch[6], Anja Ischebeck[5], Gunther Ladurner[1], [1]Department of Neurology, Paracelsus Medical University Salzburg, Salzburg, Austria, [2]Department of Neurology, F. Tappeiner Hospital Meran, Meran, Italy, [3]fMRI Lab, Department of Psychiatry, Medical University Innsbruck, Innsbruck, Austria, [4]Department of Radiology, Medical University Innsbruck, Innsbruck, Austria, [5]Department of Neurology, Medical University Innsbruck, Innsbruck, Austria, [6]Institute of Physiology, Medical University Graz, Graz, Austria, [7]Institute of Psychology, University of Salzburg, Salzburg, Austria* 148 T-PM

Correlation between "Ala score" and CBF in Alzheimer's disease -A SPECT study, *Takashi Kawachi[1], Hiroyasu Kusakabe[3], Haruhiko Oda[2], Yasuji Yamamoto[2], Toshio Kawamata[2], Kiyoshi Maeda[2], [1]IBRI, Kobe, Japan, [2]Kobe university, Kobe, Japan, [3]Ohara Hospital, Kobe, Japan* 152 T-PM

Correlation between findings of rCBF and ^{1}H-MRS in posterior cingulate gyrus for the patients with memory impairment, *Takashi Nihashi[1], Kazumasa Hayasaka[2], Yutaka Arahata[3], Katsushige Iwai[3], Akinori Takeda[3], Yoshiko Yamaoka[3], Youko Konagaya[3], Yukihiko Washimi[3], Kenji Yoshiyama[4], Hideyuki Hattori[4], Shousuke Satake[5], Hisayuki Miura[5], Hidetoshi Endo[5], Hiroshi Yatsuya[6], Shinji Naganawa[1], [1]Department of Radiology, Nagoya University Graduate School of Medicine, Nagoya, Japan, [2]Department of Radiology, National Hospital for Geriatric Medicine, Obu, Japan, [3]Department of Neurology, National Hospital for Geriatric Medicine, Obu, Japan, [4]Department of Psychiatry, National Hospital for Geriatric Medicine, Obu, Japan, [5]Department of General Outpatient services, National Hospital for Geriatric Medicine, Obu, Japan, [6]Department of Pubic Health, Nagoya University School of Medicine, Nagoya, Japan* 156 T-PM

Deconstructing Frontotemporal Lobar Degenerations, *Matthias Schroeter[1,2], Karolina Raczka[3], Jane Neumann[1], D. Yves von Cramon[1,2], [1]Max-Planck-Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, [2]Day Clinic, Leipzig, Germany, [3]Institute for Systems Neuroscience, University Medical Center Hamburg Eppendorf, Hamburg, Germany* 160 T-PM

Regional thalamic degeneration in Alzheimer's disease characterised by structural vertex- and diffusion tractography-based analyses, *Brian Patenaude[1], Mark Jenkinson[1], Jeske Damoiseaux[2], Steve Smith[1], Paul Matthews[1], Frederik Barkhof[2], Serge Rombouts[3], Ernesto Sanz-Arigita[2], Mojtaba Zarei[1], [1]Oxford Centre for Functional Magnetic Resonance Imaging of the Brain, Oxford, United Kingdom, [2]VU University Medical Center, Amsterdam, Netherlands, [3]Leiden Institute for Brain and Cognition, Leiden, Netherlands* 164 T-PM*

DISORDERS OF THE NERVOUS SYSTEM
Mood & Anxiety Disorders

Correlation between fractional anisotropy and cerebral measurements of gray and white matter substances in late-life depression, *Diana M Bezerra[1], Marco A A Moscoso[1], Salma R I Ribeiz[1], Renata Ávila[1], Fábio L S Duran[2], Geraldo F Busatto[2], Rodrigo Batistelo[3], Marcel P Jackowski[3], Cássio M C Bottino[1], [1]Old Age Research Group (PROTER), Department and Institute* 168 T-PM

of Psychiatry, Faculty of Medicine, University of Sao Paulo, Sao Paulo, Brazil, [2]Neuroimaging Laboratory, Department and Institute of Psychiatry, Faculty of Medicine, University of Sao Paulo, Sao Paulo, Brazil, [3]Computer Science Department and Institute of Mathematics and Statistics, University of Sao Paulo, Sao Paulo, Brazil

DISORDERS OF THE NERVOUS SYSTEM
Parkinson's Disease & Other Basal Ganglia

DISORDERS OF THE NERVOUS SYSTEM
Schizophrenia

Jenkinson[1], Paul Matthews[2], Anthony James[3], [1]FMRIB Centre, Oxford University, Oxford, United Kingdom, [2]CIC, GSK, London, United Kingdom, [3]Warneford Hospital, Oxford, United Kingdom

Mechanism of Nicotinic Enhancement of Visual Attention in Schizophrenia, *L. Elliot Hong[1], Thomas Ross[2], Betty Jo Salmeron[2], Gunvant Thaker[1], Elliot Stein[2], [1]Maryland Psychiatric Research Center, Department of Psychiatry, University of Maryland School of Medicine, Baltimore, USA, [2]Neuroimaging Research Branch, National Institute on Drug Abuse, NIH, Baltimore, USA* 212 T-PM

Brain regions associated with presence in the virtual environment: Comparison between patients with schizophrenia and healthy controls, *Soo Hee Choi[1], Jae-Jin Kim[1,2], Jeonghun Ku[2,3], So Young Kim[2], Hyeong Rae Lee[3], Il Ho Park[1,2], Kang-Jun Yoon[4], Sun I. Kim[3], [1]Department of Psychiatry, Yonsei University College of Medicine, Seoul, South Korea, [2]Institute of Behavioral Science in Medicine, Yonsei University College of Medicine, Gwangju, South Korea, [3]Department of Biomedical Engineering, Hanyang University, Seoul, South Korea* 216 T-PM

Decreased Information Transmission Efficiency in Schizophrenia, *Yong Liu[1], Yuan Zhou[1], Ming Song[1], Yihui Hao[2], Haihong Liu[2], Zhening Liu[2], Tianzi Jiang[1], [1]National Laboratory of Pattern Recognition, Institute of Automation, Chinese Academy of Sciences, Beijing, China, [2]Institute of Mental Health, Second Xiangya Hospital, Central South University, Changsha, China* 220 T-PM*

Dysbindin is Associated with Imaging Phenotypes in Schizophrenia, *Katherine L Narr[1], Philip R Szeszko[2], Todd Lencz[2], Roger P Woods[1], Liberty S Hamilton[1], Owen Phillips[1], Delbert G Robinson[2], Katherine E Burdick[2], Pamela DeRosse[2], Raju Kucherlapati[3], Paul M Thompson[1], Arthur W Toga[2], Anil K Malhotra[2], Robert M Bilder[1], [1]Departments of Neurology and Psychiatry, David Geffen School of Medicine, University of California at Los Angeles, USA, [2]Division of Psychiatry Research, The Zucker Hillside Hospital, North Shore-Long Island Jewish Health System, USA, [3]Harvard Medical School-Partners Healthcare Center for Genetics and Genomics, Cambridge, USA* 224 T-PM

fMRI study of a matched-performance visual discrimination task in individuals with schizophrenia and first-degree relatives, *Luke Stoeckel[1,2], Kathy Avsar[2], Martin Weiler[3], Adrienne Lahti[1], [1]Neuroimaging and Translational Research Lab, Department of Psychiatry and Behavioral Neurobiology, University of Alabama at Birmingham (UAB), Birmingham, USA, [2]Department of Psychology, UAB, Birmingham, USA, [3]Maryland Psychiatric Research Center, University of Maryland at Baltimore, Baltimore, USA* 228 T-PM

EMOTION & MOTIVATION
Reward

Comparison of Cerebral Activation during Verbal and Monetary Reward: Individual Differences in Achievement Goal, *Eunsoo Cho, Yoonkyung Chung, Eun Mo Yeon, Hun Jeon, Soonkoo Kwon, Sung-il Kim, Korea University, Seoul, Korea* 232 T-PM

Functional MRI study of reward anticipation and outcomes in the patients with obsessive-compulsive disorder, *Wi Hoon Jung[1], Ji Yeon Han[1], Do-Hyung Kang[2], Ji Young Park[1], Jung-Seok Choi[2], Myung-Hoon Jung[2], Chi-Hoon Choi[3], Jong-Min Lee[3], Jun Soo Kwon[1,2], [1]Interdisciplinary Program in Brain Science and in Cognitive Science, Seoul National University, Seoul, South Korea, [2]Department of Psychiatry, Seoul National University College of Medicine, Seoul, South Korea, [3]Department of Biomedical Engineering, Hanyang University, Seoul, South Korea* 236 T-PM

Delay Discounting during Different Reward Episodes and its Genetic Correlates, *Corinna Nuesser[1], Dina Schardt[1], Susanne Erk[1], Markus Noethen[3,4], Marcella Rietschel[5], Per Hoffmann[3,4], Markus Skowronek[5], Sven Cichon[3,4], Kerstin Ludwig[3,4], Thomas Goschke[2], Henrik Walter[1], [1]Division of Medical Psychology, Department of Psychiatry, University of Bonn, Bonn, Germany, [2]Institute of Psychology II, Technische Universität Dresden, Dresden, Germany, [3]Department of Genomics, Life & Brain Center, University of Bonn, Bonn, Germany, [4]Institute of Human Genetics, University of Bonn, Bonn, Germany, [5]Central Institute for Mental Health, Div. Genetic Epidemiology in Psychiatry, Mannheim, Germany* 240 T-PM

Smoking or eating? Neuronal mechanisms underlying nicotine's effect on eating behavior, *Michael N. Smolka[1], Lena Krebs[2], Oliver Grimm[2], Andrea Kobiella[2], Sabine Klein[2], [1]Section of Systems Neuroscience, Department of Psychiatry and Psychotherapy, Technische Universität Dresden, Dresden, Germany, [2]Department of Addictive Behavior and Addiction Medicine, Central Institute of Mental Health, Mannheim, Germany* 244 T-PM

EMOTION & MOTIVATION
Sexual Behavior

EMOTION & MOTIVATION
Social Behavior

GENETICS

IMAGING TECHNIQUES & CONTRAST MECHANISM
EEG

IMAGING TECHNIQUES & CONTRAST MECHANISM
Functional MRI

IMAGING TECHNIQUES & CONTRAST MECHANISM
MEG

LANGUAGE
Language Acquisition

LANGUAGE
Production

MEMORY & LEARNING
Plasticity (normal & following pathology)

MEMORY & LEARNING
Working Memory

Effect of sex and menstrual cycle phase on brain activation for verbal working memory, *Jane Joseph, Christine Corbly, Linah Al-Alem, Garretson Epperly, Xun Liu, Thomas Curry, Thomas Kelly, University of Kentucky, Lexington, USA* 416 T-PM

Effects of transcranial direct current stimulation on verbal working memory in patients with stroke, *Yun-Hee Kim[1], Jung Mi Jo[1], Suk Hoon Ohn[1], Myoung-Hwan Ko[2], Gyoung Moon Kim[3], Woo-Kyoung Yoo[1], Peter K.W. Lee[1], [1]Department of Physical Medicine and Rehabilitation, Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, Korea, [2]Department of Physical Medicine and Rehabilitation, Chonbuk National University Medical School, Jeonju, Korea, [3]Department of Neurology, Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, Korea* 420 T-PM

Examining Working Memory Component Processes, *Michael Motes[1,2,3], Bart Rypma[1,2,3], [1]Center for BrainHealth, Dallas, USA, [2]School of Behavioral & Brain Sciences, Dallas, USA, [3]University of Texas Southwestern Medical Center, Dallas, USA* 424 T-PM

Functional connectivity of updating in working memory and refreshing information, *Jennifer Roth[1], Marcia Johnson[2], R. Todd Constable[1], [1]Department of Diagnostic Radiology, Magnetic Resonance Research Center, Yale University, New Haven, USA, [2]Department of Psychology, Yale University, New Haven, USA* 428 T-PM

MODELING & ANALYSIS
Bayesian Modeling

Empirical Markov Chain Monte Carlo Bayesian analysis of fMRI data, *Francesco de Pasquale[1], Cosimo Del Gratta[1,2], Gian Luca Romani[1,2], [1] ITAB, Institute for Advanced Biomedical Technologies, University G. D'Annunzio, Chieti, Chieti, Italy, [2]Department of Clinical Sciences and Biomedical Imaging, University of Chieti, Chieti, Italy* 432 T-PM

Fast Bayesian nonlinear model fitting for analysis of simultaneous BOLD & ASL data, *Adrian Groves, Mark Woolrich, FMRIB Centre, Oxford, United Kingdom* 436 T-PM

Multiple-subjects connectivity-based parcellation using hierarchical infinite mixture models, *Saad Jbabdi[1], Mark Woolrich[1], Timothy Behrens[1,2], [1]FMRIB Centre, Oxford, United Kingdom, [2]Depratment of Experimental Psychology, Oxford, United Kingdom* 440 T-PM

MEG SOURCE CHARACTERIZATION THROUGH CURRENT MULTIPOLE MOMENTS, *Sheraz Khan[1,2,6], Benoît Cottereau[1,3], Richard M. Leahy[4], John C. Mosher[5], Habib Ammari[6], Sylvain Baillet[1,2], [1]Cognitive Neuroscience & Brain Imaging Laboratory,CNRS Hopital de la Salpetriere, Paris, France, [2]University Pierre & Marie CURIE, Paris 6, Paris, France, [3]ESME-Sudria College of Engineering, Ivry, France, [4]University of Southern California, Los Angeles, USA, [5]Los Alamos National Laboratory, Los Alamos, USA, [6]Laboratoire Ondes et Acoustique, CNRS & ESPCI, Paris, France* 444 T-PM

MEG source modeling by Bayesian tracking: Validation of the particle filter approach, *Lauri Parkkonen[1,5], Alberto Sorrentino[2], Cristina Campi[3], Annalisa Pascarella[4], Michele Piana[2,4], [1]Brain Research Unit, Low Temperature Lab, Helsinki Univ. of Technology, Espoo, Finland, [2]INFM - CNR Lamia, Genova, Italy, [3]Dipartimento di Matematica, Universita di Genova, Genova, Italy, [4]Dipartimento di Informatica, Universita di Verona, Verona, Italy, [5]Elekta Neuromag Oy, Helsinki, Finland* 448 T-PM

13:45 – 14:45 *Corryong Hall (Level 2)*

MODELING & ANALYSIS
Classification & Predictive Modeling

Assessment of placebo-controlled benzodiazepine sedation by means of indices derived from fMRI auditory responses, *Charilaos Alexakis[1], Ana Diukova[1,3], Quazi Siddiqui[2], Carolyn Steward[1], Jaroslav Hlinka[1], Paul Morgan[1], Jonathan Hardman[2], Dorothee Auer[1], [1]Division of Academic Radiology, University of Nottingham, Nottingham, United Kingdom, [2]Division of Anaesthesia, University of Nottingham, Nottingham, United Kingdom, [3]Division of Psychiatry, University of Nottingham, Nottingham, United Kingdom* 452 T-PM

A Neural Predictor of Schizophrenia Based on Striatal [18F] Fluorodopa Uptake Measured with PET, *Subrata Bose[1], Federico Turkheimer[1,2], Oliver Howes[3], Mitul Mehta[3], Rhian Cunliffe[1], Paul Stokes[1], Paul Grasby[1,2], [1]MRC-Clinical Sciences Centre, Imperial College London, London, United Kingdom, [2]Division of Neuroscience & Mental Health, Imperial College London, London, United Kingdom, [3]Institute of Psychiatry, King's College London, London, United Kingdom* 456 T-PM

Multiclass classification of fMRI pattern by relevance vector regression, *Carlton CHU[1], Janainan Mourão-Miranda[2], John Ashburner[1], [1]Wellcome Trust Centre for Neuroimaging, Institute of Neurology, UCL, London, United Kingdom, [2]Brain Image Analysis Unit, Biostatics Department, Centre for Neuroimaging Sciences (PO 89), Institute of Psychiatry, London, United Kingdom* 460 T-PM*

Combining top-down and bottom-up methods for ERP pattern classification, *Gwen Frishkoff[1,2], Robert Frank[2], Jiawei Rong[2], Dejing Dou[2], [1]University of Pittsburgh, Pittsburgh, USA, [2]University of Oregon, Eugene, USA* 464 T-PM*

Towards shorter scan times using subject-dependent processing pipelines for clinical tasks in fMRI, *Wayne Lee[1,2], Richard Mraz[3], Fred Tam[1], Simon Graham[1,2], Stephen Strother[1,2], [1]Rotman Research Institute, Toronto, Canada, [2]University or Toronto, Toronto, Canada, [3]Sunnybrook Health Sciences Centre, Toronto, Canada* 472 T-PM

Innovation approach to detect the respiratory related neuronal activity in the brainstem based on optical imaging data, *Fumikazu Miwakeichi[1], Yoshitaka Oku[2], Yasumasa Okada[3], Shigeharu Kawai[4], Yoshiyasu Tamura[5], Makio Ishiguro[6], [1]Medical System Course, Graduate School of Engineering,Chiba University, Chiba, Japan, [2]Department of Physiology, Hyogo College of Medicine, Hyogo, Japan, [3]Department of Medicine, Tsukigase Rehabilitation Center, Keio University, Shizuoka, Japan, [4]Department of Statistical Science, The Graduate University for Advanced Studies, Tokyo, Japan, [5]Department of Data Science, The Institute of Statistical Mathematics, Tokyo, Japan, [6]Department of Statistical Modeling, The Institute of Statistical Mathematics, Tokyo, Japan* 476 T-PM

Multivriate Bayes regression of CRS-R score from FDG-PET images, *Christophe Phillips[1], Mélanie Boly[1,2], Pierre Maquet[1,2], Caroline Schnakers[1], Marie-Aurelie Bruno[1], Audrey Vanhaudenhuyse[1], Roland Hustinx[3], Gustave Moonen[2], Steven Laureys[1,2], [1]Cyclotron Research Centre, University of Liège, Liège, Belgium, [2]Neurology Department, CHU Hospital, Universiy of Liège, Liège, Belgium, [3]Nuclear Medecine Department, CHU Hospital, Universiy of Liège, Liège, Belgium* 480 T-PM

Classification analysis of rapid event-related fMRI studies, *Angela Rizk-Jackson, Jeanette Mumford, Russell Poldrack, UCLA Dept. of Psychology, Los Angeles, USA* 484 T-PM*

Threshold-Free Cluster Enhancement – Practical Examples, *Stephen Smith[1], Gwenaelle Douaud[1], Thomas Nichols[2,1], [1]FMRIB, Oxford University, Oxford, United Kingdom, [2]GSK CIC, London, United Kingdom* 488 T-PM

Image Intensity Correction for Detecting White Matter Hyperintensity (WMH) Progression in Longitudinal Fluid Attenuation Inversion Recovery (FLAIR) Whole Brain Scans, *Wanlin Zhu[1], Wei Wen[1], Aihua Xia[2], Perminder Sachdev[1], [1]School of Psychiatry, University of NSW, Sydney, Australia, [2]Department of Mathematics and Statistics, Melbourne University, Melbourne, Australia* 492 T-PM

MODELING & ANALYSIS
Motion Correction/Spatial Normalization, Atlas Construction

FNIRT - FMRIB's Non-linear Image Registration Tool, *Jesper Andersson, Steve Smith, Mark Jenkinson, FMRIB-Centre, Oxford, United Kingdom* 496 T-PM

Inter-subject Functional Connectivity Alignment, *Bryan Conroy[1], Benjamin Singer[2], Peter Ramadge[1], James Haxby[3], [1] Department of Electrical Engineering, Princeton University, Princeton, USA, [2] Center for the Study of Brain, Mind, and Behavior, Princeton University, Princeton, USA, [3] Department of Psychology, Princeton University, Princeton, USA* 500 T-PM

Agreement of independent structural and functional methods for locating the human V1 boundary, *Oliver Hinds[1], Jonathan Polimeni[2], Mukund Balasubramanian[3], Bruce Fischl[2,4], Eric Schwartz[3,5,6], Christina Triantafyllou[1,2], [1]McGovern Institute for Brain Research, Massachusetts Institute of Technology, Cambridge, USA, [2]Athinoula A. Martinos Center, Massachusetts General* 504 T-PM

Hospital, Harvard Medical School, Charlestown, USA, [3]Department of Cognitive and Neural Systems, Boston University, Boston, USA, [4]Computer Science and Artificial Intelligence Lab, Massachusetts Institute of Technology, Cambrdige, USA, [5]Department of Electrical and Computer Engineering, Boston University, Boston, USA, [6]Department of Anatomy and Neurobiology, Boston University Medical School, Boston, USA

MODELING & ANALYSIS
Univariate Modeling, Linear, & Nonlinear

MOTOR BEHAVIOR
Brain-machine Interface

MOTOR BEHAVIOR
Hand Movements

MOTOR BEHAVIOR
Motor-Premotor Cortex/Motor Cortical Functions

Cortical Adaptations in Patients with Clinically Isolated Syndrome; perspectives for predicting MS, *Mohammad Ali Oghabian[1], Mohammad Hosain Harirchian[2], Ali Reza Rezvanizade[1], Mohammad Fakhri[1], [1]Research Center for Sciences and Technology in Medicine, Tehran University/Medical Sciences, Tehran, Iran, [2]Neurology Research Center, Emam Hospital, Tehran University /Medical Sciences, Tehran, Iran* 588 T-PM

The Neural Representation of Praxis: The Slicing Gesture, *Donald Robin[1, 2], Howard Poizner[3], Shalini Narayana[1], Jack Lancaster[1], Crystal Franklin[1], Wayne Hening[4], Peter Fox[1,2], [1]Research Imaging Center, University of Texas Health Science Center at San Antonio, San Antonio, USA, [2]Honor's College, University of Texas, San Antonio, San Antonio, USA, [3]Institute for Neural Computation, University of California, San Diego,, USA, [4]Robert Wood Johnson Medical School, Piscataway, USA* 592 T-PM

Neural Correlates of Motor Sequence Learning, *Christopher J. Steele, Virginia B. Penhune, Concordia University, Montreal, Canada* 596 T-PM

Neural Abnormalities of Synchronized Tapping in Adult ADHD, *Eve Valera[1], Joseph Biederman[2], Thomas Zeffiro[3], Ainat Rogel[3], Megha Patel[4], Rebecca Spencer[5], Nikos Makris[6], Thomas Spencer[2], Stephen Faraone[7], Larry Seidman[8], [1]Neuroimaging Program, Clinical and Research Programs in Pediatric Psychopharmacology and Adult ADHD, Psychiatry, Harvard Medical School/Massachusetts General Hospital, Charlestown, USA, [2]Clinical and Research Programs in Pediatric Psychopharmacology and Adult ADHD, Psychiatry, Harvard Medical School/Massachusetts General Hospital, Boston, USA, [3]Psychiatry, Massachusetts General Hospital, Charlestown, USA, [4]Psychology, Brandeis University, Waltham, USA, [5]Psychology, University of California at Berkeley, Berkeley, USA, [6]Neurology and Radiology, Harvard Medical School/Massachusetts General Hospital, Boston, USA, [7]Psychiatry and Neuroscience and Physiology, SUNY Upstate Medical University, Syracuse, USA, [8]Neuroimaging Program, Clinical and Research Programs in Pediatric Psychopharmacology and Adult ADHD, Psychiatry, Harvard Medical School/Beth Israel Deaconess Medical Center, Boston, USA* 600 T-PM

NEUROANATOMY
Anatomical Studies

Evolution of the Cerebellar Cortex: Selective expansion of prefrontal-projecting lobules, *Joshua Balsters[1], Emma Cussans[1], Joern Diedrichsen[2], Kimberley Phillips[3], Todd Preuss[4], James Rilling[5], Narender Ramnani[1], [1]Dept Psychology, Royal Holloway University of London, London, United Kingdom, [2]Wolfson Centre for Cognitive Neuroscience, School of Psychology, Bangor University, United Kingdom, [3]Dept Psychology Hiram College, Hiram, USA, [4]Div Neuroscience, Yerkes Natl. Primate Research Ctr, Emory University, Atlanta, USA, [5]Dept Anthropology and Dept of Psychiatry and Behavioral Sciences, Emory University, Atlanta, USA* 604 T-PM

Insular volume Reduction in Williams Syndrome Using Real-Space Morphometry, *Jeremy Cohen[1], Ursula Bellugi[2], Asya Karchemskiy[1], Brian Haas[1], Allan Reiss[1], [1]Neuroimaging Laboratory, Department of Psychiatry and Behavioral Sciences, Stanford University School of Medicine, Stanford, USA, [2]The Salk Institute for Biological Studies, Laboratory for Cognitive Neuroscience, La Jolla, USA* 608 T-PM

Cerebral change in patients with amnesic Mild Cognitive Impairment single domain and amnesic Mild Cognitive Impairment multiple-domain, *Margherita Di Paola[1,2], Serena Mosti[3], Augusto Carlesimo[3,4], Lucia Fadda[3,4], Monica Ferraccioli[5], Guido Gainotti[5], Camillo Marra[5], Roberta Perri[3], Carlo Caltagirone[3,4], [1]Neuroimaging Laboratory, IRCCS Santa Lucia Foundation, Rome, Italy, [2]Department of Internal Medicine and Public Health, University of L'Aquila, L'Aquila, Italy, [3]Clinical and Behavioural Neurology Laboratory, IRCCS Santa Lucia Foundation, Rome, Italy, [4]Department of Neurological Sciences, University of Rome "Tor Vergata", Rome, Italy, [5]Neuropsychology Service - Department of Neurology, Catholic University of Rome, Rome, Italy* 612 T-PM

Structural brain abnormalities in nonhuman primates exposed to early-life stressors, *Andrea Jackowski[1,2], Griselda Garrido[3], Andrew Dwork[4], Tarique Perera[5], Jeremy Coplan[6], Joan Kaufman[2,7], [1]LiNC, Universidade Federal de Sao Paulo, São Paulo, Brazil, [2]Child Study, Yale University, New Haven, USA, [3]Serviço de Informática, Instituto do Coração, Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo, São Paulo, Brazil, [4]Department of Neuroscience, New York State Psychiatric Institute, New York, USA, [5]Department of Biological Psychiatry, New York State Psychiatric Institute, New York, USA, [6]Psychiatry, SUNY-Downstate Medical Center, Brooklin, USA, [7]Psychiatry, Yale University, New Haven, USA* 616 T-PM

PHYSIOLOGY, METABOLISM, & NEUROTRANSMISSION

Changes in functional connectivity induced by sevoflurane in the human brain, *Roberto Martuzzi[1], Maolin Qiu[1], Nallakkandi Rajeevan[1], Ramachandran Ramani[2], R. Todd Constable[1,3,4], [1]Department of Diagnostic Radiology, Yale University School of Medicine, New Haven, USA, [2]Department of Anesthesiology, Yale University School of Medicine, New Haven, USA, [3]Department of Biomedical Engineering, Yale University School of Medicine, New Haven, USA, [4]Department of Neurosurgery, Yale University School of Medicine, New Haven, USA* 668 T-PM

Gender differences of interregional metabolic connectivity in the resting brain explained by less inter-hemispheric transfer in males, *Hyojin Park[1,2], Hyejin Kang[1,3], Eunjoo Kang[4], Jungsu S. Oh[1,5], Jae Sung Lee[1], Dong Soo Lee[1,2], [1]Department of Nuclear Medicine, Seoul National University College of Medicine, Seoul, South Korea, [2]Interdisciplinary Program in Cognitive Science, Seoul National University, Seoul, South Korea, [3]Programs in Brain and Neuroscience, Seoul National University, Seoul, South Korea, [4]Department of Psychology, Kangwon National University, Chuncheon, South Korea, [5]Psychiatry Neuroimaging Laboratory, Brigham and Women's Hospital, Harvard Medical School, Boston, USA* 672 T-PM

Changes of neuronal activity after transcranial direct current and photic stimulation are associated with glutamatergic neurotransmission as revealed by functional ^{1}H-MR-spectroscopy, *Michael Siniatchkin[1], Friederike Moeller[1], Mascha Sendacki[1], Stephan Wolff[2], Ulrich Stephani[1], [1]Pediatric Neurology, Kiel, Germany, [2]Neuroradiology, Kiel, Germany* 676 T-PM

Opioids modulate the brain activity associated with breath-holding: an FMRI study, *K.T. Pattinson[1], R.J Governo[2], E.C. Russell[1], B.J. Macintosh[2], I. Ahmad[1], S.D. Mayhew[1], D.R. Corfield[3], I. Tracey[2], R. G. Wise[4], [1]Nuffield Department of Anaesthetics, Oxford University, Oxford, United Kingdom, [2]Oxford Centre for Functional Magnetic Resonance Imaging of the Brain (FMRIB), Department of Clinical Neurology, Oxford University, Oxford, United Kingdom, [3]Institute of Science and Technology in Medicine, Keele University, Keele, United Kingdom, [4]Cardiff University Brain Research Imaging Centre (CUBRIC), School of Psychology, Cardiff University, Cardiff, United Kingdom* 680 T-PM

Midbrain dopamine autoreceptor availability is inversely associated with novelty seeking traits in humans, *David Zald, Ronald Cowan, Patritzia Riccardi, Ronald Baldwin, Ansari M Sib, Rui Li, Evan Shelby, Clarence smith, Robert Kessler, Vanderbilt University, Nashville, USA* 684 T-PM

SENSORY SYSTEMS
Multisensory & Crossmodal

Cross-modal plastic changes of effective connectivity in blind subjects: An fMRI study, *Takeshi Fujii[1,2], Hiroki Tanabe[1,2], Norihiro Sadato[1,2,3,4], [1]Division of Cerebral Integration, Department of Cerebral Research, National Institute for Physiological Sciences, Okazaki, Japan, [2]Department of Physiological Sciences, The Graduate University for Advanced Studies (Sokendai), Kanagawa, Japan, [3]Research Institute of Science and Technology for Society (RISTEX), Japan Science and Technology Agency (JST), Tokyo, Japan, [4]Department of Functional Neuroimaging, Faculty of Medical Sciences, University of Fukui, Fukui, Japan* 688 T-PM

One sound, two percepts: Predicting future speech perception from brain activation during audiovisual exposure, *Niclas Kilian-Hütten[1], Jean Vroomen[2], Elia Formisano[1], [1]Dept of Cognitive Neuroscience, Faculty of Psychology, Maastricht University, Maastricht, Netherlands, [2]Dept of Psychology, Tilburg, Netherlands* 692 T-PM

Functional development of the mirror neuron system does not require visual experience: an fMRI study in sighted and congenitally blind individuals, *Emiliano Ricciardi[1,2], Daniela Bonino[1,3], Lorenzo Sani[1,2], Tomaso E. Vecchi[3], Mario Guazzelli[4], James V. Haxby[5], Luciano Fadiga[6], Pietro Pietrini[1], [1]Laboratory of Clinical Biochemistry and Molecular Biology, University of Pisa, Pisa, Italy, [2]MRI Lab, Institute of Clinical Physiology, C.N.R. Research Area, Pisa, Italy, [3]Department of Psychology, University of Pavia, Pavia, Italy, [4]Psychology Chair, Universityof Pisa, Pisa, Italy, [5]Department of Psychology, Princeton University, Princeton, USA, [6]Department of Biomedical Sciences and Advanced Therapy – Physiology Section, University of Ferrara, Ferrara, Italy* 696 T-PM

Brain activity in colored-hearing synesthetes when listening to music: An fMRI study, *Riuma Takahashi[1], Mayuka Nishimoto[1], Takashi X. Fujisawa[1], Noriko Nagata[1], Takeshi Sugio[2], Seiji Inokuchi[3], [1]Graduate School of Science and Technology, Kwansei Gakuin University, Hyogo,* 700 T-PM

Japan, [2]Faculty of Culture and Information Science, Doshisha University, Kyoto, Japan, [3]Faculty of Media Contents, Takarazuka University of Art and Design, Hyogo, Japan

SENSORY SYSTEMS
Pain & Autonomic Function

3D TOPOGRAPHIC MAPPING OF MAGNETIC BRAIN RESPONSES IN TRAUMATIC PERIPHERAL NEUROPATHIC PAIN, *P.J. Theuvenet[1], B.W. van Dijk[1], Maria J. Peters[1], F.L. Lopes da Silva[1], J.M. van Ree[1], Andrew C.N. Chen[2], [1]Dept. of Anesthesiology, Alkmaar Medical Center,, Alkmaar, Netherlands, [2]Center for Higher Brain Functions, Capital Medical University, Beijing, China* 704 T-PM

Chronic Pain Remodels the Brain's Salience Network: A Resting-State fMRI Study, *Michael Greicius[1], Meredith Barad[1], Takefumi Ueno[2], Sean Mackey[1], [1]Stanford University Medical Center, Stanford, USA, [2]Kyushu University, Fukuoka, Japan* 708 T-PM

A PET study of wind-up pain in patients with postherniotomy pain, *Rune Christensen[1], Eske Aasvang[2], Henrik Kehlet[2], Ron Kupers[1,2], [1]PET Unit, Copenhagen, Denmark, [2]Dept. Surgical Pathophysiology, Copenhagen, Denmark* 712 T-PM

Partial least squares analysis of brain responses to experimentally induced rectal discomfort: Greater engagement of an insula-related network in female Irritable Bowel Syndrome (IBS) patients, *Jennifer Labus[1], Lisa Kilpatrick[1], Bruce Naliboff[1,2], Steve Berman[1], Brandall Suyenobu[1], Emeran Mayer[1], [1]Center for Neurobiology of Stress, Brain Research Institute, Depts of Psychiatry and Biobehavioral Science, University of California, Los Angeles, USA, [2]VA Greater Los Angeles Healthcare System, Los Angeles, USA* 716 T-PM

Brain correlates of conditioned placebo analgesia, *Luana Colloca[1], Fausta Lui[2], Davide Duzzi[2], Luca Nocetti[3], Davide Anchisi[2], Francesca Benuzzi[4], Patrizia Baraldi[2], Fabrizio Benedetti[2], Carlo Adolfo Porro[1], [1]Dip. Neuroscienze, Univ. Torino, Torino, Italy, [2]Dip. Scienze Biomediche, Univ. Modena e Reggio Emilia, Modena, Italy, [3]Fisica Sanitaria, Policlinico, Modena, Italy, [4]Dip. Neuroscienze, Univ. Modena e Reggio Emilia, Modena, Italy* 720 T-PM*

Central Representation of Menstrual Cramping Pain in Primary Dysmenorrhea: a PET Study, *Cheng-Hao Tu[1,4], David Niddam[2,3,4], Ren-Shyan Liu[5], Hsiang-Tai Cho[6], Ren-Jen Hwang[1,4], Jen-Chuen Hsieh[1,2,3,4], [1]Institute of Neuroscience, National Yang-Ming University, Taipei, Taiwan, [2]Institute of Brain of Brain Science, National Yang-Ming University, Taipei, Taiwan, [3]Brain Research Center, National Yang-Ming University, Taipei, Taiwan, [4]Laboratory of Integrated Brain Research, Taipei Veteran General Hospital, Taipei, Taiwan, [5]Department of Nuclear Medicine, Taipei Veteran General Hospital, Taipei, Taiwan, [6]Department of Obstetrics and Gynecology, Taipei Veteran General Hospital, Taipei, Taiwan* 724 T-PM

Schedule of Poster Presentation and List of Posters **Wednesday, June 18, 2008**

11:30 – 12:30 *You Yangs Hall (Level 3)*

COGNITION & ATTENTION
Executive Function

MEG analysis of inhibitory process during Go/NoGo task in normal children, *Eun Young Kim[1], Yeni Kim[2], June Sic Kim[1], Jae-Won Kim[2], Jun Won Hwang[2], Boong-Nyun Kim[2], Soo Churl Cho[2], Chun Kee Chung[1], [1]Department of Neurosurgery, Seoul National University College of Medicine, MEG Center, Seoul National University Hospital, Seoul, South Korea, [2]Department of Neuropsychiatry, Seoul National University College of Medicine, Seoul, South Korea* 1 W-AM

Functional MRI Deactivations During Working Memory Distinguishes Multiple Sclerosis Patients from Controls, *James Paskavitz[1], Lawrence Sweet[2], Jesse Samuel[1], [1]Perceptive Informatics, Waltham, USA, [2]Brown University, Providence, USA* 5 W-AM

Errors and the violation of intention: The functional role of the left ventrolateral prefrontal cortex within a neural system for error processing, *Zrinka Sosic[1], Martin Ruchsow[2], Georg Grön[1], [1]Department of Psychiatry and Psychotherapy III, University of Ulm, Ulm, Germany, [2]Clinic for Psychiatry and Psychotherapy, Christophsbad, Göppingen, Germany* 9 W-AM

Neural basis of MPH-induced improvement in working memory differs by DAT genotype in childhood ADHD, *Chandan Vaidya[1], Devon Shook[1], Jennifer Foss-Feig[1], Laura Kenealy[2], Edwin Cook[3], Mark Stein[3], [1]Georgetown University, Washington, USA, [2]Childrens National Medical Center, Washington, USA, [3]University of Illinois, Chicago, USA* 13 W-AM*

Paired pulse transcranial magnetic stimulation to investigate cortical inhibition., *Paul Fitzgerald[1], Jerome Maller[1], Kate Hoy[1], Faranak Farzan[2], Zafiris Daskalakis[2], [1]Alfred Psychiatry Research Centre, Monash University, Melbourne, Australia, [2]Alfred Psychiatry Research Centre, Monash University, Melbourne, Australia, [3]Alfred Psychiatry Research Centre, Monash University, Melbourne, Australia, [4]Centre for Addiction and Mental Health, Toronto, Canada, [5]Centre for Addiction and Mental Health, Toronto, Canada* 17 W-AM

Expertise leads to a more efficient brain utilization: an fMRI study in professional and naïve car drivers during attention and visual-spatial tasks, *Lorenzo Sani[1,2,3], Emiliano Ricciardi[1,2,3], Alessandra Papasogli[4], Riccardo Ceccarelli[4], Ferdinando Franzoni[5], Gino Santoro[5], Rainer Goebel[6], Pietro Pietrini[1,3], [1]Laboratory of Clinical Biochemistry and Molecular Biology, University of Pisa, Italy,, [2]NMR Lab, CREAS-CNR, Pisa, Italy,, [3]Department of Laboratory Medicine and Molecular Diagnostics, AUO Pisa, Italy,, [4]Formula Medicine, Viareggio, Italy,, [5]Department of Internal Medicine, University of Pisa, Italy,, [6]Department of Cognitive Neuroscience, Faculty of Psychology, Universiteit Maastricht, The Netherlands,,* 21 W-AM

Parkinson's disease patients fail to deactivate the default mode brain areas., *Thilo van Eimeren[1], Oury Monchi[2], Benedicte Ballanger[1], Antonio P. Strafella[1], [1]UNH-Toronto Western Hospital, Brain Imaging & Behaviour Systems Toronto Western Research Institute, CAMH-PET Imaging Centre, University of Toronto, Ontario, Canada, Toronto, Canada, [2]Centre de Recherche de l'Institut Universitaire de Gériatrie, Université de Montréal, Québec, Canada, Montreal, Canada* 25 W-AM

Increased activation in prefrontal and striatal areas during planning as a function of depression severity in a representative medication-free sample of Major Depressive Disorder in the general population: Preliminary results from the NESDA-neuroimaging study., *Marie-José van Tol[1], Nic van der Wee[1], Marjan Nielen[2], Andre Aleman[4], Ramona Demenescu[4], Remco Renken[4], Mark van Buchem[3], Frans Zitman[1], Dick Veltman[2], [1]Leiden University Medical Center, Department of Psychiatry, Leiden, Netherlands, [2]VU medicial Center, Amsterdam, Netherlands, [3]Leiden University Medical Center, Department of Radiology, Leiden, Netherlands, [4]University Medical Center Groningen, Groningen, Netherlands* 29 W-AM

IMAGEN Stop-Signal Task: Validation and Comparison of Brain Networks Subserving Fixed and Adaptive Stop Trials using 3T fMRI, *Mira Buehler[1, 3], Mischa de Rover[1], Sanja Abbott[1], Luke Clark[1], Hugh Garavan[2], Katya Rubia[3], Gunter Schumann[3], Laurence Reed[3], Trevor W. Robbins[1], [1]Behavioural and Clinical Neuroscience Institute, Department of Experimental Psychology, University of Cambridge,* 33 W-AM

COGNITION & ATTENTION
Perception, Imagery, Awareness

DISORDERS OF THE NERVOUS SYSTEM
Addiction

DISORDERS OF THE NERVOUS SYSTEM
Autism

DISORDERS OF THE NERVOUS SYSTEM
Brain & Spinal Cord Trauma

DISORDERS OF THE NERVOUS SYSTEM
Developmental Disorders

DISORDERS OF THE NERVOUS SYSTEM
Epilepsy

DISORDERS OF THE NERVOUS SYSTEM
Stroke & Recovery of Function

EMOTION & MOTIVATION
Decision Making

EMOTION & MOTIVATION
Emotional Learning

Neural responses in the amygdala and hippocampus relate with extinction of aversive face and voice stimuli., *Tetsuya Iidaka[1], Daisuke Saito[2], Hidetsugu Komeda[2], Yoko Mano[2], Norio Ozaki[1], Norihiro Sadato[2], [1]Nagoya University, Nagoya, Japan, [2]National Institute for Physiological Sciences, Okazaki, Japan* 201 W-AM

Switching associations between facial identity and emotional expression is more difficult for angry expressions compared to happy expressions: A behavioural and ERP study., *Megan Willis[1], Romina Palermo[1], Genevieve McArthur[1], Darren Burke[2], Carmen Atkinson[1], [1]Macquarie Centre for Cognitive Science (MACCS), Macquarie University, Sydney, Australia, [2]Centre for the Integrative Study of Animal Behaviour (CISAB), Macquarie University, Sydney, Australia* 205 W-AM

EMOTION & MOTIVATION
Emotional Perception

Neural activation to harsh faces among patients with Intermittent Explosive Disorder, *Michael McCloskey[1], Emil Coccaro[1], Mike Angstadt[2], Royce Lee[1], Mitchell Berman[3], K. Luan Phan[2], [1]The University of Chicago, Chicago, USA, [2]University of Michigan, Ann Arbor, USA, [3]University of Southern Mississippi, Hattiesburg, USA* 209 W-AM

The inferior fronto-occipital fasciculus mediates recognition of the facial expression of emotions., *Carissa Philippi[1], Sonya Mehta[1], Thomas Grabowski[1, 3], Ralph Adolphs[2], David Rudrauf[1], [1]Laboratory of Computational Neuroimaging, Department of Neurology, Division of Behavioral Neurology and Cognitive Neuroscience, University of Iowa College of Medicine, 200 Hawkins Drive, Iowa City, USA, [2]Divisions of Humanities and Social Sciences and Biology, California Institute of Technology, Pasadena, USA, [3]Department of Radiology, University of Iowa College of Medicine, 200 Hawkins Drive, Iowa City, USA* 213 W-AM*

The cerebral blood flow correlates of Emotional Facial Processing in Mild Alzheimer's disease., *Roger T. Staff[1], Trevor S. Ahearn[2], Louise H. Phillips[2], Clare Scott[2], Donald Mowat[2], Lawrence J. Whalley[2], Claude M. Wischik[2], Alison D. Murray[2], [1]Aberdeen Royal infirmary, Aberdeen, Scotland, [2]University of Aberdeen, Aberdeen, Scotland* 217 W-AM

Spatial representation of non-verbal emotional perception along the superior temporal sulcus – fMRI reveals audiovisual integration area between voice- and face-sensitive regions, *Benjamin Kreifelts[1], Thomas Ethofer[1,2], Wolfgang Grodd[2], Thomas Shiozawa[3], Dirk Wildgruber[1], [1]Department of Psychiatry, University of Tuebingen, Tuebingen, Germany, [2]Section of Experimental MR of the CNS, Department of Neuroradiology, University of Tuebingen, Tuebingen, Germany, [3]Institute of Anatomy, University of Tuebingen, Tuebingen, Germany* 221 W-AM*

Increased amygdala activation during automatic processing of facial emotion in schizophrenia, *Astrid Veronika Rauch[1, 3], Maraike Reker[1], Patricia Ohrmann[1], Anya Pedersen[1], Jochen Bauer[1], Udo Dannlowski[1], Liv Harding[1], Katja Kölkebeck[1], Carsten Konrad[1, 3], Harald Kugel[2], Volker Arolt[1], Walter Heindel[2], Thomas Suslow[1], [1]Department of Psychiatry, Muenster, Germany, [2]Department of Clinical Radiology, Muenster, Germany, [3]IZKF-Research Group 4, Muenster, Germany* 229 W-AM

Human brain represents valence of another's facial expression, *Mikko Viinikainen[1], Iiro Jääskeläinen[1], Marja Balk[1], Taina Autti[2], Mikko Sams[1], [1]Department of Biomedical Engineering and Computational Science, Espoo, Finland, [2]Helsinki University Central Hospital, Helsinki, Finland* 233 W-AM

Localization Accuracy of Current Functional Neuroimaging of the Human Amygdala: A Meta-Analysis, *Tonio Ball[1,2,7], Johanna Derix[1,7], Simon Eickhoff[3,4], Andreas Schulze-Bonhage[1,2,7], Isabella Mutschler[1,5,6,7], [1]Epilepsy Center, Univerty Clinics, Freiburg, Germany, [2]Bernstein Center for Computational Neuroscience, University Freiburg, Freiburg, Germany, [3]Institute for Medicine, Research Center Jülich, Jülich, Germany, [4]C & O Institute for Brain Research, University of Düsseldorf, Düsseldorf, Germany, [5]Department of Psychiatry, University of Basel, Basel, Switzerland, [6]Department of Psychology, University of Basel, Basel, Switzerland, [7]Freiburg Brain Imaging, University Clinics Freiburg, Freiburg, Germany* 237 W-AM*

Decreased frontal gamma oscillations for different facial expressions of patients with bipolar disorder and major depression disorder: a MEG study, *Tai-Ying Liu[1], Li-Fen Chen[2,3], Jen-Chuen Hsieh[2,3], Tung-Ping Su[4,5], [1]Institute of Biomedical Informatics, School of Medicine, National Yang-Ming University, Taipei, Taiwan, [2]Institute of Brain Science, School of Medicine, National Yang-Ming University, Taipei, Taiwan, [3]Integrated Brain Research Laboratory, Department of Medical Research* 241 W-AM

and Education, Taipei Veterans General Hospital, Taipei, Taiwan, [4]Division of Psychiatry, School of Medicine, National Yang-Ming University, Taipei, Taiwan, [5]Psychiatric Department, Taipei Veterans General Hospital, Taipei, Taiwan

IMAGING TECHNIQUES & CONTRAST MECHANISM
Anatomical MRI

IMAGING TECHNIQUES & CONTRAST MECHANISM
Diffusion MRI

Probablistic Tractograpy Using Steady-State Diffusion Imaging: A Promising Option For Acheiving Higher Spatial and Angular Resolution, *Jennifer McNab[1], Saad Jbabdi[1], Sean Deoni[1,2], Gwenaelle Douaud[1], Tim Behrens[1,3], Karla Miller[1], [1]Department of Clinical Neurology, Oxford University, Oxford, United Kingdom, [2]Centre for Neuroimaging Sciences, Institute of Psychiatry, King's College, University of London, London, United Kingdom, [3]Department of Experimental Psychology, Oxford University, Oxford, United Kingdom* 289 W-AM

How Many Gradients are Sufficient in High-Angular Resolution Diffusion Imaging (HARDI)?, *Liang Zhan[1], Ming-Chang Chiang[1], Marina Barysheva[1], Arthur W. Toga[1], Katie McMahon[2], Greig de Zubicaray[2], Matthew Meredith[2], Margaret Wright[3], Paul Thompson[1], [1]Laboratory of Neuro Imaging, Department of Neurology, UCLA School of Medicine, Los Angeles, USA, [2]Functional MRI Laboratory, Centre for Magnetic Resonance, University of Queensland, Brisbane, Australia, [3]Queensland Institute of Medical Research, Brisbane, Australia* 293 W-AM

In Vivo Study of White Matter Microvasculature Anisotropy Using the IVIM Technique, *Dimitrios C. Karampinos[1,3], Bradley P. Sutton[2,3], John G. Georgiadis[1,3], [1]Mechanical Science and Engineering Department, University of Illinois at Urbana-Champaign, Urbana, USA, [2]Bioengineering Department, University of Illinois at Urbana-Champaign, Urbana, USA, [3]Beckman Institute, University of Illinois at Urbana-Champaign, Urbana, USA* 297 W-AM

Performance of Spatial Normalization in Diffusion Tensor Imaging, *Huiling Peng, Konstantinos Arfanakis, Department of Biomedical Engineering, Illinois Institute of Technology, Chicago, USA* 301 W-AM

IMAGING TECHNIQUES & CONTRAST MECHANISM
Multi-modal Integration

Real-time Web-scale Image Annotation for Semantic-based Retrieval of Neuropsychiatric Research Images, *H Jeremy Bockholt[1], Josef Ling[1], Mark Scully[1], Adam Scott[1], Susan Lane[1], Vincent Magnotta[2], Tonya White[3], Kelvin Lim[3], Randy Gollub[4], Vince Calhoun[1,5], [1]The MIND Institute, Albuquerque, USA, [2]The University of Iowa, Iowa City, USA, [3]The University of Minnesota, Minneapolis, USA, [4]Massachusetts General Hospital, Charlestown, USA, [5]The University of New Mexico, Albuquerque, USA* 305 W-AM

DataViewer3D - An open-source, cross-platform multi-modal imaging data visualisation tool, *Andre' Gouws, William Woods, Mark Hymers, Gary Green, York Neuroimaging Centre, The Biocentre, York Science Park, University of York, York, United Kingdom* 309 W-AM

Imaging artefact removal using moving window PCA in simultaneous EEG/fMRI, *Perttu Ranta-aho[1], Stefanos Georgiadis[1], Eini Niskanen[1,2,3], Mika Tarvainen[1], Pasi Karjalainen[1], [1]Department of Physcs, University of Kuopio, Kuopio, Finland, [2]Department of clinical neurophysiology, Kuopio University Hospital, Kuopio, Finland, [3]Department of Neurology, Kuopio University Hospital, Kuopio, Finland* 313 W-AM

Simultaneous intracranial EEG-fMRI: A preliminary investigation of RF induced heating., *David Carmichael[1,2], John Thornton[3], Roman Rodionov[1,2], Rachel Thornton[1,2], Andrew McEvoy[4], Philip Allen[5], Louis Lemieux[1,2], [1]Department of Clinical and Experimental Epilepsy, UCL Institute of Neurology, London, United Kingdom, [2]MRI Unit, National society for epilepsy, Chalfont St Peter, United Kingdom, [3]Lysholm Department of Neuroradiology, National Hospital for Neurology and Neurosurgery, London, United Kingdom, [4]Victor Horsley Department of Neurosurgery, National Hospital for Neurology and Neurosurgery, London, United Kingdom, [5]Department of Clinical Neurophysiology, National Hospital for Neurology and Neurosurgery, London, United Kingdom* 317 W-AM*

Analysis on micro-structural integrity of the white matter underlying cortical surface, *Bang-Bon Koo[1], Hua Ning[2], Dae-Shik Kim[2,3], Jong-Min Lee[1], [1]Department of Biomedical Engineering, Hanyang University, Seoul, Korea, [2]Center for Biomedical Imaging (CBI), Boston University school of Medicine, Boston, USA, [3]Department of Anatomy and Neurobiology, Boston University school of Medicine, Boston, USA* 321 W-AM

Simultaneous measurement of fMRI, TMS and EMG with stepping stone sampling method, *Hitoshi Shitara[1,2], Takashi Hanakawa[1], Tetsuya Shinozaki[2], Kenji Takagishi[2], Manabu Honda[1], [1]Department of Cortical Function Disorders, National Institute of Neuroscience, National Center of Neurology and Psychiatry, Tokyo, Japan, [2]Department of Orthopedic Surgery, Gunma Graduate University School of Medicine, Gunma, Japan* 325 W-AM

IMAGING TECHNIQUES & CONTRAST MECHANISM
Optical Imaging/NIRS/MRS (magnetic resonance spectroscopy)

IMAGING TECHNIQUES & CONTRAST MECHANISM
Perfusion MRI

IMAGING TECHNIQUES & CONTRAST MECHANISM
PET/SPECT

IMAGING TECHNIQUES & CONTRAST MECHANISM
TMS

LANGUAGE
Comprehension

LANGUAGE
Reading/Writing

MEMORY & LEARNING
Learning (explicit & implicit)

The computational values of information from personal and vicarious experiences are processed in parallel in the ACC, *Timothy Behrens[1,2,3], Laurence Hunt[2,3], Mark Woolrich[1], Matthew Rushworth[1,2], [1]FMRIB Centre, University of Oxford, Oxford, United Kingdom, [2]Dept. Experimental Psychology, University of Oxford, Oxford, United Kingdom, [3]Equal contribution* 417 W-AM

Transitions of task-related brain activation during acquisition of a novel perceptual-motor mapping, *Oliver Hinds[1], Susan Gabrieli[1,2], Noa Ofen[2], Julie Yoo[1], Satrajit Ghosh[3], Nupur Lala[1], Daniel Willingham[4], Christina Triantafyllou[1,5], John Gabrieli[1,2], [1]McGovern Institute for Brain Research, Massachusetts Institute of Technology, Cambridge, USA, [2]Department of Brain and Cognitive Sciences, Massachusetts Institute of Technology, Cambridge, USA, [3]Research Laboratory of Electronics, Massachusetts Institute of Technology, Cambridge, USA, [4]Department of Psychology, University of Virginia, Charllotesville, USA, [5]Athinoula A. Martinos Center, Department of Radiology, MGH, Harvard Medical School, Charlestown, USA* 421 W-AM

The bright side of Val - An advantage for the COMT Val genotype in reward-based decision making, *Lea Krugel[1,2], Guido Biele[1,2], Peter Mohr[1,2], Shu-Chen Li[1,2], Hauke Heekeren[1,2], [1]Max Planck Institute for Human Development, Berlin, Germany, [2]Berlin NeuroImaging Center, Berlin, Germany* 425 W-AM*

Consolidation of Motor Memories Encoded by Different Practice Schedules, *Satoshi Tanaka[1], Manabu Honda[2], Takashi Hanakawa[2], Leonardo G Cohen[1], [1]Human Cortical Physiology Section, NINDS, NIH, Bethesda, USA, [2]Department of Cortical Function Disorders, National Institute of Neuroscience, Kodaira, Japan* 429 W-AM

Visuospatial Working Memory in Adolescents with Dysthymic Disorder: A Functional Magnetic Resonance Imaging (fMRI) Study, *Jacqueline Yamada[1], Melissa Casey[1], Tim Silk[2], Ross Cunnington[2], Mark Bellgrove[2], Alasdair Vance[1], [1]Academic Child Psychiatry Unit, Royal Children's Hospital, Murdoch Childrens Research Institute, Melbourne, Australia, [2]Queensland Brain Institute, Brisbane, Australia* 433 W-AM

Learning with emotional context affects brain activation during retrieval: an fMRI study, *Wenting Jia[1], Satoru Yokoyama[2], Motoaki Sugiura[23], Atsushi Sekiguchi[2], Ai Fukushima[2], Ryuta Kawashima[2], [1]Tohoku University School of Medicine, Sendai, Japan, [2]Institute of Development, Aging and Cancer, Tohoku University, Sendai, Japan, [3]National Institute for Physiological Sciences, Okazaki, Japan* 437 W-AM

Hippocampal activation during a paired associative learning of faces and names, *Kayako Matsuo[1], Tetsuya Iidaka[2], Epifanio Bagarinao[3], Chikako Kato[4], Akinori Takeda[5], Toshiharu Nakai[1], [1]Dept. Gerontechnology, National Center for Geriatrics and Gerontology, Obu, Japan, [2]Department of Psychiatry, Nagoya University, Nagoya, Japan, [3]Grid Technology Research Center, National Institute of Advanced Industrial Science and Technology, Tsukuba, Japan, [4]Department of Life and Career Design, Toyohashi Sozo University, Toyohashi, Japan, [5]Department of Advanced Medicine, National Center for Geriatrics and Gerontology, Obu, Japan* 441 W-AM

11:30 – 12:30 *Corryong Hall (Level 2)*

MEMORY & LEARNING
Long-term Memory (episodic, semantic, autobiographical)

Episodic Simulation of Specific and Generic Future Events, *Donna Rose Addis[1,2], Theresa Cheng[1], Daniel L. Schacter[1,2], [1]Dept. of Psychology, Harvard University, Cambridge, USA, [2]Athinoula A. Martinos Center for Biomedical Imaging, Charlestown, USA* 451 W-AM

Neural correlates of transmission from lexical-semantic to lexical-phonological stages during name recall: An event-related fMRI study, *Sho Yagishita[1, 2], Takamitsu Watanabe[1, 2], Hiroshi Ito[1], Hiroo Ikehira[1], Motoichiro Kato[3], Iwao Kanno[1], Tetsuya Suhara[1], Hideyuki Kikyo[1], [1]National Institute of Radiological Sciences, Chiba, Japan, [2]The University of Tokyo, Tokyo, Japan, [3]Keio University, Tokyo, Japan* 455 W-AM

Dissociated networks mediate retrieval operations via free-recall or recognition, *Irit Shapira-Lichter[1,2], Tali Siman-Tov[1], Daphna Paran[3,4], Dan Caspi[3,4], Eli Vakil[5], Talma Hendler[1,4], [1]Functional Brain Imaging Unit, Wohl Institute for Advanced Imaging, Tel Aviv Sourasky Medical* 459 W-AM

Center, Tel-Aviv, Israel, [2]Department of Psychology, Tel Aviv University, Tel-Aviv, Israel, [3]Department of Rheumatology, Tel-Aviv Sourasky Medical Centre, Tel-Aviv, Israel, [4]Sackler Faculty of Medicine, Tel Aviv University, Tel-Aviv, Israel, [5]Department of Psychology and Leslie and Susan Gonda (Goldschmied) Multidisciplinary Brain Research Center, Bar-Ilan University, Ramat-Gan, Israel

MODELING & ANALYSIS
Exploratory Methods, Artifact Removal

MODELING & ANALYSIS
Flattening, Segmentation

MODELING & ANALYSIS
Functional Connectivity and Structural Equation Modeling

MODELING & ANALYSIS
Multivariate Modeling, PCA, & ICA

Megan Davis[1], Daniel Hommer[1], [1]Section of Brain Electrophysiology and Imaging, Laboratory of Clinical Studies, NIH, Bethesda, USA, [2]Synergy Research Inc., Monrovia, USA

Modulation of the fractal properties of low frequency endogenous brain oscillations in functional MRI by a working memory task., *Anna Barnes[1], Christian Habeck[2], Garry Honey[1], Alle-Meije Wink[3], Edward Bullmore[1], John Suckling[1], [1]Cambridge University, Cambridge, United Kingdom, [2]Columbia University, New York, USA, [3]Cambridge University, Cambridge, United Kingdom, [4]Imperial College, London, United Kingdom, [5]Cambridge University, Cambridge, United Kingdom, [6]Cambridge University, Cambridge, United Kingdom* 599 W-AM

Reliability of multivariate causality measures for neural data, *Esther Florin[1,2], Joachim Gross[3], Gereon R. Fink[1,2], Lars Timmermann[2], [1]Institute of Neuroscience and Biophysics - Medicine, Cognitive Neurology, Research Centre Jülich, Juelich, Germany, [2]b Department of Neurology, University Hospital Cologne, Cologne, Germany, [3]Centre for Cognitive Neuroimaging (CCNi), Department of Psychology, University of Glasgow, Glasgow, United Kingdom* 603 W-AM

A frequency domain approach for understanding brain connectivity from EEG data, *Laura Marzetti[1,2], Cosimo Del Gratta[1,2], Guido Nolte[3], [1]Department of Clinical Sciences and Bioimaging, Gabriele D'Annunzio University, Chieti, Italy, [2]Institute for Advanced Biomedical Technologies, Gabriele D'Annunzio University Foundation, Chieti, Italy, [3]Fraunhofer FIRST.IDA, Berlin, Germany* 607 W-AM

Exploring changes in phase of EEG oscillations with tests on complex valued time–frequency representations, *Eduardo Martínez-Montes, Pedro A. Valdés-Sosa, Cuban Neuroscience Center, Havana, Cuba* 611 W-AM

MOTOR BEHAVIOR
Basal Ganglia/Brainstem/Spinal Cord

'REAL-TIME' IMAGING OF CARDIOVASCULAR CONTROL IN HUMAN SUBJECTS: CONCURRENT RECORDING OF SPONTANEOUS MUSCLE SYMPATHETIC NERVE ACTIVITY AND SPONTANEOUS FLUCTUATIONS IN BRAINSTEM fMRI SIGNAL INTENSITY, *Vaughan Macefield[1,2], Luke Henderson[3], [1]School of Medicine, University of Western Sydney, Sydney, Australia, [2]Prince of Wales Medical Research Institute, Sydney, Australia, [3]Department of Anatomy & Histology, University of Sydney, Sydney, Australia* 615 W-AM

MOTOR BEHAVIOR
Eye Movements/Visuomotor Processing

Cerebral Representations of Space and Time, *Martijn Beudel[1,2], Remko Renken[2], Klaus Leenders[1], Bauke de Jong[1,2], [1]dept. Neurology, University Medical Center Groningen, Groningen, Netherlands, [2]2. BCN Neuroimaging Center, University of Groningen, Groningen, Netherlands* 619 W-AM

Modulation of BOLD activations of the Smooth Pursuit Eye Movement network as a function of the amount of background dots, *Sabine Ohlendorf[1,3], Andreas Sprenger[2], Oliver Speck[4], Volkmar Glauche[1], Sven Haller[5], Hubert Kimmig[2], [1]Neurologische Universitätsklinik Freiburg, Freiburg, Germany, [2]Klinik für Neurologie, Universitätsklinikum Schleswig Holstein, Campus Lübeck, Lübeck, Germany, [3]Abteilung Röntgendiagnostik, Medizin Physik, Universitätsklinikum Freiburg, Freiburg, Germany, [4]Abteilung Biomedizinische Magnetresonanz, Institut für Experimentelle Physik, Universität Magdeburg, Magdeburg, Germany, [5]Abteilung für Neuroradiologie, Universitätsspital Basel, Basel, Switzerland* 623 W-AM

Differential Frontal Controls during Eye Tracking of Visible and Occluded Moving Targets: Simultaneous fMRI and Eye-Movement Recording, *Jinhong Ding[1,2], David Powell[3], Yang Jiang[2], [1]Psychology Dept., Capital Normal University, Beijing, China, [2]Behavioral Science Dept., University of Kentucky, Lexington, USA, [3]Magnetic Resonance Imaging and Spectroscopy Center, University of Kentucky, Lexington, USA* 627 W-AM

NEUROANATOMY
DTI Studies, Application

Using multimodal imaging to investigate the structure-function relationship of a sensorimotor cortical U-fiber, *Kristi Clark[1, 2], Kenichi Oishi[2], Roger Woods[3], Susumu Mori[2], Arthur Toga[1], [1]Laboratory of Neuro Imaging, UCLA, Los Angeles, USA, [2]Laboratory of Brain Anatomical* 631 W-AM

MRI, Johns Hopkins University, Baltimore, USA, [3]Brain Mapping Center, UCLA, Los Angeles, USA

Remediation-related neuroplasticity of left hemisphere white matter among poor readers: A longitudinal diffusion tensor imaging study, *Timothy A. Keller, Ann Meyler, Vladimir L. Cherkassky, Marcel Adam Just, Center for Cognitive Brain Imaging, Department of Psychology, Carrnegie Mellon University, Pittsburgh, USA* 635 W-AM

Frontal-Limbic White Matter Pathway Differences Associated with Genetic Risk for Major Depressive Disorder, *Jennifer Pacheco[1,2], Christopher Beevers[1], Cristina Benavides[1], John McGeary[3,4], Mithra Sathishkumar[2], David M. Schnyer[1,2], [1]Department of Psychology, The University of Texas at Austin, Austin, USA, [2]Imaging Research Center, The University of Texas at Austin, Austin, USA, [3]Research Service, Providence VA Medical Center, Providence, USA, [4]Center for Alcohol and Addiction Studies, Brown University, Providence, USA* 639 W-AM

Relating connectional architecture to grey matter function in the human lateral premotor cortex using functional and diffusion imaging, *Valentina Tomassini[1], Saad Jbabdi[1], Jan Scholz[1], Tim Behrens[1,2], Paul M Matthews[1], Matthew Rushworth[1,2], Heidi Johansen-Berg[1], [1]FMRIB Centre, University of Oxford, Oxford, United Kingdom, [2]Dept of Experimental Psychology, University of Oxford, Oxford, United Kingdom* 643 W-AM*

Correlation of White Matter Integrity measured by DTI with Intelligence, Personality, and Creativity in Healthy Subjects., *Arvind Caprihan, Ranee Barrow, Robert Chavez, H. Jeremy Bockholt, Rex E. Jung, MIND Research Network, Albuquerque, USA* 647 W-AM

Cortical Connections of Human Inferior Parietal Area PF: Probabilistic Cytoarchitectonic Mapping and Diffusion Tensor Tractography Show a Similar Structural Organization as Compared to Macaques, *Stefan Geyer[1,3], Simon B. Eickhoff[2], Karl Zilles[1,2], [1]C. and O. Vogt Brain Research Institute, Univ. Duesseldorf, Duesseldorf, Germany, [2]Institute of Neurosciences and Biophysics – Medicine, Research Center, Juelich, Germany, [3]Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany* 651 W-AM

Whole-Brain Analysis of Fractional Anisotropy in Fetal Alcohol Syndrome Using Tract-based Spatial Statistics, *Longchuan Li[1], Claire Coles[2], Mary Ellen[2], Zhihao Li[1], Mingguo Qiu[1], Xiaoping Hu[1], [1]Biomedical Imaging Technology Center, Emory University/Georgia Institute of Technology, Atlanta, USA, [2]Department of Psychiatry and Behavioral Sciences, Emory University, Atlanta, USA* 655 W-AM

Mapping the Structural Core of Human Cerebral Cortex, *Olaf Sporns[1], Leila Cammoun[2], Xavier Gigandet[2], Reto Meuli[3], Christopher Honey[1], Patric Hagmann[3], [1]Department of Psychological and Brain Sciences, Indiana University, Bloomington, USA, [2]Signal Processing Institute, Ecole Polytechnique Federale de Lausanne, Lausanne, Switzerland, [3]Department of Radiology, University Hospital Center and University of Lausanne, Lausanne, Switzerland* 659 W-AM

Age Related Changes of Human Brains suing Magnetic Resonance Hybrid Diffusion Imaging, *Yu-Chien Wu[1,2], Frances B. Haeberli[2], Yi-Min Huang[6], Aaron S. Field[1,3], Andrew L. Alexander[2,4,5], [1]Department of Radiology, University of Wisconsin-Madison, Madison, USA, [2]Waisman Laboratory for Brain Imaging and Behavior, University of Wisconsin-Madison, Madison, USA, [3]Department of Biomedical Engineering, University of Wisconsin-Madison, Madison, USA, [4]Department of Medical Physics, University of Wisconsin-Madison, Madison, USA, [5]Department of Psychiatry, University of Wisconsin-Madison, Madison, USA, [6]Department of Physics, Madison, USA* 663 W-AM

SENSORY SYSTEMS
Auditory/Vestibular

Patterns of local gamma activity over the human superior temporal gyrus suggested the presence of FM-selective processing areas, *Paul Poon[1,2], John Brugge[2], Hiroyuki Oya[2], Richard Reale[2], Hiroto Kawasaki[2], Kirill Nourski[2], Matthew Howard III[2], [1]Dept Physiology, NCKU, Tainan, Taiwan, [2]Dept Neurosurgery, Univ of Iowa, Iowa City, USA* 667 W-AM

Sound-induced activation of vestibular cortex: Electrical neuroimaging during vestibular evoked myogenic potentials, *Pär Halje, Christophe Lopez, Olaf Blanke, Laboratory of Cognitive Neuroscience, Brain Mind Institute, Ecole Polytechnique Federale de Lausanne, Lausanne, Switzerland* 671 W-AM

Multimodal Functional Imaging of Loss of Consciousness Under Propofol Anesthesia with Simultaneous EEG, fMRI, and 40-Hz ASSR, *Patrick Purdon[1,2,6], Eric Pierce[1], Giorgio Bonmassar[2,3], John Walsh[1], Grace Harrell[1], Jean Kwo[1], Daniel Deschler[8], Catherine Mullaly[1], Margaret Barlow[4], Rebecca Merhar[1], Camilo Lamus[6], Sharon Maginnis[5], Debra Skoniecki[5], Mary Sullivan[5], Helen-Anne Higgins[5], Emery Brown[1,6,7], [1]Mass Gen Hospital Dept Anesthesia & Critical Care, Boston, USA, [2]Martinos Ctr. Biomed. Imaging, Charlestown, USA, [3]Mass Gen Hospital Dept Radiology, Boston, USA, [4]Mass Gen Hospital Dept Neurology, Boston, USA, [5]Mass Gen Hospital GCRC, Boston, USA, [6]MIT Dept Brain Cog Sci, Cambridge, USA, [7]Harvard/MIT Division Health Sci & Technology, Cambridge, USA, [8]Mass Eye Ear Infirmary, Boston, USA* 675 W-AM

SENSORY SYSTEMS
Tactile/Somatosensory

Brain white matter differences in lower limb amputees, a Diffusion Tensor Imaging study, *Sarael Alcauter[1,2], Erick H Pasaye[2,3], Perla M Salgado[3], Maria del Refugio Pacheco[4], Maria De Iturbe[3], Fernando A Barrios[5], [1]Instituto Nacional de Psiquiatria INPRF, Mexico DF, Mexico, [2]Posgrado en Ciencias Biomedicas, UNAM, Mexico DF, Mexico, [3]Instituto Nacional de Neurologia y Neurocirugía MVS, Mexico DF, Mexico, [4]Instituto Nacional de Rehabilitacion, Mexico DF, Mexico, [5]Instituto de Neurobiologia, Universidad Nacional Autónoma de México, Queretaro, Mexico* 679 W-AM

An fMRI Study of Head Massage Reveals Activity in the Brain's Reward Centres, *Lisan Ho[1], Laura M Parkes[1], Richard L Evans[2], Neil Roberts[1], Francis McGlone[2], [1]The Magnetic Resonance and Image Analysis Research Centre (MARIARC), University of Liverpool, Liverpool, United Kingdom, [2]Unilever Research Ltd, Wirral, United Kingdom* 683 W-AM

A somatotopical relationship between cortical activity and reflexological stimulation: an fMRI study, *Tomomi Nakamaru[1,2], Naoki Miura[3,2], Ai Fukushima[2], Ryuta Kawashima[2], [1]Tohoku University School of Medicine, 4-1 Seiryo-cho, Aoba-ku, Sendai, Miyagi, Japan, [2]Department of Functional Brain Imaging, Institute of Development, Aging and Cancer (IDAC), Tohoku University, 4-1 Seiryo-cho, Aoba-ku, Sendai, Miyagi, Japan, [3]Department of Intelligence Mechanical Systems Engineering, Kochi University of Technology, 185 Miyanokuchi, Kami, Kochi, Japan* 687 W-AM

Behavioral correlates of negative BOLD signal changes in the primary somatosensory cortex, *Jürgen Baudewig[1], Andreas Kastrup[2], Sonja Schnaudigel[2], Lars Becker[2], Jan Martin Sohns[2], Peter Dechent[1], [1]MR-Research in Neurology and Psychiatry, University Medical Center, Göttingen, Germany, [2]Department of Neurology, University Medical Center, Göttingen, Germany* 691 W-AM*

Multimodal neuroimaging of somatosensory cortex during somatotopic air-puff stimulation, *Ruey-Song Huang[1,2], Tzyy-Ping Jung[1], Rey Ramirez[1], Zeynep Akalin-Acar[1], Martin Sereno[2], Scott Makeig[1], [1]Swartz Center for Computational Neuroscience, Institute for Neural Computation, University of California, San Diego, La Jolla, USA, [2]Department of Cognitive Science, University of California, San Diego, La Jolla, USA* 695 W-AM

Finger representations in areas 3b and 1 of human primary somatosensory cortex as revealed by functional MRI of tactile stimulation, *Renate Schweizer, Jens Frahm, Biomedizinische NMR Forschungs GmbH am Max–Planck-Institut für biophysikalische Chemie, Goettingen, Germany* 699 W-AM

SENSORY SYSTEMS
Vision

Evidence of two alpha rhythm systems in the human brain: a combined EEG/fMRI study, *Eti Ben Simon[1,2], Ilana Podlipsky[1], Andrey Zhdanov[1], Talma Hendler[1,2,3], [1]Functional Brain Center, Wohl Institute for Advanced Imaging, Tel Aviv Sourasky Medical Center, Tel Aviv, Israel, [2]2Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel, [3]Psychology department,Tel Aviv University, Tel Aviv, Israel* 703 W-AM

fMRI of chromatic and achromatic responses in human visual areas: Specializations for spatial & temporal frequency, *Dany V. D'Souza[1], Barry B. Lee[2], Jens Frahm[1], [1]Biomedizinische NMR Forschungs GmbH am Max-Planck-Institut für biophysikalische Chemie, Goettingen, Germany, [2]State University of New York, School of Optometry, New York, USA* 707 W-AM

Cortical Network for Coherent Stereomotion in the Human Brain, *Lora Likova, The Smith-Kettlewell Eye Research Institute, San Francisco, USA* 711 W-AM

Coincident Visual Retinotopy in simultaneous Slow cortical potentials and fMRI recordings, *Hugo Sandoval[1,2], Stephen Sands[1,2], J. Andrew Sands[1], George R. Mangun[3], Cameron Carter[3], Joy Geng[3], [1]Sands Research, El Paso, USA, [2]University of Texas, El Paso, USA, [3]UC Davis, Davis, USA* 715 W-AM

Volumetric Analysis of the Optic Chiasm in Early-blind Patients., *Flemming Andersen[1], Ron Kupers[1], Fabien Schneider[2], Maurice Ptito[3], [1]PET Unit, Copenhagen University Hospital, Copenhagen, Denmark, [2]University of Saint-Etienne, Saint-Etienne, France, [3]University of Montreal, Montreal, Canada* 719 W-AM

ORIENTATION-SPECIFIC CONTEXTUAL MODULATION IN HUMAN VISUAL CORTEX, *J. Scott McDonald[1], Kiley Seymour[1], Mark Schira[2], Branka Spehar[2], Colin Clifford[1], [1]University of Sydney, Sydney, Australia, [2]UNSW, Sydney, Australia* 723 W-AM

Neural correlates of detection and identification of human bodies, *Amra Hodzic[1,2], Amanda Kaas[1,3], Wolf Singer[1], Aglaja Stirn[4], [1]Max Planck Institut for Brain Research, Frankfurt am Main, Germany, [2]Graduate School of Neural and Behavioural Sciences IMPRS, Tübingen, Germany, [3]Department of Cognitive Neuroscience, University of Maastricht, Maastricht, Netherlands, [4]Johann Wolfgang Goethe University Clinic, Frankfurt am Main, Germany* 727 W-AM

Functional decoupling of BOLD and gamma band amplitudes in human visual cortex, *Suresh Muthukumaraswamy, Krish Singh, CUBRIC, Cardiff University, Cardiff, United Kingdom* 731 W-AM

MEG and fMRI studies on the neural basis of global form perception in Glass pattern stimuli., *Jennifer B. Swettenham[1], Stephen J. Anderson[2], Ngoc J. Thai[2], [1]CUBRIC, School of Psychology, Cardiff University, Cardiff, United Kingdom, [2]The Wellcome Trust Laboratory for MEG Studies, School of Life and Health Sciences, Aston University, Birmingham, United Kingdom* 735 W-AM

MEMORY & LEARNING
Long-term Memory (episodic, semantic, autobiographical)

Dissociating Regional Changes in Prefrontal Cortex Structure and Function that Impact Memory Performance during Normal Aging, *Luc Valiquette[1], Rafael Languay[1], Sidney Pinto[1], Cheryl Grady[2], Jens Pruessner[1], Maria N. Rajah[1], [1]McGill University and Douglas Mental Health Univ. Inst., Montreal, QC, Canada/[2]U. of Toronto & Rotman Research Inst., Toronto, ON, Canada* 739 W-AM

13:45 – 14:45 *You Yangs Hall (Level 3)*

COGNITION & ATTENTION
Executive Function

Transiently disrupting right prefrontal cortex interferes with updating of working memory, *Neir Eshel, Joseph Luka, Agatha Lenartowicz, Leigh E. Nystrom, Jonathan D. Cohen, Princeton University, Princeton, USA* 2 W-PM

How positive and negative smells influence cognitive interference processes, *Martina Reske[1,2], Thilo Kellermann[2], Andreas Finkelmeyer[2], Thomas Niessen[2], Michael Schwenzer[2], Klaus Mathiak[2,3], [1]University of California San Diego, Laboratory of Biological Dynamics and Theoretical Medicine, La Jolla, USA, [2]RWTH Aachen University, Department of Psychiatry, Aachen, Germany, [3]King's College, Institute of Psychiatry, London, United Kingdom* 6 W-PM

Modafinil modulates activity in brain regions underlying attentional control in healthy subjects, *Beth Stankevich, Roberta Rasetti, Fabio Sambataro, Giuseppe Blasi, Kelsey Skjei, Guilna Alce, Jose Apud, Daniel Weinberger, Venkata Mattay, Clinical Brain Disorders Branch: Genes, Cognition, and Psychosis Program, NIMH, NIH, Bethesda, USA* 10 W-PM

Comparison of putative default networks in macaque and human cerebral cortex, *David Van Essen[1], Justin Vincent[2], Avi Snyder[1], Marcus Raichle[1], [1]Washington University, St. Louis, USA, [2]Harvard University, Cambridge, USA* 14 W-PM

Activation of self-knowledge reduces conflict during occupational choice: An ERP study., *Takashi Nakao, Makoto Miyatani, Akane Okamoto, Kaori Katayama, Mayo Mitsumoto, Yu Watanabe, Hiroshima Universit, Higashi-Hiroshima, Japan* 18 W-PM

CNV resolution does not cause the N2 and P3 Go/NoGo effects, *Janette Smith[1,2], Robert Barry[2], Stuart Johnstone[2], [1]University of Newcastle, Newcastle, Australia, [2]University of Wollongong, Wollongong, Australia* 22 W-PM

Brain network dynamics during working memory task events in relation to COMT Val(158)Met, *Hao-Yang Tan, Qiang Chen, Rachel Higier, Laura Libby, Morgan Prust, Venkata Mattay, Daniel Weinberger, Joseph Callicott, Clinical Brain Disorders Branch, NIMH, NIH, Bethesda, USA* 26 W-PM

Multi-voxel coding of stimulus-response mapping rules in human frontal and parietal cortex, *Alexandra Woolgar, John Duncan, Medical Research Council - Cognition and Brain Sciences Unit, Cambridge, United Kingdom* 30 W-PM

Transient modulation of intrinsic network connectivity during working memory, *Catie Chang[1], Gary H. Glover[1,2,3], Moriah E. Thomason[3], Michael D. Greicius[4], Vinod Menon[5,6], [1]Dept. of Electrical Engineering, Stanford University, Stanford, USA, [2]Dept. of Radiology, Stanford University, Stanford, USA, [3]Dept. of Psychology, Stanford University, Stanford, USA, [4]Dept. of Neurology, Stanford University School of Medicine, Stanford, USA, [5]Dept. of Psychiatry and Behavioral Sciences, Stanford University School of Medicine, Stanford, USA, [6]Program in Neuroscience, Stanford, USA* 34 W-PM

A Longitudinal Investigation of Developmental Changes in Response Inhibition in Early Adolescence, *Frances Haeberli[1,2], John Ollinger[1,2], Dan Kelley[1,2], Tom Johnstone[3], Andrew Alexander[1,2], [1]University of Wisconsin - Madison, Madison, USA, [2]Waisman Center: Lab for Brain Imaging and Behavior, Madison, USA, [3]Bristol University, Bristol, United Kingdom* 38 W-PM

Tracing the neural correlates of the N200 in a tactile stop-signal task: predominance of the dACC?, *Rene Huster[1,2,3], Rene Westerhausen[4], Arne Wittling[1], Werner Wittling[1], Elisabeth Schweiger[1], Christo Pantev[2], [1]Center for Neuropsychological Research, Trier, Germany, [2]Institute for Biomagnetism and Biosignalanalysis, Münster, Germany, [3]Department of Psychiatry and Psychotherapy and Interdisciplinary Center for Clinical Research (IZKF), Münster, Germany, [4]Cognitive NeuroScience Group, Department of Biological and Medical Psychology, Bergen, Norway* 42 W-PM

Freely Generating Task Goals and Delayed Intention, *Sara L Bengtsson[1], John-Dylan Haynes[2], Katsuyuki Sakai[3], Richard E Passingham[4], [1]Wellcome Centre for NeuroImaging, London, United Kingdom, [2]Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, [3]Department of Cognitive Neuroscience, Univ of Tokyo, Tokyo, Japan, [4]Department of Experimental Psychology, Oxford, United Kingdom* 46 W-PM*

Changes of EEG Spectra from Alertness to Drowsiness in a Driving Simulator, *Sheng-Fu Liang[1], Chin-Teng Lin[2,3], Jong-Liang Jeng[2], Tzai-Wen Chiu[2], Li-Wei Ko[2], Ruey-Song Huang[2,4], Tzyy-Ping Jung[2,4], Jeng-Ren Duann[2,4], [1]Department of Computer Science and Information Engineering, National Cheng-Kung University, Tainan, Taiwan, [2]Brain Research Center, University System of Taiwan, Hsinchu, Taiwan, [3]Department of Electrical and Control Engineering, National Chiao-Tung University, Hsinchu, Taiwan, [4]Institute for Neural Computation, University of California, San Diego, USA* 50 W-PM*

Performance monitoring dysfunction in cannabis users: evidence of anterior cingulate and prefrontal hypoactivity associated with reduced error awareness, *Robert Hester[1], Liam Nestor[2], Hugh Garavan[2], [1]Queensland Brain Institute and School of Psychology, University of Queensland, St Lucia, Australia, [2]School of Psychology and Trinity College Institute for Neuroscience, Trinity College Dublin, Dublin, Ireland* 54 W-PM

Identifying components of task-set reconfiguration using ERP and BESA., *Elise Mansfield[1], Frini Karayanidis[1,2,3], Kasey Galloway[1], Janette Smith[1,3], [1]Functional Neuroimaging Laboratory, Newcastle, Australia, [2]Schizophrenia Research Institute, Sydney, Australia, [3]Hunter Medical Research Institute, Newcastle, Australia* 58 W-PM

COGNITION & ATTENTION
Perception, Imagery, Awareness

Dopaminergic neurotransmission plays a causal role in conscious awareness, *Joshua Skewes[1], Hans Lou[1], Pedro Rosa[1], Hakwan Lau[2], Troels Kjaer[3], Svend Jensen[1], Kim Mouridsen[1], Andreas Roepstorff[1], Albert Gjedde[1], [1]Center for Functionally Integrative Neuroscience, Aarhus University Hospitals, Aarhus, Denmark, [2]Department of Psychology, Columbia University, Manhatten, USA, [3]Department of Clinical Neurophysiology, Copenhagen University Hospital, Copenhagen, Denmark* 62 W-PM

DISORDERS OF THE NERVOUS SYSTEM
Addiction

DISORDERS OF THE NERVOUS SYSTEM
Autism

DISORDERS OF THE NERVOUS SYSTEM
Brain & Spinal Cord Trauma

[1]Max-Planck-Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, [2]Day Clinic of Cognitive Neurology, University of Leipzig, Leipzig, Germany

Impaired Functional Connectivity in Traumatic Brain Injury: An MEG Study, *Pratik Mukherjee[1], Anne Findlay[1], Hana Lee[2], Adrian Guggisberg[1], Susanne Honma[1], Michele Meeker[2], Geoffrey Manley[2], Srikantan Nagarajan[1], [1]Radiology, UCSF, San Francisco, USA, [2]Neurosurgery, UCSF, San Francisco, USA* 114 W-PM

DISORDERS OF THE NERVOUS SYSTEM
Developmental Disorders

Connectivity analysis of brain function in control children and children with fetal alcohol spectrum disorder (FASD) during number processing, *Robyn Herron[1], Ernesta Meintjes[1], Sandra Jacobson[2], Christopher Molteno[3], Eric Murphy[2], Vaibhav Diwadkar[2], John Gore[4], Joseph Jacobson[2], Baxter Rogers[4], [1]Department of Human Biology, Faculty of Health Sciences, University of Cape Town, Cape Town, South Africa, [2]Department of Psychiatry and Behavioural Neurosciences, Wayne State University School of Medicine, Detroit, USA, [3]Department of Psychiatry, Faculty of Health Sciences, University of Cape Town, Cape Town, South Africa, [4]Vanderbilt University Institute of Imaging Science, Vanderbilt University, Nashville, USA* 118 W-PM

Right Inferior Prefrontal Cortex is activated during Response Inhibition in Healthy Controls but not in Children with Fetal Alcohol Spectrum Disorder (FASD), *Ernesta Meintjes[1], Sandra Jacobson[2], Christopher Molteno[1], J Christopher Gatenby[3], Christopher Warton[1], Christopher Cannistraci[3], John Gore[3], Joseph Jacobson[2], [1]University of Cape Town, Cape Town, South Africa, [2]Wayne State University, Detroit, USA, [3]Vanderbilt University, Nashville, USA* 122 W-PM

Volumetric reduction of normal appearing cortex in patients with polymicrogyria detected by cortical surface analysis, *Pedro P M Oliveira, Claudia C Leite, Edson Amaro, NIF - LIM-44 - InRad - Faculdade de Medicina - Universidade de São Paulo, Sao Paulo, Brazil* 126 W-PM

Functional integrity of malformed cortex: an fMRI study, *Florian Koppelstaetter[1,2], Giorgi Kuchukhidze[3], Iris Unterberger[3], Judith Dobesberger[3], Norbert Embacher[3], Gerald Walser[3], Thaddaeus Gotwald[1], Christian Siedentopf[1,2], Stephan Felber[4], Anja Ischebeck[2,3], Werner Jaschke[1], Eugen Trinka[3], [1]Department of Radiology, Medical University Innsbruck, Innsbruck, Austria, [2]fMRI-Lab, Department of Psychiatry, Medical University Innsbruck, Innsbruck, Austria, [3]Department of Neurology, Medical University Innsbruck, Innsbruck, Austria, [4]Stiftungsklinikum Mittelrhein St.Martin, Koblenz, Germany* 130 W-PM

Disruption of right-lateralized fronto-striatal functional circuitry in Fragile X syndrome, *Elizabeth Walter, Fumiko Hoeft, Allan Reiss, Department of Psychiatry, Stanford, USA* 134 W-PM

DISORDERS OF THE NERVOUS SYSTEM
Epilepsy

How different brain pathologies influence language plasticity in the brain: fMRI study., *Massimo Caulo, Carlo Sestieri, Chiara Briganti, Francesco De Pasquale, Armando Tartaro, Gian Luca Romani, University of Chieti-Pescara, Chieti, Italy* 138 W-PM

Spatiotemporal propagation pattern of ictal scalp EEG in mesial temporal lobe epilepsy associated with hippocampal sclerosis, *Ki-Young Jung[1], Soyoung Kwon[1], Joong-Koo Kang[2], Ji Hyun Kim[1], [1]Department of Neurology, Korea University Medical Center, Korea University College of Medicine, Seoul, South Korea, [2]Department of Neurology, Asan Medical Center, Ulsan University College of Medicine, Seoul, South Korea* 142 W-PM

The Neurodynamics of seizure propagation in focal epilepsy, *Andre Peterson[1,2,3], Anthony Burkitt[1,2], Iven Mareels[1], David Grayden[1,2], Mark Cook[3], Levin Kuhlmann[1], [1]Department of Electrical & Electronic Engineering, Melbourne University, Melbourne, Australia, [2]Bionic Ear Institute, Melbourne, Australia, [3]St. Vincents Hospital, Melbourne, Australia* 146 W-PM

Low Frequency Fluctuation Inhibition in BOLD Deactivation Regions Caused by Ictal Epileptic Discharges, *Zhiqiang Zhang[1], Guangming Lu[1], Lei Tian[2], Yijun Liu[3], [1]Department of Medical Imaging, Clinical School of Nanjing University, Nanjing, China, [2]Department of Neurosugeryi, Clinical School of Nanjing University, Nanjing, China, [3]Department of Psychiatry and Neuroscience, University of Florida, Gainesville, USA* 150 W-PM

DISORDERS OF THE NERVOUS SYSTEM
Stroke & Recovery of Function

EMOTION & MOTIVATION
Decision Making

EMOTION & MOTIVATION
Emotional Learning

EMOTION & MOTIVATION
Emotional Perception

Medical University of Vienna, Vienna, Austria, [2]Center for Biomedical Engineering and Physics, Medical University of Vienna, Vienna, Austria, [3]Department of Biomedical Engineering, School of Science and Engineering, Reykjavik University, Reykjavik, Iceland

Inhibiting responses to faces and complex objects: Concurrent empathy, developmental aggression, and neural response, *Jessica Kirkland[1], Marilyn Essex[2], Jeffrey Armstrong[2], Richard Davidson[1], [1]University of Wisconsin Madison, Psychology Department, Madison, USA, [2]University of Wisconsin Madison, Department of Psychiatry, Madison, USA* 250 W-PM

Conscious but not nonconscious perception of social emotions alters the "default mode" brain activity, *Franco Cauda[2,6], Katiuscia Sacco[2,6], Sergio Duca[6], Federico D'Agata[2,3,6], Barbara Massa Micon[1,5], Giuliano Geminiani[2,6], Marco Tamietto[2,4], [1]Turin Advanced Neuromodulation Group, Torino, Italy, [2]Department of Psychology, University of Turin, Tf Psychology, University of Turinorino, Italy, [3]Department of Neuroscience, Molinette Hospital, Torino, Italy, [4]Cognitive and Affective Neuroscience Laboratory, Tilburg University, Tilburg, Netherlands, [5]Department of Neurosurgery, CTO hospital, Torino, Italy, [6]CCS fMRI, Koelliker Hospital, Torino, Italy* 254 W-PM

Brain connectivity changes during cognitive-emotional processing in alexithymia, *Branislava Ćurčić-B, Marte Swart, André Aleman, Neuroimaging Centrum, University Medical Centre Groningen, Groningen, Netherlands* 258 W-PM

Fright and Screams: Supra-additive neural responses to perceptually incongruous audio-visual cues of fear, *Cindy C. Hagan[1], Sam Johnson[1], Will Woods[1], Andrew J. Calder[2], Gary R. Green[1], Andrew W. Young[1], [1]Department of Psychology and York Neuroimaging Centre, University of York, York, United Kingdom, [2]MRC Cognition and Brain Sciences Unit, Cambridge University, Cambridge, United Kingdom* 262 W-PM

Nicotine negatively influences the neural processing of visual emotional stimuli in non-smokers, *Andrea Kobiella[1], Dorothea E. Ulshöfer[1], Christian Vollmert[1], Sabine Klein[1], Derik Hermann[1], Karl Mann[1], Michael N. Smolka[2], [1]Department of Addictive Behavior and Addiction Medicine, Central Institute of Mental Health, Mannheim, Germany, [2]Section of Systems Neuroscience, Department of Psychiatry and Psychotherapy, Technische Universität Dresden, Dresden, Germany* 266 W-PM

IMAGING TECHNIQUES & CONTRAST MECHANISM
Anatomical MRI

Voxel-Guided Morphometry in MS: individual assessment of chronic structural brain tissue changes in MRI – the role of focal lesions for brain atrophy development, *Matthias Kraemer[1], Thorsten Schormann[2], Andreas Dabringhaus[1], Jochen Hirsch[3], Klaus-Martin Stephan[1], Volker Hoemberg[1], Achim Gass[3], [1]St. Mauritius Therapieklinik, Meerbusch, Germany, [2]Institut für Anatomie 1, Heinrich-Heine Universität, Düsseldorf, Germany, [3]Universitätsspital Basel, Neuroradiologie, Basel, Switzerland* 270 W-PM

A Comparison of Three Different Tractography Software Tools and Their Ease of Application, *Brian Snyder[1], Jerry Chen[2], Mojgan Hodaie[1], [1]Department of Surgery, Division of Neurosurgery, Toronto Western Hospital, University of Toronto, Toronto, Canada, [2]University of Toronto, Toronto, Canada* 274 W-PM

High resolution R_2* maps reveal laminar structure of human visual cortex *in vivo*., *Masaki Fukunaga, Marta Bianciardi, Peter van Gelderen, Jacco de Zwart, Jeff Duyn, Advanced MRI, LFMI, NINDS, National Institutes of Health, Bethesda, USA* 278 W-PM

MRI Phase-based Magnetic Susceptibility Mapping of the Human Brain at High Resolution, *Karin Shmueli, Peter van Gelderen, Tie-Qiang Li, Jeff Duyn, Advanced MRI Section, Laboratory of Functional and Molecular Imaging, National Institute of Neurological Disorders and Stroke, National Institutes of Health, Bethesda, USA* 282 W-PM*

IMAGING TECHNIQUES & CONTRAST MECHANISM
Diffusion MRI

Can residual bootstrap reliably estimate uncertainty in fiber orientation obtained by spherical deconvolution from diffusion-weighted MRI?, *Ben Jeurissen[1], Alexander Leemans[2], Jacques-Donald Tournier[3,4], Jan Sijbers[1], [1]Visionlab, Dept. of Physics, University of Antwerp, Antwerp, Belgium, [2]CUBRIC, School of Psychology, Cardiff University, Cardiff, United Kingdom, [3]Brain Research Institute, Melbourne, Australia, [4]Dept. of Medicine, University of Melbourne, Melbourne, Australia* 286 W-PM

IMAGING TECHNIQUES & CONTRAST MECHANISM
Multi-modal Integration

IMAGING TECHNIQUES & CONTRAST MECHANISM
Optical Imaging/NIRS/MRS (magnetic resonance spectroscopy)

IMAGING TECHNIQUES & CONTRAST MECHANISM
Perfusion MRI

Comparison of Pulsed Arterial Spin Labeling (PASL) With and Without Parallel Imaging at 3T, *Yang Wang, Chen Lin, Andrew Kalnin, Kristine Mosier, John West, Andrew Saykin, IU Center for Neuroimaging, Dept. of Radiology, Indiana University School of Medicine, Indianapolis, USA* 338 W-PM

Venous outflow effect in arterial spin labeling magnetic resonance imaging: A demonstration in healthy children and children with sickle cell disease, *Wen-Chau Wu[1], Hengyi Rao[2], Mikolaj Pawlak[1], Kim Cecil[3], John VanMeter[4], Thomas Zeffiro[5], John Detre[2], Elias Melhem[1], Jiongjiong Wang[1], [1]Department of Radiology, University of Pennsylvania, Philadelphia, USA, [2]Department of Neurology, University of Pennsylvania, Philadelphia, USA, [3]Department of Radiology, Cincinnati Children's Hospital, Cincinnati, USA, [4]Department of Neurology, Georgetown University Medical Center, Washington, USA, [5]Neural system group, Massachusetts General Hospital, Boston, USA* 342 W-PM*

IMAGING TECHNIQUES & CONTRAST MECHANISM
PET/SPECT

Functional compensation in incipient Alzheimer's disease, *Anna Caroli[1], Cristina Geroldi[1,2], Flavio Nobili[3], Leighton R Barnden[4], Ugo P Guerra[5], Matteo Bonetti[6], Giovanni B Frisoni[1,2,7], [1]LENITEM Laboratory of Epidemiology, Neuroimaging, & Telemedicine - IRCCS S. Giovanni di Dio-FBF, Brescia, Italy, [2]Psychogeriatrics Unit - IRCCS S. Giovanni di Dio-FBF, Brescia, Italy, [3]Division of Clinical Neurophysiology, Department of Endocrinological and Metabolic Sciences, University of Genoa, Genoa, Italy, [4]Department of Nuclear Medicine, The Queen Elizabeth Hospital, Adelaide, Australia, [5]Department of Nuclear Medicine, Ospedali Riuniti, Bergamo, Italy, [6]Neuroradiology Service, Clinical Institute Città di Brescia, Brescia, Italy, [7]AFaR Associazione Fatebenefratelli per la Ricerca, Rome, Italy* 346 W-PM

IMAGING TECHNIQUES & CONTRAST MECHANISM
TMS

Investigation of the role of S1 and PFC in tactile working memory: a navigated TMS, tractography and EEG study., *Tuomas Neuvonen[1,2,6], Henri Hannula[1,2,6], Petri Savolainen[1], Jaana Hiltunen[3], Oili Salonen[4], Synnöve Carlson[1,5], Antti Pertovaara[1], [1]Neuroscience Unit, Institute of Biomedicine/Physiology, University of Helsinki, Helsinki, Finland, [2]Nexstim Ltd, Helsinki, Finland, [3]Advanced Magnetic Imaging Centre, Helsinki University of Technology, Espoo, Finland, [4]HUS Helsinki Medical Imaging Centre, Helsinki University of Technology, Helsinki, Finland, [5]Medical School, University of Tampere, Tampere, Finland, [6]these authors had an equal contribution to the study* 350 W-PM*

LANGUAGE
Comprehension

The cortical dynamics of intelligible speech, *Thomas Schofield, Alex Leff, Klaas Stephan, Jenny Crinion, Karl Friston, Cathy Price, Wellcome Trust Centre for Neuroimaging, 12 Queen Square, University College London, London, United Kingdom* 354 W-PM*

The Stages of Syntactic Processing measured with ERP: Effects of Word Frequency, *Laurie A. Stowe, Hanneke Loerts, John C.J. Hoeks, NeuroimagingCenter, University of Groningen, Groningen, Netherlands* 358 W-PM

Functional networks for semantic and phonological processing assessed with directed partial correlation analysis, *Wolfgang Mader[1,3], David Feess[1,3], Rüdiger Lange[3], Cornelius Weiller[2,3], Jens Timmer[1,2], Björn Schelter[1,2], Dorothee Saur[3], [1]FDM, Center for Data Analysis and Modeling, University of Freiburg, Freiburg, Germany, [2]BCCN, Bernstein Center for Computational Neuroscience, University of Freiburg, Freiburg, Germany, [3]Department of Neurology, University Hospital Freiburg, Freiburg, Germany* 362 W-PM

Meta-analysis of Neural Representation of First Language and Second Language, *Rajani Sebastian[1], Swathi Kiran[1,2], [1]Department of Communication Sciences and Disorders, University of Texas at Austin, Austin, USA, [2]Institute of Neuroscience, University of Texas at Austin, Austin, USA* 366 W-PM

LANGUAGE
Reading/Writing

MEMORY & LEARNING
Learning (explicit & implicit)

Dept. of Neurology, Innsbruck, Austria, [2]University of Trieste, Dept. of Psychology, Trieste, Italy, [3]Medical University Innsbruck, Dept. of Radiology I, Innsbruck, Austria

An Investigation of Motor Plasticity using Resting State fMRI and Structural Equation Modeling, *Liangsuo Ma[1], Binquan Wang[2], Donald Robin[2], Peter Fox[2], Jinhu Xiong[1], [1]Department of Radiology, University of Iowa, Iowa City, USA, [2]Research Imaging Center, University of Texas Health Science Center, San Antonio, USA* 426 W-PM

Visuospatial Memory (VSM) in Children with Attention Deficit Hyperactivity Disorder, Combined Type (ADHD-CT): A Functional Magnetic Resonance Imaging (fMRI) Study., *Melissa Casey[1], Maree Farrow[3], Ross Cunnington[2], Alasdair Vance[1], [1]Academic Child Psychiatry Unit, Royal Children's Hospital, Murdoch Childrens Research Institute, Melbourne, Australia, [2]Queensland Brain Institute, Brisbane, Australia, [3]Howard Florey Institute, Melbourne, Australia* 434 W-PM

Repetition enhancement in perceptual priming: influence of word processing on cortical sharpening, *Lebreton Karine[1], Villain Nicolas[1], Chételat Gaël[1], Landeau Brigitte[1], Seghier Mohammed L[2,3], Lazeyras François[3], Eustache Francis[1], Ibanez Vincent[4], [1]Inserm - EPHE - Université de Caen Basse/Normandie, Unité U923, GIP Cyceron, CHU Côte de Nacre, Caen, France, [2]Department of Radiology, University Hospitals of Geneva, Geneva, Switzerland, [3]Wellcome Trust Centre for Neuroimaging, Institute of Neurology, UCL, London, United Kingdom, [4]Psychiatric Neuroimaging Unit, Division of Neuropsychiatry, Department of Psychiatry, University Hospitals of Geneva, Geneva, Switzerland* 438 W-PM

Functional association of brain and somatic activities accompanying reverse learning, *Hideki Ohira[1], Michio Nomura[2], Masahiro Matsunaga[1,3], Tokiko Isowa[4], Kenta Kimura[1], Noriaki Kanayama[1], Hiroki Murakami[1], Takahiro Osumi[1], [1]Nagoya University, Nagoya, Japan, [2]Tokai Gakuin University, Kakamigahara, Japan, [3]Aichi Medical University, Nagakute, Japan, [4]Mie Prefectural College of Nursing, Tsu, Japan* 442 W-PM

11:30 – 12:30 *Corryong Hall (Level 2)*

MEMORY & LEARNING
Long-term Memory (episodic, semantic, autobiographical)

The neurocognitive benefits of donepezil on episodic memory in young, healthy individuals following 24 h of sleep deprivation, *Lisa Chuah[1], Chong Delise[1], Jiat-Chow Tan[1], William Rekshan[1], Annette Chen[1], Martin Pan[2], Robert Lai[2], Vincenzo Libri[2], Michael Chee[1], [1]Cognitive Neuroscience Lab, Duke-NUS Graduate Medical School, Singapore, Singapore, [2]Neurology Centre of Excellence of Drug Discovery, GlaxoSmithKline, Harlow, United Kingdom* 452 W-PM

Autobiographical Retrieval Evokes and Induces Medial Temporal Lobe Theta Oscillatory Activity, *Taufik A. Valiante[1,2], Mary Pat McAndrews[1,2], [1]University Health Network, Toronto, Canada, [2]University of Toronto, Toronto, Canada* 456 W-PM

Cortical Representations of Famous and Personally-Familiar Places, *Motoaki Sugiura[1,2], Yoko Mano[2,1], Akihiro Sasaki[2,1], Norihiro Sadato[1,2], [1]Departmen of Cerebral Research, National Institute for Physiological Sciences, Okazaki, Japan, [2]Division of Physiological Sciences, Graduate University for Advanced Investigations (SOKENDAI), Okazaki, Japan* 460 W-PM

Memory performance related to hippocampal activation in non-demented older adults, *Amy DeLuca[1], Peter LaViolette[2], Kelly O'Keefe[1], Jacqueline O'Brien[1], Reisa A. Sperling[1], [1]Brigham and Women's Hospital, Boston, USA, [2]Massachusetts General Hospital, Boston, USA* 464 W-PM

EEG theta-gamma coupling during explicit memory retention, *Hiroaki Mizuhara[1,2], Yoko Yamaguchi[2], [1]Graduate School of Informatics, Kyoto University, Kyoto, Japan, [2]Lab. For Dynamics of Emergent Intelligence, RIKEN Brain Science Institute, Wako, Japan* 468 W-PM

Memory consolidation leads to decreased posterior hippocampal activity during retrieval of face-location associations while anterior hippocampal activity is increased, *Atsuko Takashima[1], Ingrid Nieuwenhuis[1], Ole Jensen[1], Lucia Talamini[2], Mark Rijpkema[1], Guillen Fernandez[1,3], [1]FC Donders Centre, Radboud University Nijmegen, Nijmegen, Netherlands, [2]Dept. of Psychology, University of Amsterdam, Amsterdam, Netherlands, [3]Dept. of Neurology, Radboud University Nijmegen, Nijmegen, Netherlands* 472 W-PM

MODELING & ANALYSIS
Exploratory Methods, Artifact Removal

MODELING & ANALYSIS
Flattening, Segmentation

Shozo Hirota[2], Yutaka Hata[1], [1]Graduate School of Engineering, Univerisity of Hyogo, Himeji, Japan, [2]Hyogo College of Medicine, Nishinomiya, Japan

MODELING & ANALYSIS
Functional Connectivity and Structural Equation Modeling

BrainSPANs: An Open Toolbox for Analyzing Brain Spontaneous Activity and Networks, *Tianzi Jiang, Yong Liu, Kun Wang, Ming Song, Yuan Zhou, National Laboratory of Pattern Recognition, Institute of Automation, Chinese Academy of Sciences, Beijing, China* 568 W-PM

A neural code of motor programmes during hand gripping tasks, *CC Chen, James Kilner, Nick Ward, Karl Friston, Wellcome Trust Centre for Neuroimaging, london, United Kingdom* 572 W-PM

Online Resting Connectivity with Inline Image Reconstruction, *Christopher Glielmi[1], Keith Heberlein[2], Xiaoping Hu[1], [1]Georgia Institute of Technology / Emory University, Atlanta, USA, [2]Siemens Medical Solutions, Erlangen, Germany* 576 W-PM

Possible sources of functional connectivity and under-connectivity in adolescents with autism spectrum disorders., *Tyler Jones[1], Lauren Kenworthy[1,2], Laura Case[1], Shawn Milleville[1], Peter Bandettini[1], Alex Martin[1], Rasmus Birn[1], [1]Laboratory of Brain and Cognition, Bethesda, USA, [2]Center for Autism Spectrum Disorders Children's National Medical Center, Washington, USA* 580 W-PM

MODELING & ANALYSIS
Multivariate Modeling, PCA, & ICA

Improving results from polarized light imaging by means of independent component analysis, *Jürgen Dammers[1], Markus Axer[1], David Gräßel[1], Karl Zilles[1,2], Katrin Amunts[1,3], Uwe Pietrzyk[1,4], [1]Institute of Neuroscience and Biophysics, INB-3 Medicine, Research Center Jülich, Jülich, Germany, [2]C. and O. Vogt Institute for Brain Research, University of Düsseldorf, Düsseldorf, Germany, [3]Department of Psychiatry and Psychotherapy, Aachen University Hospital, Aachen, Germany, [4]Department of Physics, University of Wuppertal, Wuppertal, Germany* 584 W-PM

Cross-Modal Classification in Human Right Premotor Cortex, *Joset Etzel, Valeria Gazzola, Christian Keysers, Unversity Medical Center Groningen/University of Groningen, Groningen, Netherlands* 588 W-PM

Modulation of ongoing cerebral activity during finger-tapping: A new MEG method for capturing spatio-temporal dynamics, *Dante Mantini[1,2], Stefania Della Penna[1,2], Laura Marzetti[1,2], Francesco De Pasquale[1,2], Paolo Belardinelli[1,2], Luca Ciancetta[1,2], Christofer Lewis[1,2,3,4], Abraham Z. Snyder[3,4], Vittorio Pizzella[1,2], Gian Luca Romani[1,2], Maurizio Corbetta[1,2,3,4], [1]Institute for Advanced Biomedical Technologies, University Foundation "G. D'Annunzio", Chieti, Italy, [2]Department of Clinical Sciences and Bio-imaging, University "G. D'Annunzio", Chieti, Italy, [3]Department of Neurology, Washington University, St. Louis, USA, [4]Department of Radiology, Washington University, St. Louis, USA* 592 W-PM

Multifractal refraction of resting state fMRI time series by age and drug, *John Suckling[1], Alle-Meije Wink[2], Frederic Bernard[3], Anna Barnes[1], Ed Bullmore[1], [1]Brain Mapping Unit, Department of Psychiatry, University of Cambridge, Cambridge, United Kingdom, [2]2Imaging Sciences Division, Imperial College, Hammersmith Hospital, London, United Kingdom, [3]Département d'Etudes Cognitives, Ecole Normale Supérieure, Paris, France* 596 W-PM

Multivariate Deformation-Based Morphometry Statistics of Cortical Surfaces Reveals Changes in Folding Frequency Correlated with Alzheimer's Disease, *Maxime Boucher[1,2], Oliver Lyttelton[1], Sue Whitesides[2], Alan Evans[1], [1]Montreal Neurological Institute, Montreal, Canada, [2]School of Computer Science, McGill University, Montreal, Canada* 600 W-PM

Event-related Functional Near-infrared Spectroscopy (fNIRS) Analysis by Independent Component Analysis, *Yun Jiao[1,2], Zhenyu Zhou[1,2,4], Hongyu Yang[1], Zongcai Ruan[1], Hui Gong[3], Zuhong Lu[1,2], [1] Key Laboratory of Child Development and Learning Science (Southeast University), Ministry of Education, Nanjing, China, [2]School of Biological Science and Medical Engineering, Southeast University, Nanjing, China, [3]Key Laboratory of Biomedical Photonics of Ministry of Education, Huazhong University of Science and Technology, Wuhan, China, [4]Dept. of Psychiatry, University of Florida, Gainesville, USA* 604 W-PM

Voxel selection for fMRI data based on sparse representation, *Yuanqing Li[1], Praneeth Namburi[1,2], Cuntai Guan[1], Jianfeng Feng[3], [1]Institute for Infocomm Research, Singapore, [2]Nanyang Technological University,, Singapore, [3]Warwick University, United Kingdom* 608 W-PM

Source Based Morphometry: Using Independent Component Analysis to Identify Gray and White Matter Differences with Application to Schizophrenia, *Lai Xu[1,2], Godfrey Pearlson[1,2], Vince Calhoun[3,4], [1]The MIND Institute, Albuquerque, USA, [2]Dept. of ECE, University of New Mexico, Albuquerque, USA, [3]Olin Neuropsychiatry Research Center, Institute of Living, Hartford, USA, [4]Dept. of Psychiatry, Yale University School of Medicine, New Haven, USA* 612 W-PM

MOTOR BEHAVIOR
Basal Ganglia/Brainstem/Spinal Cord

Neural synchronization of distributed spinal activity as a sign of motor binding, *Tjeerd Boonstra[1,2], Andreas Daffertshofer[2], Peter Beek[2], [1]University of New South Wales, Randwick, Australia, [2]VU University, Amsterdam, Netherlands* 616 W-PM

MOTOR BEHAVIOR
Eye Movements/Visuomotor Processing

Pure observational vs. imitation practice of hand actions: Correlation between behavioural outcome and neural activations., *Satomi Higuchi[1,2], Neil Roberts[2], Simon B. Eickhoff[3], Stefan Vogt[1,2], [1]Department of Psychology, University of Lancaster, Lancaster, United Kingdom, [2]Magnetic Resonance and Image Analysis Research Centre, University of Liverpool, Liverpool, United Kingdom, [3]Institut for Medicine, Research Center, Jülich, Germany* 620 W-PM*

Secondary sensory area SII is crucially involved in the preparation of familiar movements compared to movements never made before., *Martijn Beudel[1,4], Sjouke Zijlstra[2,4], Theo Mulder[2], Inge Zijdewind[3,4], Bauke de Jong[1,4], [1]dept. Neurology, University Medical Center Groningen, Groningen, Netherlands, [2]dept. Human Movement Sciences, University of Groningen, Groningen, Netherlands, [3]dept. Medical Physiology, University of Groningen, Groningen, Netherlands, [4]BCN Neuroimaging Center, University of Groningen, Groningen, Netherlands* 624 W-PM

Influence of sensory and motor properties on the Parietal Cortex, *Karin Nadig[1], Lutz Jäncke[1], Roger Lüchinger[2], Kai Lutz[1], [1]Department of Neuropsychology, University of Zurich, Zurich, Switzerland, [2]Institute for Biomedical Engineering, Swiss Federal Institute of Technology (ETH) Zurich, Zurich, Switzerland* 628 W-PM

NEUROANATOMY
DTI Studies, Application

Effects of regular alcohol use during adolescence on white matter integrity, *Francesca Filbey, Arvind Caprihan, Kent Hutchison, The MIND Research Network, Albuquerque, USA* 632 W-PM

Asymmetry of the arcuate fasciculus of the human brain studied by in- and ex-vivo DTI, as well as post-mortem microdissection, *Kovacs Silvia[1], Sage Caroline[1], De Jong Lars[2], Van Loon Johannes[2], Sunaert Stefan[1], [1]University Hospitals of the Catholic University Leuven, department of Radiology, Herestraat 49, Leuven, Belgium, [2]University Hospitals of the Catholic University Leuven, Department of Neurosurgery, Herestraat 49, Leuven, Belgium* 636 W-PM

Probabilistic maps and reproducibility of the pyramidal tract by diffusion tensor imaging, *mingguo qiu[1], Qiyu Li[1], Guangjiu Liu[1], Bing Xie[2], Jian Wang[2], Shaoxiang Zhang[1], [1]Department of Anatomy, Third Military Medical University, Chongqing, China, [2]Department of Anatomy, Third Military Medical University, Chongqing, China, [3]Department of Anatomy, Third Military Medical University, Chongqing, China, [4]Department of Radiology, Southwest Hospital, Third Military Medical University, Chongqing, China, [5]Department of Radiology, Southwest Hospital, Third Military Medical University, Chongqing, China, [6]Department of Anatomy, Third Military Medical University, Chongqing, China* 640 W-PM

DTI Spatial Unbiased Infratentorial Template based on MPRAGE SUIT, *Goran Vucurevic[1], Paulo Dellani[2], Andrea Kronfeld[1], Andreas Konrad[3], Peter Stoeter[1], [1]Institute of Neuroradiology, Mainz, Germany, [2]University Clinic, Department of Neurology, Mainz, Germany, [3]University Clinic, Department of Psychiatry, Mainz, Germany* 644 W-PM

Evaluation of DTI fiber tracking strategy for clinical use, *Perrine Clarisse[1,2,3], Jean-Albert Lotterie[1,2,3], Matthieu Delion[1], Kader Boulanouar[1,2,3], Florent Aubry[1,2,3], Pierre Celsis[1,2,3], Isabelle Berry[1,2,3], [1]INSERM U825, Toulouse, France, [2]Université Toulouse III Paul Sabatier, Toulouse, France, [3]CHU de Toulouse, Toulouse, France* 648 W-PM

Kernohan's Notch Phenomenon demonstrated by Diffusion Tensor Imaging and Transcranial Magnetic Stimulation, *Ji heon Hong[1], Sung Ho Jang[2], Sang Ho Ahn[2], Dong Seok Yang[2], [1]Department of Physical Therapy, Graduate School of Rehabilitation Science Daegu University, Daegu, South Korea, [2]Department of Physical Medicine and Rehabilitation, School of Medicine, Yeungnam University, Deagu, South Korea* 652 W-PM

In vivo **tract tracing of cortico-cortical connections in humans: a combined study of CCEP and Probabilistic Diffusion Tractography**, *Riki Matsumoto[1], Nobukatsu Sawamoto[2], Shin-ichi Urayama[2], Nobuhiro Mikuni[3], Takashi Hanakawa[4], Timothy Behrens[5], Akio Ikeda[1], Ryosuke Takahashi[1], Hidenao Fukuyama[2], [1]Department of Neurology, Kyoto University Graduate School of Medicine, Kyoto, Japan, [2]Human Brain Research Center, Kyoto University Graduate School of Medicine, Kyoto, Japan, [3]Department of Neurosurgery, Kyoto University Graduate School of Medicine, Kyoto, Japan, [4]Dept. Cortical Functional Disorder, National Institute of Neuroscience, National Center of Neurology, Kodaira, Japan, [5]FMRIB, Oxford University, Oxford, United Kingdom* 656 W-PM

Connectivity characteristics of eloquent cortical language sites, *Stephen Dreyer[1], Timothy Ellmore[1], Thomas O'Neill[1], Giridhar Kalamangalam[2], Nitin Tandon[1], [1]Department of Neurosurgery, The University of Texas Medical School, Houston, USA, [2]Department of Neurology, The University of Texas Medical School, Houston, USA* 660 W-PM

SENSORY SYSTEMS
Auditory/Vestibular

The ability of absolute pitch and the cortical structure., *Nobuko Hara[1], Kimihiro Nakamura[1], Chihiro Kuroki[2], Yoshihiro Takayama[1], Seiji Ogawa[2], [1]Department of Speech Physiology, The University of Tokyo, Tokyo, Japan, [2]Ogawa Laboratories for Brain Function Research, Tokyo, Japan* 664 W-PM

Regional specialization for processing auditory complexity: ALE meta-analysis and fMRI validation, *Fabienne Samson[1], Pascal Belin[2], Alain Toussaint[1], Laurent Mottron[1], Thomas A. Zeffiro[3], [1]Hôpital Rivière-des-Prairies, University of Montréal, Montréal, Canada, [2]Centre for Cognitive Neuroimaging & Department of Psychology, University of Glasgow, Glasgow, United Kingdom, [3]Neural Systems Group, Massachussetts General Hospital, Boston, USA* 668 W-PM

Involvement of Limbic Brain Centers in Sound Perception in Humans, *Dave Langers[1,2], Jennifer Melcher[1,3], [1]Eaton-Peabody Laboratory, Massachusetts Eye and Ear Infirmary, Boston, USA, [2]University Medical Center Groningen, Groningen, Netherlands, [3]Tinnitus Research Initiative, Regensburg, Germany* 672 W-PM

Absolute pitch perception depends on morphology of the right Heschl's gyrus, *Peter Schneider[1,2], Martina Wengenroth[2], Maria Blatow[2], Konstantin Bodamer[3], Christoph Stippich[1], Doris Geller[3], Andre Rupp[2], [1]Dept. of Neurology, University Hospital Heidelberg, Heidelberg, Germany, [2]2Div. of Neuroradiology, University Hospital Heidelberg, Heidelberg, Germany, [3]3University of Music and Performing Arts, Mannheim, Germany* 676 W-PM

SENSORY SYSTEMS
Tactile/Somatosensory

Neurophysiological basis of localization and delocalization of fMRI activation patterns, *Natasja J.G. Maandag[1,2], Daniel Coman[1], Basavaraju G. Sanganahalli[1], Peter Herman[1], Arien J. Smith[1,3], Hal Blumenfeld[4], Robert G. Shulman[1], Fahmeed Hyder[1,5], [1]Diagnostic Radiology, Yale University, New Haven, USA, [2]Anaesthesiology, University Medical Centre, Nijmegen, Netherlands, [3]Neurosurgery, Mount Sinai Hospital, New York, USA, [4]Neurology, Yale University, New Haven, USA, [5]Biomedical Engineering, Yale University, New Haven, USA* 684 W-PM

Neural correlates of phantom limb perception in lower limb amputee patients during a sensation task., *Erick H Pasaye[1,5], Sarael Alcauter[4,5], Maria del Refugio Pacheco[3], Jorge Paz[1], Roberto Mercadillo[2], Erika Aguilar[1], Maria De Iturbe[1], Perla M. Salgado[1], Fernando A. Barrios[2], [1]Instituto Nacional de Neurología y Neurocirugía MVS, Mexico DF, Mexico, [2]Instituto de Neurobiología, Universidad Nacional Autónoma de México, Queretaro, Mexico, [3]Instituto Nacional de la Rehabilitación, Mexico DF, Mexico, [4] Instituto Nacional de Psiquiatría Ramón de la Fuente, Mexico DF, Mexico, [5]Posgrado en Ciecias Biomedicas UNAM, Mexico DF, Mexico* 688 W-PM

Dynamic texture perception for dominant and non-dominant hands within individuals: an fMRI study in adult healthy volunteers., *Leeanne Carey[1,2], David Abbott[3], Matt Harvey[1,3], Aina Puce[1,4], Rudiger Seitz[1,5], [1]National Stroke Research Institute, Melbourne, Australia, [2]LaTrobe University, Melbourne, Australia, [3]Brain Research Institute, Melbourne, Australia, [4]Center for Advanced Imaging, Morgantown, USA, [5]University Hospital, Duesseldorf, Germany* 692 W-PM

Variability of somatosensory cortex localization over different fMRI centers – a multicenter patient study, *Roland Beisteiner[1], Nicolaus Klinger[1], Markus Aichhorn[2], Thomas Foki[1], Alexander Geißler[1], Martin Kronbichler[2], Janpeter Nickel[4], Jakob Rath[1], Christian Siedentopf[3], Wolfgang Staffen[2],* 696 W-PM

Thomas Steinkellner[1], Michael Verius[3], Stephan Felber[5], Stefan Golaszewski[2], Florian Koppelstaetter[3], Rüdiger Seitz[4], [1]Study Group Clinical fMRI, MR Center of Excellence, Department of Neurology, Medical University of Vienna, Vienna, Austria, [2]Department of Neurology, Christian Doppler Clinic and Center for Neurocognitive Research, Paracelsus Private Medical University, Salzburg, Austria, [3]Department of Radiology, Subdivision Neuroradiology, Medical University of Innsbruck, Innsbruck, Austria, [4]Department of Neurology, University Hospital Düsseldorf, Düsseldorf, Germany, [5]Institute for Diagnostic Radiology, Stiftungsklinikum Mittelrhein, Koblenz, Koblenz, Germany

EEG source imaging and single-trial statistical analysis of distributed inverse solutions reveals late activation of insular cortex during light mechanical stimulation of the human hairy skin., *Johan Wessberg, Goteborg University, Dept. of Physiology, Goteborg, Sweden* 700 W-PM

SENSORY SYSTEMS
Vision

Functional MRI and DTI tractography in visual pathology, *Christine Boucard[1], Masahiro Ida[2], Masaki Yoshida[1], Takehiko Nagao[3], Takaaki Hara[1], Thien Huong Nguyen[4], Jean Louis Stievenart[4], Chistophe Habas[4], Takuya Shiba[1], Kenji Kitahara[1], Marie Therese Iba-Zizen[4], Emmanuel Alain Cabanis[4], Tohru Noda[5], Hiroshi Tsuneoka[1], [1]Department of Ophthalmology, The Jikei University School of Medicine, Tokyo, Japan, [2]Department of Radiology, Tokyo Metropolitan Health and Medical Treatment Corporation Ebara Hospital, Tokyo, Japan, [3]Department of Neurology, Tokyo Metropolitan Health and Medical Treatment Corporation Ebara Hospital, Tokyo, Japan, [4]Service de Neuro-Imagerie, Centre Hospitalier National d'Ophtalmologie des XV-XX, Paris, France, [5]Department of Ophthalmology, National Tokyo Medical Center, Tokyo, Japan* 704 W-PM

Topography of responses to colour and luminance in human subcortical visual pathways as revealed by high-resolution fMRI at 7T, *Marcus Grueschow[1,2,3], Jörg Stadler[4], Claus Tempelmann[3], Hans-Jochen Heinze[3], Jochem Rieger[3], Oliver Speck[5], John-Dylan Haynes[2], [1]Max Planck Institute for Cognitive and Brain Sciences, Leipzig, Germany, [2]Bernstein Center for Computational Neuroscience, Berlin, Germany, [3]3 Dept. of Neurology II, Otto-von-Guericke University, Magdeburg, Germany, [4]Non-Invasive Imaging Lab, Leibniz-Institut für Neurobiologie, Magdeburg, Germany, [5]Dept. of Biomedical Magnetic Resonance, Institute for Experimental Physics, Magdeburg, Germany* 708 W-PM

Fixation Based Event Related (FIBER) fMRI; Using individual fixations as events to reveal cortical processing, *Jan Bernard C. Marsman[1,2], Remco Renken[2], Frans W. Cornelissen[1,2], [1]Laboratory of Experimental Ophthalmology, University Medical Center Groningen/ University of Groningen, Groningen, Netherlands, [2]BCN NeuroImaging Center, School of Behavioural and Cognitive Neurosciences, University Medical Center Groningen/ University of Groningen, Groningen, Netherlands* 712 W-PM

The coding of colour, motion and their conjunction: revisited using pattern classifier analysis., *Kiley Seymour[1], Colin Clifford[1], Nikos Logothetis[2], Andreas Bartels[2], [1]University of Sydney, Sydney, Australia, [2]MPI for Biological Cybernetics, Tuebingen, Germany* 716 W-PM

Electrical Stimulation, Recording and BOLD fMRI of the Human Anterior Color Center, *Michael Beauchamp[1], Dona Murphey[2], Daniel Yoshor[2], [1]Univ of Texas Med School at Houston, Houston, USA, [2]Baylor College of Medicine, Houston, USA* 720 W-PM*

Positive and negative changes in motion coherence from adapted state always elicit positive BOLD responses in hV4., *Mauro Costagli[1,2], Kenichi Ueno[1], Pei Sun[1], Xiaohong Wan[1], Emiliano Ricciardi[2], Pietro Pietrini[2], Keiji Tanaka[1], Kang Cheng[1], [1]RIKEN Brain Science Institute, Wako-shi, Japan, [2]University of Pisa, Pisa, Italy* 724 W-PM

Inhibition of single word identification with TMS over dorsal area V5/MT+, *Robin Laycock[1], Sheila Crewther[1], Paul Fitzgerald[2], David Crewther[3], [1]La Trobe University, Melbourne, Australia, [2]Monash University and The Alfred Hospital, Melbourne, Australia, [3]Swinburne University, Melbourne, Australia* 728 W-PM*

Resonance properties of human occipital, parietal and frontal cortical areas studied by Transcranial Magnetic Stimulation (TMS) combined with high density EEG (hd-EEG)., *Mario Rosanova[1], Adenauer Casali[1], Valentina Bellina[1], Federico Resta[2], Maurizio Mariotti[1], Marcello Massimini[1], [1]Department of Clinical Science, University of Milan, Ospedale Luigi Sacco, Milan, Italy, [2]Division of Radiology, Ospedale Luigi Sacco, Milan, Italy* 732 W-PM

Invariance of P250m to visual stimulation categories, *Omi Terasaki[1,2], [1]Faculty of Medicine, Tokyo Medical and Dental University, Tokyo, Japan, [2]Kurita Hospital, Kanagawa, Japan* 736 W-PM

Schedule of Poster Presentations and List of Posters **Thursday, June 19, 2008**

11:30 – 12:30 *You Yangs Hall (Level 3)*

COGNITION & ATTENTION
Executive Function

Neural correlates of response inhibition deficits in schizophrenia – an fMRI and ERP study., *Matthew Hughes[1,2], William Fulham[1,2], Janette Smith[1], Johanna Badcock[2,3,4], Patricia Michie[1,2], [1]University of Newcastle, Callaghan, Australia, [2]Schizophrenia Research Institute, Sydney, Australia, [3]Centre for Clinical Research in Neuropsychiatry, Perth, Australia, [4]University of Western Australia, Perth, Australia* — 3 TH-AM

Differential Prefrontal and Parietal Function in Spatial Working Memory, *Tim Silk[1,2,3], Cattram Nguyen[3], Maree Farrow[3], Alasdair Vance[2], Ross Cunnington[1,3], [1]School of Psychology and Queensland Brain Institute, University of Queensland, Brisbane, Australia, Australia, [2]Academic Child Psychiatry Unit, Department of Paediatrics, University of Melbourne, Royal Children's Hospital, Murdoch Children's Research Institute, Melbourne, Australia, Australia, [3]Howard Florey Institute, University of Melbourne, Melbourne, Australia, Australia* — 7 TH-AM

cTBS impairs dorsolateral prefrontal cortex function during sorting task and affects striatal dopamine: a TMS-PET study, *Ji Hyun Ko[1], Oury Monchi[2], Alain Ptito[1], Antonio P. Strafella[3,4], [1]Montreal Neurological Institute, McGill University, Montréal, Canada., Montreal, [2]Functional Neuroimaging Unit, Geriatric's Institute, University of Montréal, Canada., Montreal, [3]Toronto Western Research Institute and Hospital, University of Toronto, Canada., Toronto, [4]PET Imaging Centre, Centre for Addiction and Mental Health, University of Toronto, Canada, Toronto,* — 11 TH-AM

Activity in anterior cingulate and parietal cortex predicts activity in prefrontal cortex, *Justin Vincent[1,2], Abraham Snyder[2], Lawrence Cabusora[2], Michael Fox[2], Randy Buckner[1,3], Marcus Raichle[2], [1]Harvard University, Cambridge, USA, [2]Washington University, St. Louis, USA, [3]Howard Hughes Medical Institute, Cambridge, USA* — 15 TH-AM

Extracting Consistent Activated Patterns of Eyes Open and Eyes Closed Resting State fMRI Data by Independent Component Analysis, *Mohammad Ali Oghabian[1], Ameneh Boroumand[1], Hajir Sikaroodi[2], Ali Reza Ahmadian[1], [1]Research Center for Sciences and Technology in Medicine, Tehran University/Medical Sciences, Tehran, Iran, [2]Neurology Group, Shariaty Hospital, Tehran University /Medical Sciences, Tehran, Iran* — 19 TH-AM

COGNITION & ATTENTION
Cognitive Development

Neural encoding of perceptual decision making without awareness: Challenges for signal detection models of perception, *Stefan Bode[1], John-Dylan Haynes[1,2], [1]Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, [2]Bernstein Center for Computational Neuroscience Berlin, Charité – Universitätsmedizin, Berlin, Germany* — 23 TH-AM*

COGNITION & ATTENTION
Executive Function

Post-error performance optimization by modulation of goal-relevant sensory processing, *Joseph A. King[2], D. Yves von Cramon[1,2], Markus Ullsperger[1,2], [1]MPI for neurological research, Cologne, Germany, [2]MPI for Human Cognitive and Brain Sciences, Leipzig, Germany* — 27 TH-AM

Effective Connectivity during Task Set Reconfiguration, *Rei Akaishi, Yosuke Morishima, Vivian Rajeswaren, Katsuyuki Sakai, Grad. Sch. of Medicine, Univ. of Tokyo, Tokyo, Japan* — 31 TH-AM*

Segregation of Posterior Inferior Frontal Gyrus and Inferior Frontal Junction Revealed by Modified Go/No-Go Task, *Junichi Chikazoe, Koji Jimura, Tomoki Asari, Ken-ichiro Yamashita, Hiroki Morimoto, Satoshi Hirose, Yasushi Miyashita, Seiki Konishi, The Univ of Tokyo Sch of Med, Tokyo, Japan* — 35 TH-AM

COGNITION & ATTENTION
Perception, Imagery, Awareness

[3]Interdisciplinary MRI/MRS Lab, Department of Electrical Engineering, National Taiwan University, Taipei, Taiwan, [4]Department of Medical Imaging, National Taiwan University Hospital, Taipei, Taiwan

DISORDERS OF THE NERVOUS SYSTEM
Epilepsy

EMOTION & MOTIVATION
Emotional Perception

Hospital, Sydney, Australia, [5]Psychological Medicine, Children's Hospital at Westmead, Westmead, Sydney, Australia

IMAGING TECHNIQUES & CONTRAST MECHANISM
Anatomical MRI

IMAGING TECHNIQUES & CONTRAST MECHANISM
Diffusion MRI

IMAGING TECHNIQUES & CONTRAST MECHANISM
PET/SPECT

LANGUAGE
Comprehension

LANGUAGE
Reading/Writing

MEMORY & LEARNING
Learning (explicit & implicit)

Guidance and Learning of Circular Eye Movements, *Raimund Kleiser[1], Thomas Matyas[2], Hans-Jörg Wittsack[3], Rüdiger Seitz[1,4], [1]Department of Neurology, University Hospital, Duesseldorf, Germany, [2]School of Psychology, LaTrobe University, Bundoora, Victoria, Australia, [3]Department of Diagnostic Radiology, University Hospital, Duesseldorf, Germany, [4]Brain Imaging Centre West, Juehlich, Germany* 439 TH-AM

Hippocampal Subregional Involvement in Encoding and Retrieval of Spatial Information, *Nanthia Suthana[1,2], Arne Ekstrom[1,2], Saba Moshirvaziri[1,2], Barbara Knowlton[3], Susan Bookheimer[1,2,3], [1]Center for Cognitive Neurosciences, Semel Institute, UCLA, Los Angeles, USA, [2]Dept. of Psychiatry and Biobehavioral Sciences, UCLA, Los Angeles, USA, [3]Department of Psychology, UCLA, Los Angeles, USA* 443 TH-AM*

11:30 – 12:30 *Corryong Hall (Level 2)*

MEMORY & LEARNING
Long-term Memory (episodic, semantic, autobiographical)

KIBRA alleles modulate medial temporal lobe activity during episodic memory, *M. R. Emery, V. S. Mattay, F. Sambataro, V. P. Murty, J. Reed, H. Y. Tan, B. Kolachana, J. H. Callicott, D. R. Weinberger, Clinical Brain Disorders Branch, National Institute of Mental Health, NIH, Bethesda, USA* 453 TH-AM

Semantic Knowledge Alters Functional Connectivity Recorded with MEG During Transverse Patterning Performance, *Sandra Moses, Natasa Kovacevic, Christina Villate, Timothy Bardouille, Anthony Randal McIntosh, Jennifer Ryan, Rotman Research Institute, Baycrest Centre, Toronto, Canada* 457 TH-AM

Functional connectivity of the hippocampi in healthy subjects, *Kathrin Wagner[1], Lars Frings[1, 2], Anne Buller[1], Joachim Spreer[3], Andreas Schulze-Bonhage[1], [1]Epilepsy Center, University Hospital Freiburg, Freiburg, Germany, [2]Gerontopsychiatry and Neuropsychology Section, Department of Psychiatry and Psychotherapy, University Hospital Freiburg, Freiburg, Germany, [3]Department of Neuroradiology, University Hospital Freiburg, Freiburg, Germany* 461 TH-AM

Stressed memories: effects of acute stress on medial temporal lobe activation during memory formation, *Erno Hermans[1,2], Marloes Henckens[1], Zhenwei Pu[3,1], Marian Joëls[3], Guillen Fernández[1,2], [1]F.C. Donders Centre at the Radboud University Nijmegen, Nijmegen, Netherlands, [2]Department of Neurology at the Radboud University Nijmegen Medical Centre, Nijmegen, Netherlands, [3]SILS-CNS, University of Amsterdam, Amsterdam, Netherlands* 465 TH-AM*

Activity in the medial temporal lobes predicts realization of intentions for future actions, *Jiro Okuda[1], Nobuhito Abe[2], Maki Suzuki[3,4], Toshikatsu Fujii[2], [1]Tamagawa University Brain Science Institute, Machida, Tokyo, Japan, [2]Department of Behavioral Neurology and Cognitive Neuroscience, Tohoku University Graduate School of Medicine, Sendai, Japan, [3]Division of Cyclotron Nuclear Medicine, Cyclotron and Radioisotope Center, Tohoku University, Sendai, Japan, [4]The Japan Society for the Promotion of Science, Tokyo, Japan* 469 TH-AM

Retrieval of associations between color and achromatic features activates two distinct areas in the ventral occipitotemporal cortex, *Yan Wang[1,2], JinHui Zhao[2], FuCang Jia[2], Sheng He[3], Lin Ma[4], DeJun Li[4], XuChu Weng[2], [1]Department of Psychology, Laboratory for Cognition and Learning, Capital Normal University, BeiJing, China, [2]Institute of Psychology, the Chinese Academy of Sciences, BeiJing, China, [3]Department of Psychology, University of Minnesota, Minneapolis, USA, [4]Department of Radiology, PLA General Hospital, BeiJing, China* 473 TH-AM

MODELING & ANALYSIS
Exploratory Methods, Artifact Removal

Measurement of gamma band effects in MEG and concurrent EEG/fMRI at 7T, *Matthew Brookes, Karen Mullinger, Claire Stevenson, Gerda Geirsdottir, Peter Morris, Richard Bowtell, University of Nottingham, Nottingham, United Kingdom* 477 TH-AM

A Framework for Analyzing and Visualizing Multi-Modality Cross-Correlation, *Satoru Hayasaka[1,2], Paul Laurienti[2], Joseph Maldjian[2], [1]Biostatistical Sciences, Wake Forest University, Winston-Salem, USA, [2]Radiology, Wake Forest University, Winston-Salem, USA* 481 TH-AM

Average Gradient Artefact Subtraction: the effect on neuronal signals, *Karen J. Mullinger, Matthew J. Brookes, Gerda B. Geirsdottir, Richard W. Bowtell, University of Nottingham, Nottingham, United Kingdom* 485 TH-AM

MODELING & ANALYSIS
Flattening, Segmentation

MODELING & ANALYSIS
Functional Connectivity and Structural Equation Modeling

MODELING & ANALYSIS
Multivariate Modeling, PCA, & ICA

MOTOR BEHAVIOR
Basal Ganglia/Brainstem/Spinal Cord

MOTOR BEHAVIOR
Eye Movements/Visuomotor Processing

NEUROANATOMY
DTI Studies, Application

SENSORY SYSTEMS
Auditory/Vestibular

Sensory Organs, Medical Research Center, Seoul National University, Seoul, Korea, [2]Department of Otolaryngology-Head and Neck Surgery, Hallym University Sacred Heart Hospital, Seoul, Korea, [3]Department of Neurosurgery, Seoul National University College of Medicine, MEG Center, Seoul, Korea, [4]Department of Otorhinolaryngology, Seoul Municipal Boramae Hospital, Seoul, Korea, [5]Department of Biomedical Engineering, College of Health Science, Yonsei University, Seoul, Korea

SENSORY SYSTEMS
Tactile/Somatosensory

SENSORY SYSTEMS
Vision

Superposition of evoked and spontaneous activity in the visual cortex: a 7T study, *Marta Bianciardi, Masaki Fukunaga, Peter van Gelderen, Silvina G. Horovitz, Jacco A. de Zwart, Jeff H. Duyn, Advanced MRI Section, LFMI, NINDS, NIH, Bethesda, USA* 721 TH-AM

Multimodal Imaging combining fMRI and PET for the definition of early visual areas in humans, *Florian Gerstl[1,2], Christian Windischberger[1,2], Rupert Lanzenberger[3], Ewald Moser[1,2], Kurt Kletter[4], Siegfried Kasper[3], [1]MRCE, Medical University of Vienna, Vienna, Austria, [2]Center for Biomedical Engineering and Physics, Medical University of Vienna, Vienna, Austria, [3]Department of Psychiatry and Psychotherapy, Clinical Division of Biological Psychiatry, Medical University of Vienna, Vienna, Austria, [4]Department of Nuclear Medicine, PET Centre, Medical University of Vienna, Austria, Vienna, Austria* 725 TH-AM*

Visual and auditory development: the use of entropy., *Sarah Lippe[1,2], Maryse Lassonde[1,2], Natasa Kovacev[3], Randy McIntosh[3], [1]Hôpital Ste-Justine, Monreal, Canada, [2]University of Montreal, Montreal, Canada, [3]Rotman-Baycrest Center, Toronto, Canada* 729 TH-AM

High resolution fMRI protocols are feasible for standard fMRI procedures demonstrated using retinotopy., *Mark Schira[1], Branka Spehar[1], Michael Breakspear[1], Christopher Tyler[2], [1]University of New South Wales, Sydney, Australia, [2]Smith Kettlewell Eye Research Institute, San Francisco, USA* 733 TH-AM

Spontaneous activity associated with primary visual cortex in early blind, *Kun Wang[1], Chunshui Yu[2], Lijuan Xu[1], Wen Qin[2], Kuncheng Li[2], Tianzi Jiang[1], [1]National Laboratory of Pattern Recognition, Institute of Automation, Chinese Academy of Sciences, Beijing, China, [2]Department of Radiology, Xuanwu Hospital of Capital Medical University, Beijing, China* 737 TH-AM

13:45 – 14:45 *You Yangs Hall (Level 3)*

COGNITION & ATTENTION
Executive Function

The activaion of prefrontal area, basal ganglia, and paralimbic system involved in maintaining of goal-directed action without rewards, *Masahiko Nishimura[1,2], Jobu Watanabe[3], Yoshihiko Yoshii[1], [1]Department of Clinical Neuroscience Faculty of Medicine, University of the Ryukyus, Okinawa, Japan, [2]Department of Occupational Therapy, Okinawa College of Rehabilitation and Welfare, Okinawa, Japan, [3]Waseda Institute for Advanced Study Waseda University, Tokyo, Japan* 4 TH-PM

Brain Substrates Associated with Strategic Mode in Executive Function: Comparison between the Tower of London Task and 2-Back Task Using fMRI, *Ji-Eun Park[1], Jin-Sup Eom[1], Ik-Hyun Kim[2], Mying-Ae Chung[2], Hajime Nagai[3], Jin-Hun Sohn[1], [1]Dept. of Psychology, Institute for Brain Research, Chungnam Nat'l University, Daejeon, South Korea, [2]Medical Information Convergence Service Research Team, ETRI, Daejeon, South Korea, [3]BRAND'S Health Science Center, Cerebos Pacific Limited, China square central, Singapore* 8 TH-PM

Freedom and Predictability of Choice Visualised by fMRI, *Markus Thimm[1,2], Ralph Weidner[2], Gereon Fink[2,3], Walter Sturm[1], [1]Department of Neurology, Section Clinical Neuropsychology, University Hospital RWTH Aachen, Aachen, Germany, [2]Institute of Neurosciences and Biophysics - Medicine, Research Centre Jülich, Jülich, Germany, [3]Department of Neurology, University Hospital Cologne, Cologne, Germany* 12 TH-PM

Representation of situational context during preparation in task switching as mediated by task specific and behaviorally significant functional connectivity., *A. Lenartowicz, L. E. Nystrom, J. D. Cohen, Neuroscience of Cognitive Control Laboratory, Princeton University, Princeton, USA* 16 TH-PM

The neural substrate of task-switching behavior in major depressive disorder and obsessive-compulsive disorder, *Peter Remijnse[1,4], Marjan Nielen[1], Harry Uylings[2,3,4], Dick Veltman[1,4], [1]Department of Psychiatry, VU Medical Center, Amsterdam, Netherlands, [2]Department of Anatomy and Neurosciences, VU Medical Center, Amsterdam, Netherlands, [3]School for Mental Health and Neuroscience, division Neuropsychology, and Brain & Behaviour Institute, University of Maastricht, Maastricht, Netherlands, [4]Graduate School Neurosciences, Amsterdam, Netherlands* 20 TH-PM

Exploring a common executive attention network in the brain across stimulus modalities using visual and auditory sorting tasks, *Helene Hjelmervik[1], Kenneth Hugdahl[1,2], Karsten Specht[1,3], [1]Department of Biological and Medical Psychology, University of Bergen, Bergen, Norway, [2]of Psychiatry and Bergen Mental Health Center, Haukeland University Hospital, Bergen, Norway, [3]Clinical Engineering Department, Haukeland University Hospital, Bergen, Norway* 24 TH-PM

COGNITION & ATTENTION
Perception, Imagery, Awareness

Investigating the processing of chimaeric speech with MEG and DTI, *Rebecca Millman[1], Philip Quinlan[2], [1]York Neuroimaging Centre, University of York, York, United Kingdom, [2]Department of Psychology, University of York,, United Kingdom* 80 TH-PM

Imagery of a moving object affects activation patterns and directed influences of hMT/V5+, posterior parietal and early visual regions, *Amanda Kaas[1,2], Sarah Weigelt[1], Alard Roebroeck[2], Axel Kohler[1], Wolf Singer[1], Lars Muckli[3], [1]Department of Neurophysiology, Max Planck Institute for Brain Research, Frankfurt am Main, Germany, [2]Department of Cognitive Neuroscience, Faculty of Psychology, Maastricht University, Maastricht, Netherlands, [3]Department of Psychology, UNiversity of Glasgow, Glasgow, United Kingdom* 84 TH-PM

Is mental rotation a right parietal function? Investigation using ERPs and fMRI, *Branka Milivojevic, Michael Corballis, Jeff Hamm, University of Auckland, Auckland, New Zealand* 88 TH-PM

DISORDERS OF THE NERVOUS SYSTEM
Addiction

Why we drink alcohol: Striatal activation in response to intravenous alcohol infusion in social drinkers, *Jodi Gilman, Vijay Ramchandani, Megan Davis, James Bjork, Daniel Hommer, National Institutes of Alcohol Abuse and Alcoholism, Section of Brain Electrophysiology and Imaging, Bethesda, USA* 92 TH-PM

Differential effects of cognitive set on brain response to emotionally salient images in Alcohol-dependent Patients and Healthy Controls, *Daniel Hommer, Megan Davis, Jodi Gilman, NIH/NIAAA, Bethesda, USA* 96 TH-PM

DISORDERS OF THE NERVOUS SYSTEM
Autism

Neural substrates underlying Theory-of-Mind processing in children with autism: a functional MRI study, *Rajesh Kana[1,2], Timothy Keller[2], Diane Williams[3], Vladimir Cherkassky[2], Nancy Minshew[4], Marcel Just[2], [1]University of Alabama, Birmingham, USA, [2]Carnegie Mellon University, Pittsburgh, USA, [3]Duquesne University, Pittsburgh, USA, [4]University of Pittsburgh, Pittsburgh, USA* 100 TH-PM

Alterations in Regional Homogeneity of Baseline Brain Activity in Autism Spectrum Disorder., *Paakki Jyri-Johan[1], Rahko Jukka[2], Ebeling Hanna[2], Jussila Katja[2], Jansson-Verkasalo Eira[3], Kuusikko Sanna[2], Mattila Marja-Leena[2], Moilanen Irma[2], Nikkinen Juha[1], Remes Jukka[1], Starck Tuomo[1], Tervonen Osmo[1], Zang Yu-Feng[4], Kiviniemi Vesa[1], [1]Department of Diagnostic Radiology, Oulu University Hospital, Oulu, Finland, [2]Department of Child Psychiatry, Oulu University Hospital, Oulu, Finland, [3]Faculty of Humanities, Speech and Language Pathology, University of Oulu, Oulu, Finland, [4]State Key Laboratory of Cognitive Neuroscience and Learning, Beijing Normal University, Beijing, China* 104 TH-PM

DISORDERS OF THE NERVOUS SYSTEM
Brain & Spinal Cord Trauma

Sensory processing in patients with ALS: An fMRI study, *Dorothee Lule[1,2], Volker Diekmann[1], Jan Kassubek[1], Niels Birbaumer[2], Albert Ludolph[1], [1]Department of Neurology, University of Ulm, Ulm, Germany, [2]Medical Psychology and Behavioural Neurobiology, University of Tuebingen, Tuebingen, Germany* 108 TH-PM

fMRI reveals cognitive and emotional processing in a long-term comatose patient, *Simon B. Eickhoff[1], Manuel Dafotakis[1], Christian Grefkes[1,2], Tony Stöcker[1,4], Jon N. Shah[1,4], Karl Zilles[1,3,4], Mario Siebler[5], [1]Institute of Neuroscience and Biophysics, INB-3 Medicine, Research Centre Jülich, Jülich, Germany, [2]Max-Planck-Institut for Neurological Research, Cologne, Germany, [3]C&O. Vogt Institute of Brain Research, University of Düsseldorf, Düsseldorf, Germany, [4]Brain Imaging Center West (BICW), Jülich, Germany, [5]Department of Neurology, Heinrich-Heine-University Düsseldorf, Düsseldorf, Germany* 112 TH-PM

Assessing diffuse axonal injury in the corpus callosum using multimodal imaging, *And Turken[1], Timothy Herron[1], Xiaojiang Kang[1,2], David Woods[1,2], [1]Veterans Affairs Northern California Health Care System, Martinez, USA, [2]University of California, Davis, Davis, USA* 116 TH-PM

DISORDERS OF THE NERVOUS SYSTEM
Developmental Disorders

DISORDERS OF THE NERVOUS SYSTEM
Epilepsy

DISORDERS OF THE NERVOUS SYSTEM
Stroke & Recovery of Function

EMOTION & MOTIVATION
Decision Making

COGNITION & ATTENTION
Attention (visual)

EMOTION & MOTIVATION
Emotional Learning

EMOTION & MOTIVATION
Emotional Perception

Emotion regulation in patients with major depression, *Susanne Erk[1], Alexandra Mikschl[2], Sabine Stier[2], Angela Ciaramidaro[3], Volker Gapp[2], Bernhard Weber[2], Henrik Walter[1], [1]Dept. of Psychiatry, Div. of Medical Psychology, University of Bonn, Bonn, Germany, [2]Dept. of Psychiatry, Joh.-Wolfgang-Goethe University, Frankfurt/Main, Germany, [3]Dept. of Cognitive Science, University of Turin, Turin, Italy* 244 TH-PM

Prefrontal regulation of the emotional brain: Findings in depressed and healthy subjects from neuroimaging and psychophysiology, *Tom Johnstone[1,2], Gregory Kolden[1], Sara Polis[1], Michael Peterson[1], Sandy Tierney[1], Ned Kalin[1], Richard Davidson[1], [1]University of Wisconsin-Madison, Madison, USA, [2]University of Reading, Reading, United Kingdom* 248 TH-PM

Brain response to emotional anticipation is related to respiratory rate, *Jennifer L. Aron[1], Scott C. Matthews[1,2], Alan N. Simmons[1,2,3], Irina A. Strigo[1], Martin P. Paulus[1,2,3], [1]University of California, San Diego, La Jolla, USA, [2]San Diego Veterans Administration, La Jolla, USA, [3]Center of Excellence in Stress and Mental Health (CESAMH), San Diego, USA* 252 TH-PM

Magnetoencephalographic evidence of right frontal impairment of negative emotion processing in bipolar disorder, *Li-Fen Chen[1,2], Ying-Chia Lin[2], Yong-Sheng Chen[3], Jen-Chuen Hsieh[1,2], Tung-Ping Su[4,5], [1]Institute of Brain Science, National Yang-Ming University, Taipei, Taiwan, [2]Integrated Brain Research Laboratory, Taipei Veterans General Hospital, Taipei, Taiwan, [3]Department of Computer Science, Hsinchu, Taiwan, [4]Division of Psychiatry, School of Medicine, National Yang-Ming University, Taipei, Taiwan, [5]Psychiatric Department, Taipei Veterans General Hospital, Taipei, Taiwan* 256 TH-PM

Repetition suppression in orbitofrontal cortex is modulated by anger in the voice, *Thomas Ethofer[1,2,3], Benjamin Kreifelts[1], Sarah Wiethoff[2], Jonathan Wolf[4], Wolfgang Grodd[2], Patrik Vuilleumier[3], Dirk Wildgruber[1,2], [1]Department of General Psychiatry, University of Tuebingen, Tuebingen, Germany, [2]Section on Experimental MR of the CNS, University of Tuebingen, Tuebingen, Germany, [3]Laboratory for Behavioral Neurology & Imaging of Cognition, Department of Neurosciences & Clinic of Neurology, University Medical Center of Geneva, Geneva, Switzerland, [4]Department of Child Psychiatry, University of Tuebingen, Tuebingen, Germany* 260 TH-PM

Automatic and Controlled Emotion Processing: Preliminary Data, *Nicole Joshua[1,2], Susan Rossell[1,3], [1]MHRI, Melbourne, Australia, [2]University of Melbourne, Melbourne, Australia, [3]Monash University, Melbourne, Australia* 264 TH-PM

IMAGING TECHNIQUES & CONTRAST MECHANISM
Anatomical MRI

MRI of Postmortem Human Brain Hemispheres: Changes in T_2 Relaxation during Formaldehyde Fixation, *Robert Dawe[1], David Bennett[2], Julie Schneider[2], Sunil Vasireddi[1], Konstantinos Arfanakis[1], [1]Department of Biomedical Engineering, Illinois Institute of Technology, Chicago, USA, [2]Rush Alzheimer's Disease Center, Rush University Medical Center, Chicago, USA* 268 TH-PM

Evaluating Faster Structural MRI Acquisitions based on Automated Measures of Classified Local Brain Volumes, *Michael Marxen[1,2], Tara L. Dawson[1], M. Kate Hanratty[3], Gwenn S. Smith[1,3], Simon J. Graham[1,2,4,5], [1]Rotman Research Institute, Baycrest Centre for Geriatric Care, Toronto, Canada, [2]Heart & Stroke Foundation Centre for Stroke Recovery, Toronto, Canada, [3]Centre for Addiction and Mental Health, Toronto, Canada, [4]Department of Medical Biophysics, University of Toronto, Toronto, Canada, [5]Sunnybrook Health Sciences Centre, Toronto, Canada* 272 TH-PM

Comparison of MMSE Scores with Postmortem Hippocampal Volumes, *Robert Dawe[1], David Bennett[2], Julie Schneider[2], Sunil Vasireddi[1], Konstantinos Arfanakis[1], [1]Department of Biomedical Engineering, Illinois Institute of Technology, Chicago, USA, [2]Rush Alzheimer's Disease Center, Rush University Medical Center, Chicago, USA* 276 TH-PM

Automatic Segmentation of White Matter Hyperintensities in FLAIR images at 3T, *Erin Gibson[1], Fuqiang Gao[1], Sandra E. Black[1,2], Nancy J. Lobaugh[1,2], [1]Sunnybrook Health Sciences Centre, Toronto, Canada, [2]University of Toronto, Toronto, Canada* 280 TH-PM

IMAGING TECHNIQUES & CONTRAST MECHANISM
Diffusion MRI

Simulated Framework for Fibre Tracking Validation, *Thomas Close[1,2,3], Jacques-Donald Tournier[1,4], Leigh Johnston[2,3,5], Fernando Calamante[1,4], Iven Mareels[2,3], Alan Connelly[1,4], [1]Brain Research Institute, Melbourne, Australia, [2]National ICT Australia, Melbourne, Australia, [3]Department of Electrical* 284 TH-PM

Engineering, University of Melbourne, Melbourne, Australia, [4]Department of Medicine, University of Melbourne, Melbourne, Australia, [5]Howard Florey Institute, Melbourne, Australia

Diffusion Tensor Imaging (DTI) at 3T and 7 T, *Ralf Luetzkendorf, Tobias Moench, Maurice Hollmann, Sebastian Baecke, Johannes Bernarding, Institute for Biometry and Medical Informatics, Medical Faculty, University of Magde-burg, Magdeburg, Germany* 288 TH-PM

Resolving crossing fibres: validation studies using DWI phantom data, *Jacques-Donald Tournier[1,2], Chun-Hung Yeh[3], Fernando Calamante[1,2], Kuan-Hung Cho[4], Alan Connelly[1,2], Ching-Po Lin[3,5], [1]Brain Research Institute, Melbourne, Australia, [2]Department of Medicine, University of Melbourne, Melbourne, Australia, [3]Department of Biomedical Imaging and Radiological Sciences, National Yang-Ming University, Taipei, Taiwan, [4]Interdisciplinary MRI/MRS Lab, Department of Electrical Engineering, National Taiwan University, Taipei, Taiwan, [5]Lab for Brain Connectivity, Institute of Neuroscience, National Yang-Ming University, Taipei, Taiwan* 292 TH-PM

Prediction of Motor Outcome using Diffusion Tensor Tractography in Pontine Infarct, *min cheol Jang, sung ho Jang, sang ho Ahn, dong kyu Kim, Department of Physical Medicine & Rehabilitation, Yeungnam University College of Medicine, Taegu, Korea* 296 TH-PM

Measuring and correcting errors that occur in diffusion weighted images due to non-linear gradients, *Zoltan Nagy, Chloe Hutton, Nikolaus Weiskopf, Wellcome Trust Centre for Neuriomaging, University College London, London, United Kingdom* 300 TH-PM

Combining DTI with Partial-brain Q-Ball Imaging to Improve the Efficiency of Fiber Detection, *Jiancheng Zhuang[1], Nicolas Lori[1, 2], [1]University of Southern California, Los Angeles, USA, [2]Coimbra University, Coimbra, Portugal* 304 TH-PM

IMAGING TECHNIQUES & CONTRAST MECHANISM
Multi-modal Integration

Evaluating quality of ultrafast EEG signatures in a synchronized EEG-fMRI approach, *Frank Freyer[1], Petra Ritter[1], Robert Becker[1], Kimitaka Anami[3], Gabriel Curio[1], Arno Villringer[1,2], [1]Berlin Neuroimaging Center, Charité Universitaetsmedizin, Berlin, Germany, [2]Max Planck Institute for Brain and Cognitive Sciences, Leipzig, Germany, [3]National Center Hospital for Mental, Nervous, and Muscular Disorders, Tokyo, Japan* 308 TH-PM

Integration of MEG and EEG data in minimum L2 norm estimation, *Antonio Molins[3,2], Steven Stufflebeam[2,4,3,5], Emery Brown[3,2,6,1], Matti Hämäläinen[2,5,3], [1]Brain and Cognitive Sciences, MIT, Cambridge, USA, [2]MGH-MIT-HMS Athinoula A. Martinos Ctr. for Biomed. Imaging, Charlestown, USA, [3]Harvard-MIT division for Hlth. Sci. and Technology, Cambridge, USA, [4]Harvard Medical School, Cambridge, USA, [5]Radiology, MGH, Boston, USA, [6]Anesthesiology, MGH, Boston, USA* 312 TH-PM

The MIND Clinical Imaging Consortium as an application for novel comprehensive quality assurance procedures in a multi-site heterogeneous clinical research study, *H Jeremy Bockholt[1], Sumner Williams[1], Mark Scully[1], Vincent Magnotta[2], Randy Gollub[3], John Lauriello[4], Kelvin Lim[5], Tonya White[5], Rex Jung[1], Charles Schulz[5], Nancy Andreasen[2], Vince Calhoun[1,4], [1]The MIND Institute, Albuquerque, USA, [2]The University of Iowa, Iowa City, USA, [3]Massachusetts, Charlestown, USA, [4]The University of New Mexico, Albuquerque, USA, [5]The University of Minnesota, Minneapolis, USA* 316 TH-PM

Comparison of CBV changes with MRI and laser-Doppler: Implications on CMR_{O2} calculation, *Peter Herman[1], Basavaraju G. Sanganahalli[1], Fahmeed Hyder[1,2], [1]Diagnostic Radiology, Yale University, New Haven, USA, [2]Biomedical Engineering, Yale University, New Haven, USA* 320 TH-PM

Relation between spatially and spectrally confined EEG rhythms and fMRI resting state networks, *Petra Ritter[1], Michael D. Greicius[2], Robert Becker[1], Arno Villringer[1,3], [1]Berlin Neuroimaging Center and Dept. Neurology, Charité, Universitätsmedizin Berlin, Berlin, Germany, [2]Departments of Neurology and Psychiatry, Stanford University School of Medicine, Stanford, USA, [3]Max Planck Institute for Brain and Cognitive Sciences, Leipzig, Germany* 324 TH-PM

IMAGING TECHNIQUES & CONTRAST MECHANISM
Optical Imaging/NIRS/MRS (magnetic resonance spectroscopy)

Removal of skin blood flow artifact in fNIRS signal induced by an excessive finger tapping task though ICA, *Satoru Kohno[1,2], Akihiro Ishikawa[1], Shin-ichi Shiomi[3], Shoichi Tsuneishi[1], Haruhide* 328 TH-PM

Udagawa[1], Takashi Amita[1], Yoshihiro Mukuta[1], [1]R&D Department Medical Systems Division, Shimadzu Corporation, Kyoto, Japan, [2]Human Brain Research Center, Kyoto University Graduate School of Medicine, Kyoto, Japan, [3]R&D Department, Shimadzu System Development Corporation, Kyoto, Japan

IMAGING TECHNIQUES & CONTRAST MECHANISM
Perfusion MRI

IMAGING TECHNIQUES & CONTRAST MECHANISM
PET/SPECT

LANGUAGE
Comprehension

LANGUAGE
Reading/Writing

MEMORY & LEARNING
Learning (explicit & implicit)

imaging of IDAC, Tohoku University, Sendai, Japan, [2]Department of Cortical research, National Institute for Physiological Sciences, Okazaki, Japan, [3]RISTEX, JST, Kawaguchi, Japan

A MEG study of recognition memory, ***Sun-Kyoung Kim[1], Myung-Sun Kim[1], June Sic Kim[2], Chun Kee Chung[2]***, *[1]Sungshin Women's University, Department of Psychology, Seoul, South Korea, [2]Seoul National University Hospital, Department of Neurosurgery, Seoul, South Korea* 424 TH-PM

SPOKEN WORD MEMORY TRACES WITHIN THE HUMAN AUDITORY CORTEX, *Pierre Gagnepain, Gael Chételat, Brigitte Landeau, Jacques Dayan, Francis Eustache, Karine Lebreton, Inserm - EPHE - Université de Caen Basse/Normandie, Unité U923, GIP Cyceron, CHU Côte de Nacre, Caen, France* 428 TH-PM

Visuospatial Memory (VSM) in Children and Adolescents with Obsessive Compulsive Disorder (OCD): A Functional Magnetic Resonance Imaging (fMRI) Study, *Eve Gu[1], Hannah Shoemaker[3], Melissa Casey[1], Tim Silk[2], Michael Farrell[3], Alasdair Vance[1], [1]Academic Child Psychiatry Unit, Royal Children's Hospital, Murdoch Childrens Research Institute, Melbourne, Australia, [2]Queensland Brain Institute, Brisbane, Australia, [3]Howard Florey Institute, Melbourne, Australia* 432 TH-PM

"Does Size Matter? The relationship between hippocampal volume and memory ability in patients with treatment resistant MDD" , *Kate Hoy, Alfred Psychiatry Research Centre, Prahran, Australia* 436 TH-PM

The effects of prenatal methamphetamine exposure on brain activation during verbal learning, *Lisa H Lu[1,2], Lynne M Smith[3], Mary J O'Connor[4], Arianne Johnson[1], Elizabeth D O'Hare[1,5], Suzanne Houston[1], Susan Y Bookheimer[4,5], Elizabeth R Sowell[1,5], [1]UCLA Laboratory of Neuro Imaging, David Geffen School of Medicine, Los Angeles, USA, [2]Roosevelt University Dept of Psychology, Chicago, USA, [3]Harbor-UCLA Medica Center Dept of Pediatrics, Torrance, USA, [4]UCLA Dept of Psychiatry & Biobehavioral Sciences, Los Angeles, USA, [5]UCLA Interdepartmental PhD Program for Neuroscience, Los Angeles, USA* 440 TH-PM

The neural substrate of Shogi pattern recognition shaped by long-term training in professional players, *Xiaohong Wan, Hironori Nakatani, Kenichi Ueno, Takeshi Asamizuya, Kang Cheng, Keiji Tanaka, RIKEN Brain Science Institute, Wako_shi, Japan* 444 TH-PM

11:30 – 12:30 *Corryong Hall (Level 2)*

MEMORY & LEARNING
Long-term Memory (episodic, semantic, autobiographical)

Effective connectivity during recollection- and familiarity-based memory decisions, *Thomas Lemmin, Alumit Ishai, Institute of Neuroradiology, University of Zurich, Zurich, Switzerland* 454 TH-PM

Impact of Valence and Concreteness on Word List Learning in Young Adults: Differential Effects on Performance and Brain Activation, *Olivier Piguet[1,2], Paymon Varnamkhasti[1], Keyma Prince[1], Emily Connally[1], Suzanne Corkin[1,3], [1]Massachusetts Institute of Technology, Cambridge, USA, [2]Prince of Wales Medical Research Institute, Sydney, Australia, [3]MGH/MIT/HMS Athinoula A. Martinos Center for Biomedical Imaging, Charlestown, USA* 458 TH-PM

An fMRI Study of Episodic Memory Retrieval at 7T, *Bing Yao[1], Tie-Qiang Li[1], James Kroger[2], Peter van Gelderen[1], Jacco de Zwart[1], Jeff Duyn[1], [1]NINDS, National Institutes of Health, Bethesda, USA, [2]Department of Psychology, University of New Mexico, Albuquerque, USA* 462 TH-PM

The role of facial expressions in animated characters during word encoding – an fMRI study, *Henk Jansma[1], Jan Ole Schumann[1], Claus Tempelmann[2], Thomas Münte[1], [1]Dept. of Neuropsychology, Otto von Guericke University, Magdeburg, Germany, [2]2 Dept. of Neurology II and CAI, University of Magdeburg, Magdeburg, Germany* 466 TH-PM

Differential Connectivity During Memory Encoding for Patients with MCI versus Controls: A Partial Least Squares Account of Encoding Success, *Andrea B. Protzner[1], Mary Pat McAndrews[1], Jennifer L. Mandzia[2], Sandra E. Black[2], [1]Krembil Neuroscience Program, Toronto Western Hospital, Toronto, Canada, [2]Cognitive Neurology Unit, Sunnybrook Health Sciences Centre, Toronto, Canada* 470 TH-PM*

Predicting Successful Memory Formations using fMRI and Discriminant Analyses, *Julie Yoo[1], Noa Ofen[2], Susan Gabrieli[1,2], Oliver Hinds[1], Christina Triantafyllou[1,3], John Gabrieli[1,2], [1]McGovern Institute for Brain Research, Massachusetts Institute of Technology, Cambridge, USA, [2]Department of Brain and* 474 TH-PM*

Cognitive Sciences, Massachusetts Institute of Technology, Cambridge, USA, [3]Athinoula A. Martinos Center, Department of Radiology, MGH, Harvard Medical School, Boston, USA

MODELING & ANALYSIS
Exploratory Methods, Artifact Removal

MODELING & ANALYSIS
Flattening, Segmentation

MODELING & ANALYSIS
Functional Connectivity and Structural Equation Modeling

Biomedical Engineering, Georgia Institute of Technology and Emory University, Atlanta, USA, [2]Departments of Neurology, Psychology and Rehabilitation Medicine, Emory University, Atlanta, USA, [3]Atlanta VAMC Rehabilitation R&D Center of Excellence, Atlanta, USA

MODELING & ANALYSIS
Multivariate Modeling, PCA, & ICA

Gennadiy Knyazev[1], [1]Institute of Physiology of SB RAMS, Novosibirsk, Russia, [2]Institute of Statistical Science of Academia Sinica, Taipei, Taiwan

MOTOR BEHAVIOR
Basal Ganglia/Brainstem/Spinal Cord

Gender differences in voluntary micturition control - An fMRI study., *Jürgen Baudewig[1], Sandra Seseke[2], Kai Kallenberg[1], Rolf H Ringert[2], Florian Seseke[3], Peter Dechent[1], [1]MR-Research in Neurology and Psychiatry, University Medical Center, Göttingen, Germany, [2]Department of Urology, University Medical Center, Göttingen, Germany, [3]Department of Urology, Martha-Maria Hospital, Halle, Germany* 614 TH-PM

MOTOR BEHAVIOR
Eye Movements/Visuomotor Processing

Interhemispheric Transfer Visualized by fMRI: Are there BOLD Signal Changes in White Matter?, *Jürgen Baudewig[1], Julia Böhm[2], Peter Dechent[1], Aribert Rothenberger[2], Veit Roessner[2], [1]MR-Research in Neurology and Psychiatry, University Medical Center, Göttingen, Germany, [2]Department of Child and Adolescent Psychiatry, University Medical Center, Göttingen, Germany* 618 TH-PM

Eye hand coordination task by Children with Developmental Coordination Disorder: An fMRI study, *Mitsuru Kashiwagi[1], Sunao Iwaki[2], Ryusaku Hashimoto[1], Shuhei Suzuki[2], [1]Osaka Medical College, Takatsuki, Japan, [2]National Institutes of Advanced Industrial Science and Technology, Ikeda, Japan* 622 TH-PM

COMPARISON OF OBSERVING AN ACTION AS IF IT WERE PERFORMED BY ONESELF OR THE OTHER PERSON USING EVENT RELATED fMRI, *Satomi Higuchi[1,3], Stefan Vogt[1,3], Francis McGlone[2], Neil Roberts[3], [1]Department of Psychology, Lancaster University, Lancaster, United Kingdom, [2]Cognitive Neuroscience, Unilever R&D, Port Sunlight Laboratories, Wirral, United Kingdom, [3]Magnetic Resonance and Image Analysis Research Centre, University of Liverpool, Liverpool, United Kingdom* 626 TH-PM

NEUROANATOMY
DTI Studies, Application

MAPPING GENETIC INFLUENCES ON BRAIN FIBER ARCHITECTURE WITH HIGH ANGULAR RESOLUTION DIFFUSION IMAGING (HARDI), *Ming-Chang Chiang[1], Marina Barysheva[1], Agatha D. Lee[1], Sarah Madsen[1], Andrea D. Klunder[1], Arthur W. Toga[1], Katie L. McMahon[2], Greig I. de Zubicaray[2], Matthew Meredith[2], Margaret J. Wright[3], Anuj Srivastava[4], Nikolay Balov[4], Paul M. Thompson[1], [1]Laboratory of Neuro Imaging, Department of Neurology, UCLA School of Medicine, Los Angeles, USA, [2]Functional MRI Laboratory, Centre for Magnetic Resonance, University of Queensland, Brisbane, Australia, [3]Queensland Institute of Medical Research, Brisbane, Australia, [4]Department of Statistics, Florida State University, Tallahassee, USA* 630 TH-PM

Connectivity-based parcellation of the cortical surface using q-ball diffusion imaging, *Pamela Guevara[1,2], Muriel Perrin[1,2,3], Pascal Cathier[1,2], Yann Cointepas[1,2], Denis Rivière[1,2], Cyril Poupon[1,2], Jean-François Mangin[1,2], [1]CEA, Neurospin, Gif-sur-Yvette, France, [2]Institut Fédératif de Recherche 49, Gif-sur-Yvette, France, [3]GE Healthcare, Buc, France* 634 TH-PM*

Disparate Gender Effects on White Matter Tracts in Fronto-striato-thalamic Circuit: A Diffusion Spectrum Imaging Study, *Y.C. Lo[1], S.C. Huang[2], W.Y. Chiang[2], L.W. Kuo[4], F.C. Yeh[2], V.J. Wedeen[5], W.Y.I. Tseng[1,2,3], [1]Institute of Biomedical Engineering, National Taiwan University, Taipei, Taiwan, [2]Center for Optoelectronic Biomedicine, National Taiwan University College of Medicine, Taipei, Taiwan, [3]Department of Medical Imaging, National Taiwan University Hospital, Taipei, Taiwan, [4]Department of Electrical Engineering, National Taiwan University, Taipei, Taiwan, [5]MGH Martinos Center for Biomedical Imaging, Harvard Medical School, Charlestown, USA* 638 TH-PM

Comparison of white matter indices in healthy ageing, *Emmanuel A Stamatakis[1], Meredith A Shafto[2], Lorraine K Tyler[2], [1]School of Psychological Sciences and Division of Imaging Science and Biomedical Engineering, University of Manchester, Manchester, United Kingdom, [2]Centre for Speech, Language and the Brain, Department of Experimental Psychology, University of Cambridge, Cambridge, United Kingdom* 642 TH-PM

Gender difference in gray/white matter volume and diffusion tensor data during normal aging, *Osamu Abe[1], Hiddenori Yamasue[1], Haruyasu Yamada[2], Yoshitaka Masutani[1], Hideyuki Inoue[1], Kunio* 646 TH-PM

Takei[1], Motomu Suga[1], Hiroyuki Kabasawa[1], Kiyoto Kasai[1], Shigeki Aoki[1], Kuni Ohtomo[1], [1]University of Tokyo, Tokyo, Japan, [2]Teikyo University, Chiba, Japan

Uncertainty of apparent white matter fiber tract size in DTI fiber tracking and region of interest analyses: A multi-resolution study, *Daniel Franc[1], Christophe Lenglet[2], Gloria Haro[3], Paul Thompson[4], Bryon Mueller[1], Guillermo Sapiro[1], Kelvin Lim[1], [1]University of Minnesota, Minneapolis, USA, [2]Siemens Corporate Research, Princeton, USA, [3]UPC, Barcelona, Spain, [4]UCLA Medical School, Los Angeles, USA* 650 TH-PM

Gender Differences in White Matter Asymmetry in Relation with Cortical Thickness Asymmetry, *Chi-Hoon Choi[1,2], Jong-Min Lee[2], Bang-Bon Koo[2], Jun Sung Park[2], Jun Soo Kwon[3], Sun I. Kim[2], [1]Department of Diagnostic Radiology, National Medical Center, Seoul, South Korea, [2]Department of Biomedical Engineering, Hanyang University, Seoul, South Korea, [3]Department of Psychiatry, Seoul National University College of Medicine, Seoul, South Korea* 654 TH-PM

Comparative SPM and ROI analyses of fractional anisotropy maps in preterm and normal newborns, *Paola Scifo, Cristina Baldoli, Silvia Pontesilli, Valeria Blasi, Roberta Scotti, Giuseppe Scotti, Ferruccio Fazio, Scientific Institute H San Raffaele, Milan, Italy* 658 TH-PM

DTI Fiber Tractography Reveals Precentral-Postcentral Gyral Connectivity, *John Bogovic, Aaron Carass, Jing Wan, Bennett Landman, Jerry Prince, Image Analysis and Communications Laboratory, Electrical and Computer Engineering, the Johns Hopkins University, Baltimore, USA* 662 TH-PM

SENSORY SYSTEMS
Auditory/Vestibular

Diffusion tensor imaging study on congenitally deaf, *Yonghui Li[1], Yuan Zhou[1], Jun Li[1], Chunshui Yu[2], Wen Qin[2], Kuncheng Li[2], Yong Liu[1], Ni Shu[1], Tianzi Jiang[1], [1]National Laboratory of Pattern Recognition, Institute of Automation, Chinese Academy of Sciences, Beijing, China, [2]Department of Radiology, Xuanwu Hospital of Capital Medical University, Beijing, China* 666 TH-PM

rTMS over medial posterior parietal cortex impairs fine auditory spatial discrimination, *Santani Teng, David Whitney, Center for Mind and Brain/Dept. of Psychology, UC Davis, Davis, USA* 670 TH-PM

Electrophysiological mapping of the human auditory cortex using click-train stimulation, *Kirill Nourski[1], Hiroyuki Oya[1], Hiroto Kawasaki[1], Richard Reale[1,2], Albert Fenoy[1], Paul Poon[3], Matthew Howard[1], John Brugge[1,2], [1]The University of Iowa, Iowa City, USA, [2]University of Wisconsin-Madison, Madison, USA, [3]National Cheng Kung University, Tainan, Taiwan* 674 TH-PM

Plastic Functional Connectivity in Musicians' Brain: a Resting State fMRI Study, *Han Zhang[1], Ying Han[1], Hong Yang[2], He-Han Tang[2], Qi-Yong Gong[2], Yu-Feng Zang[1], Chao-Zhe Zhu[1,*], [1]State Key Laboratory of Cognitive Neuroscience and Learning, Beijing Normal University, Beijing, China, [2]Huaxi MR Research Center (HMRRC), Department of Radiology, West China Hospital of Sichuan University, Chengdu, China* 678 TH-PM

SENSORY SYSTEMS
Tactile/Somatosensory

MEG Event-Related Desynchronization and Synchronization Differences During Basic Somatosensory Processing in Individuals with ADHD, *Colleen Dockstader[1], William Gaetz[1,2], Douglas Cheyne[1,2], Christina M. Popovich[1,3], Frank Wang[1,3], F. Xavier Castellanos[4], Rosemary Tannock[1,5], [1]Neurosciences and Mental Health Program, The Hospital for Sick Children, Toronto, Canada, [2]Department of Diagnostic Imaging, The Hospital for Sick Children, Toronto, Canada, [3]Institute of Medical Science, University of Toronto, Toronto, Canada, [4]Child Study Center, New York University, New York, USA, [5]Human Development & Applied Psychology, Ontario Institute for Studies in Education, Toronto, Canada* 682 TH-PM

Perceptive limits linked to differential 600 Hz activity in the somatosensory system, *Ulrike Jaros[1], Bernd Hilgenfeld[1], Stephan Lau[1,2], Gabriel Curio[3], Jens Haueisen[1,2], [1]Biomagnetic Center, Department of Neurology, University Hospital Jena, Jena, Germany, [2]Institute of Biomedical Engineering and Informatics, Technical University Ilmenau, Ilmenau, Germany, [3]Neurophysics Group, Department of Neurology, Charité - University Medicine Berlin, Berlin, Germany* 686 TH-PM

Top-down control of cortical ongoing mu rhythm (7-13 Hz) in sensory awareness of a weak stimulus, *Yan Zhang, Mingzhou Ding, J. Crayton Pruitt Family Department of Biomedical Engineering, University of Florida, Gainesville, USA* 690 TH-PM

Cuff-type pneumatic stimulator for somatosensory mapping of finger afferences with fMRI, *Eugen Gallasch[1], Martin Fend[1], Dietmar Rafolt[2], Christian Siedentopf[5,6], Stefan Golaszewski[3,5], Roland Beisteiner[4], [1]Dept. of Physiology, Medical University of Graz, Graz, Austria, [2]Center for Biomedical Engineering and Physics, Medical University of Vienna, Vienna, Austria, [3]Dept. of Neurology, Paracelsus Medical University Salzburg, Salzburg, Austria, [4]Dept. of Neurology, Medical University of Vienna, Vienna, Austria, [5]fMRI Lab, Dept. of Psychiatry, Medical University Innsbruck, Innsbruck, Austria, [6]Dept. of Radiology, Medical University Innsbruck, Innsbruck, Austria* 694 TH-PM

A fMRI Study of Acupuncture: Human Brain Activity in the Manipulation of Needle Rotation., *Hiroaki Mano[1], Masahiro Umeda[2], Masaki Fukunaga[2], Toshihiro Higuchi[1], Chuzo Tanaka[1], [1]Department of Brain Surgery, Meiji Unisersity of Integrated Medicine, Nantan, Japan, [2]Department of Medical Informatics, Meiji Unisersity of Integrated Medicine, Nantan, Japan* 698 TH-PM

SENSORY SYSTEMS
Vision

Multivoxel fMRI analysis reveals the representation of spatial frequency information in the human primary visual cortex, *Bahador Bahrami[1,2], Geraint Rees[1,2], [1]Institute of Cognitive Neuroscience, London, United Kingdom, [2]Wellcome Department of Imaging Neuroscience, London, United Kingdom* 702 TH-PM

Brain Mechanisms of Vision in Human Amblyopia: A Magnetoencephalography (MEG) Study., *Filomeno Cortese[1], Herbert C. Goltz[1], Zahra Hirji[1], Douglas O. Cheyne[2], Agnes F.M. Wong[1], [1]Department of Ophthalmology & Vision Sciences, The Hospital for Sick Children, Toronto, Canada, [2]Diagnostic Imaging, The Hospital for Sick Children, Toronto, Canada* 706 TH-PM

The transformation of representational similarity along human ventral-stream stages of visual-object processing, *Nikolaus Kriegeskorte, Marieke Mur, Jerzy Bodurka, Peter Bandettini, NIMH, Bethesda, USA* 710 TH-PM*

N170 amplitude reflects the seen number of faces irrespective of low-level stimulus variables, *Aina Puce[1], Marie McNeely[1], Olivia Carrick[1], Michael Berrebi[1], James Epling[1], James Thompson[1, 2], Jillian Hardee[1], Leor Zellner[1], Julie Brefcynski-Lewis[1], [1]Center for Advanced Imaging, West Virginia University, Morgantown, USA, [2]Psychology Department, George Mason University, Fairfax, USA* 714 TH-PM

MEG demonstrates a shift to higher gamma frequencies in primary visual cortex for moving versus stationary stimuli., *Jennifer B. Swettenham, Krish D. Singh, CUBRIC, School of Psychology, Cardiff University, Cardiff, United Kingdom* 718 TH-PM

Increasing the measured BOLD signal in human lateral geniculate nucleus and superior colliculus using cardiac gating, *Martin Hebart[1], Ignacio Vallines[1,2], [1]Department of Experimental Psychology, Ludwig Maximilian University, Munich, Germany, [2]Department of Experimental Psychology, University of Regensburg, Regensburg, Germany* 726 TH-PM

Exploring the relationship between natural fluctuations in electrical measures of brain activity and the BOLD response, during visual stimulation., *Karen J. Mullinger, Gerda B. Geirsdottir, Matthew J. Brookes, Peter F. Liddle, Richard W. Bowtell, University of Nottingham, Nottingham, United Kingdom* 730 TH-PM

Using inter-session repeatability to improve the results of phase-encoded retinotopic mapping, *Krish D. Singh[1], Simon K. Rushton[1], Tom C.A. Freeman[1], Petroc Sumner[1], Paul A. Warren[1], Andy T. Smith[2], [1]CUBRIC, School of Psychology, Cardiff University, Cardiff, United Kingdom, [2]Dept. of Psychology, Royal Holloway, University of London, Egham, United Kingdom* 734 TH-PM

SENSORY SYSTEMS
Tactile/Somatosensory

Proprioceptive perception, an fMRI study of brain lateralization and its relationship with behavioral measures, *Ettie Ben-Shabat[1,2], Gaby S Pell[3], Amy Brodtmann[2], Thomas A Matyas[1,2], Leeanne M Carey[1,2], [1]La Trobe University, Melbourne, Australia, [2]National Stroke Research Institute, Melbourne, Australia, [3]Brain Research Institute, Melbourne, Australia* 738 TH-PM