### Scientific Program

Member initiated scientific sessions and individual contributions provide an overview about current topics in alpine brain mapping research.

For free registration or submission of additional alpine presentations please contact the local organizers given below.

### **Local Organisation / Contact**

Tabea Philippi-Novak (tabeapn@hotmail.com, 0043-(0)-69917150750) Roland Beisteiner (roland.beisteiner@meduniwien.ac.at) Department of Neurology, Medical University of Vienna Austrian Society for fMRI (www.oegfmrt.org) OHBM Alpine Chapter (www.humanbrainmapping.org)

#### Venue

Art nouveau lecture hall (Jugendstilhörsaal) Building 88, Level 2, Staircase 8, Spitalgasse 23, A-1090 Vienna, Austria

### **Faculty OHBM Alpine Chapter**

Vienna: Roland Beisteiner (Chair) Basel: Christoph Stippich (Chair Elect) Geneva: Patrik Vuilleumier (Secretary) Graz: Christian Enzinger (Secretary Elect)

Salzburg: Stefan Golaszewski, Martin Kronbichler (Treasurer)

Bern: Roland Wiest (Treasurer Elect)

### **Sponsoring**







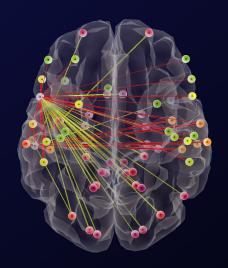




### Organization for Human Brain Mapping

Alpine Chapter







# 1st Alpine Chapter Symposium

15th Austrian fMRI Symposium

November 27 - 28, 2015 Medical University of Vienna, Austria



**fMRI** www.oegfmrt.org



Cluster Medical University of Vienna, Austria



of Vienna. Austria

### Friday

#### 09:00 - 09:30 Opening

Roland Beisteiner (Chair OHBM Alpine Chapter) Markus Mueller (Rector Medical University of Vienna) Stefan Boehm (Medical Neuroscience Cluster, Medical University of Vienna)

# 09:30 - 10:30 Christian Enzinger, Graz/AT: Repeated cerebral fMRI to probe effects of neurorehabilitation - chances & challenges

What clinicians want to learn from fMRI rehabilitation studies Christian Enzinger, Graz, AT

Big data for precision medicine: From cohorts to individualized predictions

- BREAK -

Christian Beckmann, Nijmegen, NL

Assessment of stroke recovery with functional MRI Rick M Dijkhuizen, Utrecht, NL

#### 10:30 - 11:00

### 11:00 - 12:00 Lukas Pezawas, Wien/AT: Imaging Measures as Intermediate Phenotypes of Psychiatric Disease

Searching for connectomic intermediate phenotypes for schizophrenia: An empirical study on emotion processing Hengyi Cao, Mannheim, DE

Imaging Genetics of Human Memory Dominique de Quervain, Basel, CH

Structural imaging of gene x environment interactions Ulrich Rabl, Vienna, AT

Oppositional COMT Val158Met effects on resting state functional connectivity in adolescents and adults
Bernhard Meyer, Vienna, AT

#### 12:00 - 12:45 Individual Alpine contributions

7 Tesla DCM Connectivity Analysis in affective disorders Ronald Sladky, Christian Windischberger, Vienna, AT

fMRI - EEG study during various stages of sleep Raimund Kleiser et al., Linz, AT

Dynamic Distortion Correction for clinical functional magnetic resonance imaging
Barbara Dymerska, Simon Robinson et al., Wien, AT

Barbara Dymerska, Simon Robinson et al., Wien, Al

Automated morphometric analysis of cerebral MRI and its application in the diagnosis of neurodegenerative diseases Christoph Scherfler et al., Innsbruck, AT

12:45 - 14:15 - LUNCH BREAK -

### 14:15 - 14:45 Simon Eickhoff, Jülich/DE: The structure of the haystack: Multivariate methods in neuroimaging

### 14:45 - 15:30 Mauricio Reyes, Bern/CH: Machine learning

Detection and analysis of brain lesions using machine learning Mauricio Reyes, Bern, CH

Approaches in neuroimaging: The variability of functional brain architecture

Georg Langs, Vienna, AT

Machine learning in brain tumor segmentation: The BRATS competition

Bjoern Menze, Munich, DE

#### 15:30 - 16:00 - BREAK -

### 16:00 - 17:00 Veronika Schöpf, Guilherme Wood, Graz/AT: Multimodal Imaging

Alcohol and the human brain: A multimodal MR imaging perspective

Deepika Bagga, Graz, AT

Multimodal functional connectivity analysis of fetal MRI images Andras Jakab, Vienna, AT

Spirituality and the ability of self control over brain activity: A multimodal imaging study
Silvia Kober, Graz, AT

With body and soul: A comparison of self regulatory mechanisms required for neurofeedback in triathletes and healthy controls Matthias Witte, Graz, AT

18:30 - DINNER -

### Saturday

#### 08:30 - 09:15 Roland Wiest, Bern/CH: Post stroke recovery of hand function

Recovery potential after acute stroke Rüdiger Seitz, Düsseldorf, DE

Supplementary motor complex and disturbed motor control Florian Brugger, St. Gallen, CH

Neuronal networks involved in stroke recovery Eugenio Abela, Bern, CH

# 09:15 - 10:15 Rupert Lanzenberger, Wien/AT: Pharmacological Neuroimaging

fMRI in mice: Changes in functional networks due to pathology and pharmacological interventions Markus Rudin, Zürich, CH

Antidepressants and MRI with psychiatric patients Thomas Frodl, Magdeburg, DE

MRI and PET investigations of the effects of sex hormones on brain structure and function Georg Kranz, Vienna, AT

Effects of ketamin on the human brain investigated by pharmacological fMRI Andreas Hahn, Vienna, AT

10:15 - 10:45 - BREAK -

### 10:45 - 11:45 Stefan Golaszewski, Salzburg/AT: Clinical applications of brain computer interfaces

Applicability of fMRI for brain computer interfaces Rainer Goebel, Maastricht, NL

Detecting signs of consciousness as a prerequisite of brain computer communication
Boris Kotchoubey, Tübingen, DE

Investigation of brain function of patients suffering from chronic impaired conciousness
Stefan Golaszewski, Salzburg, AT

# 11:45 - 12:30 Anja Ischebeck, Graz/AT: The functional and structural basis of cognition

How fast is aging of brain structures? A box-cox investigation Maria Morozova & Guilherme Wood, Graz, AT

Influence of acute bouts of exercise on effective connectivity within the verbal working memoy network
Karl Koschutnig, Gernot Reishofer & Andreas Fink, Graz, AT

The neural correlates of social comparisons: Differential activations for self-related comparisons
Gayanee Kedia, Thomas Mussweiler, Anja Ischebeck, Graz, AT

12:30 - 14:00 - LUNCH BREAK -

### 14:00 - 15:00 Roland Beisteiner, Tecumseh Fitch, Vienna/AT: Functional Imaging of Hierarchy and Recursion

Hierarchy and recursion Tecumseh Fitch, Vienna, AT

Functional imaging of language hierarchy and recursion Tomas Goucha, Emiliano Zaccarella, Angela Friederici, Leipzig, DE

Functional imaging of visual hierarchy and recursion Florian Fischmeister, Vienna, AT

Functional imaging of musical hierarchy and recursion Mauricio Martins, Berlin, DE

# 15:00 - 16:00 Christoph Stippich, Basel/CH: Brain Mapping of auditory and language systems: Plasticity, individual abilities and learning strategies

Neural basis of sound perception in children and adults Peter Schneider, Heidelberg, DE

Imaging training-induced neuroplasticity in professional musicians

Maria Blatow, Basel, CH

Musical aptitude and expertise from a neurocognitive viewpoint Annemarie Seither-Preisler, Graz, AT

Neural basis of language learning and expertise Narly Golestani, Genf, CH

16:00 - 16:30 - BREAK -

### from 16:30 Individual Alpine contributions

Shared and dissociated neural representations for pain and disgust Gil Shlomo Sharvit, Corrado Corradi Dell'Acqua, Patrik Vuilleumier, Genf, CH

Pain activations in patients with menstrual cramps Christian Siedentopf, Elke Gizewski et al., Innsbruck, AT

Short-term effect of escilatopram on efficiency of sensorimotor networks

Christian Weisstanner, Georg Kägi, John Missimer, Roland Wiest, Bern, CH

Reading and the left occipitotemporal cortex Martin Kronbichler, Salzburg, AT

Further contributions to be announced

- Poster visits during the breaks -