

### **3rd BRAHE-meeting, October 22, 2014 at 12:00 - 18:00**

Biomedicum Helsinki, Lecture room 1, Haartmaninkatu 8, Helsinki

12:15 - 12:20 **Opening of the meeting**, Synnöve Carlson

12:20 - 13:35 **Research Infrastructures at AU, UH and HUCH** (13 + 2 min each) **Chair: Synnöve Carlson**

12:20 - 12:35 **Riitta Salmelin** (AU): National Roadmap for Research Infrastructures

12:35 - 12:50 **Veikko Jousmäki** (AU): Aalto NeuroImaging (ANI) Infrastructure

12:50 - 13:05 **Jyrki Mäkelä** (HUCH): Research Infrastructures at HUCH

13:05 - 13:20 **Leonard Khirug** (UH): Two-Photon Microscopy in awake rodents at the Viikki Campus

13:20 - 13:35 **Petri Hyytiä** (UH): Biomedicum Rodent MRI

13:35 - 14:15 **Science at AU, UH and HUCH** (13 + 2 min)

13:35 - 13:50 **Simo Monto** (UH, AU BRAHE postdoc): Behavioral relevance of working memory networks is revealed by MEG-guided TMS

13:50 - 14:15 **Snapshots** (One slide/researcher/2 min + 2 min questions)

**Venkat Swaroop Achuta** (UH): Defects of glutamate signaling during differentiation of neural progenitors lacking fragile X mental retardation protein

**Tage Orenius** (ORTON, UTU, AU): Interaction of pain and affect in the neural pain matrix

**Eeva Parkkonen** (AU): Dynamics of ~20-Hz motor-cortex oscillations in stroke recovery

**Tomi Rantamäki** (UH): Insights into the antidepressant mechanisms of isoflurane anesthesia

**Patricia Seja** (UH): Functional analysis of a single amino acid variant of KCC2 from patients with febrile seizures

**Sari Ylinen** (UH): Predictive coding mediates word recognition and learning in 12- and 24-month-old children

14:15 - 15:15 **Poster Session 1 + coffee** (60 min)

15:15 - 16:45 **Science at AU, UH and HUCH** (13 + 2 min each) **Chair: Eero Castren**

15:15 - 15:30 **Hanna Renvall** (AU): Attention to speech sounds within auditory scenes modifies temporal auditory cortical activity

15:30 - 15:45 **Mathieu Bourguignon** (AU): Corticokinematic coherence mainly reflects movement-induced proprioceptive feedback

15:45 - 16:00 **Pirta Hotulainen** (UH): Regulation of the actin cytoskeleton in dendritic spine morphogenesis

16:00 - 16:15 **Manuel Eugster** (AU): Predicting term-relevance from brain signals

16:15 - 16:30 **Koos Zevenhoven** (AU): Novel methods for improving source localization using hybrid ultra-low-field MRI and MEG

16:30 - 16:45 **Mikhail Yuryev** (UH): Laser-induced ATP dependent cortical calcium waves in E13-E15 mouse embryos ex utero

16:45 - 17:15 **Poster Session 2 + snacks** (30 min)

17:15 - 18:00 **Plenary lecture** (40 + 5 min) **Chair: Mikko Sams**

**Petri Ala-Laurila** (UH): Vision at its ultimate limits: optimal strategies of neural computation