# 3rd Alpine Chapter Symposium

## HALF DAY EEG-FMRI TRAINING COURSE

### November 3rd – 4th, 2017
Inselspital, University of Bern

## Venue
Langhans Auditorium, Inselspital, Freiburgstrasse 8, CH-3010 Bern
Pathologisches Institut H 128, Eingang 43 A.

## Registration / Contact
For registration or submission of abstracts please contact the local congress executive
M. Pastore-Wapp (manuela.pastore-wapp@insel.ch)
Congress Fee CHF 50.-. On-site registration will be possible.

## Swiss Evening Event
Restaurant Schwellenmätteli, Dalmaziquai 11, 3000 Bern
The Swiss Evening Event will be charged with CHF 70.- (students CHF 50.-)

## Faculty OHBM Alpine Chapter
- **Vienna**: Roland Beisteiner (Chair)
- **Basel**: Christoph Stippich (Chair Elect)
- **Geneva**: Patrik Vuilleumier (Secretary)
- **Graz**: Christian Enzinger (Secretary Elect)
- **Salzburg**: Martin Kronbichler (Treasurer)
- **Bern**: Roland Wiest (Treasurer Elect)

## Support Center for Advanced Neuroimaging (SCAN), Institute of Diagnostic and Interventional Neuroradiology
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## OHBM Alpine Chapter (www.humanbrainmapping.org, www.oegfmrt.org)
Training course under auspices of the Swiss Soc. for Clinical Neurophysiology
(Course Directors: R. Wiest/ Bern and S. Vulliémoz/Geneva)

## Local Organisation

### Vienna
- Roland Beisteiner (Chair)

### Basel
- Christoph Stippich (Chair Elect)
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- Patrik Vuilleumier (Secretary)
- Christian Enzinger (Secretary Elect)
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- Christian Enzinger (Secretary Elect)

### Salzburg
- Martin Kronbichler (Treasurer)

### Bern
- Roland Wiest (Treasurer Elect)

## Sponsors

### Siemens

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### Sectra
Day 1: Friday, Nov. 3rd 2017

9.00-12.30: Joint workshop EEG/fMRI 
Together with the Swiss Society for Clinical Neurophysiology SSCN

9.00 Methods 
(F. Grouiller, Geneva, CH)

9.30 Practical Application, Demo, Postprocessing 
(C. Rummel, M. Pastore-Wapp, Bern, CH)

10.30-11.00 Coffee break

11.00 EEG/fMRI in psychology 
M. Züst, Bern, CH

11.30 EEG/fMRI in neurology 
S. Vuillémoz, Geneva, CH

12.00 EEG/fMRI in psychiatry 
T. Koenig, Bern, CH

12.30-13.30 Lunch / Poster session

13.30 Session 1 "fMRI to explore the effects of rehabilitation in MS" 
Chair: C. Enzinger (Graz, AT)

- "Longitudinal fMRI studies in MS - what do we know and what do we need to know?" 
  C. Enzinger (Graz, AT)
- "fMRI in rehab studies in MS - Existing knowledge and gaps in knowledge" 
  M. Rocca (Milan, IT)
- "Future trials incorporating fMRI - what do we need and how to proceed?" 
  J. Sastre-Garriga (Barcelona, ES)

14.00 Session 2 "EEG-based imaging of physiological and pathological brain activity" 
Chair: S Vuillémoz (Geneva, CH)

- "Mapping large scale neuronal networks in real time with EEG" 
  C. Michel (Geneva, CH)
- "Functional imaging of epileptic activity: from sources to networks" 
  S. Vuillémoz (Geneva, CH)
- "Neurological deficits and plasticity after stroke: the importance of networks" 
  A. Guggisberg (Geneva, CH)

15.30-16.00 Coffee break

16.00 Chapter Communications Part I 
Chair: R. Beisteiner (Vienna, AT), P. Vuilleumier (Geneva, CH)

- "The woman who unintentionally shuts down her motor cortex - Physiological mechanisms in motor imagery and pathophysiological patterns in psychogenic paresis" 
  E. Matt (Wien, AT)
- "Metacognition of motor control in patients with functional motor deficits (conversion)" 
  I. Sinanaj, P. Vuilleumier (Geneva, CH)
- "Multimodal Neuroimaging in the domain of Social Neuroscience" 
  C. Lamm (Wien, AT)
- "Multimodal Pharmacor-Imaging in PET/MR" 
  R. Lanzenberger (Wien, AT)
- "Quantifying functional brain development: Networks and Dynamics" 
  G. Langs (Wien, AT)

18.30 Swiss Evening Event 
Restaurant Schwellenmätteli, Dalmaziquai 11, 3000 Bern
Day 2: Saturday, Nov. 4th 2017

9.00  **Session 3** "Psychological factors in acute and chronic pain"
      Chair: E. Gizewski
      • "Pain and fear in visceral pain"  
        S. Elsenbruch (Essen, D)
      • "Plasticity in chronic pain"  
        M. Diers (Mannheim, D)
      • "Functional connectivity in cerebral pain and migraine"  
        L. Michels (Zürich, CH)

10.00  **Session 4** "Methodological perspectives of functional neuroimaging"
       Chair: A. Federspiel, R. Wiest (Bern, CH)
       • "Functional ASL"  
         K. Jann (Los Angeles, USA)
       • "Functional BOLD MRI"  
         B. Biswal (New Jersey, USA)
       • "Detecting energy metabolites in brain disease"  
         A. Heerschap (Nijmegen, NL)

11.00-11.30 Coffee break

11.30  **Keynote Lecture** K. Henke (Bern, CH):  
       "Hippocampus and Memory"

12.30-13.30 Lunch / Poster session

13.30  **Session 5** "Structural and functional MRI in dementia / neurodegeneration"
       Chair: C. Stippich (Basel, CH)
       • "Practical MR-reading and structured reporting for dementia"  
         A. Tyndall (Basel, CH)
       • "Longitudinal changes of cerebral grey matter and blood flow in MCI"  
         L. Michels (Zürich, CH)
       • "Gait analysis and cognitive-motor dual task in fMRI"  
         M. Blatow (Basel, CH)

14.30  **Session 6** "Clinical-psychological MRI studies: Pitfalls and special effects"
       Chair: K. Lidzba (Bern, CH), A. Ischebeck (Graz, AT)
       • "Resting-state fMRI in the field of neuropsychiatrics"  
         S. Kornfeld (Bern, CH)
       • "Limitations of standard fMRI analyses to assess cognitive processes"  
         M. Himmelbach (Tübingen, D)
       • "Placebo/Nocebo effects on affective processing"  
         A. Wabnegger (Graz, AT)

15:30-15:45 Break

15.45  **Chapter Communications** Part II  
       Chair: S. Walther (Bern, CH)
       • "Interaction of region, gender, lateralization and age in cerebral energy metabolism at 31P MRS-Influence on further studies"  
         R. Steiger (Wien, AT)
       • "Exploring the relation between MR Spectroscopy features and the distance to MRI-visible solid tumour part in GBM patients"  
         N. Barros (Bern, CH)
       • "The memory function of high-frequency oscillations in human hippocampus"  
         S. Ruch (Bern, CH)
       • "Unexpected CBF response to anxiety reinforcing transcranial direct current stimulation"  
         M. Grieder (Bern, CH)
       • "Resting-State Hyperperfusion of the Supplementary Motor Area in Catatonia"  
         S. Walther (Bern, CH)
       • "Aberrant hyperconnectivity in the motor system at rest is linked to motor abnormalities in schizophrenia spectrum disorders"  
         A. Viher (Bern, CH)

17:00 Goodbye Coffee