Translational Neurobiology of the Pain System XXIII: Provoke, Probe and Modulate Pain Neuroplasticity Aalborg University, 18-19 June 2018



## Monday 18 June 2018: Pain Neuroplasticity

### Probing Pain Neuroplasticity

- 9.00 Multichannel EEG and assessment of cortical connectivity in relation to pain Federico G. Arguissain, Center for Neuroplasticity and Pain, Aalborg University, Denmark
- 9.35 Neurophysiological mechanisms of cortical neural synchronization and connectivity in vigilance: EEG and MRI windows on the mind *Claudio Babiloni, Department of Physiology and Pharmacology "Vittorio Erspamer", University of Rome "La Sapienza", Italy*
- 10.20 Break

#### Manifestations of Neuroplasticity and Reorganisation

- 10.45 Cortical plasticity as a basis of phantom limb pain Herta Flor, Department of Cognitive and Clinical Neuroscience, Central Institute of Mental Health, Heidelberg University, Germany
- 11.30 Manipulating bodily visual feedback with augmented reality to provoke plastic changes: is it possible? *Mikkel Thøgersen, Center for Neuroplasticity and Pain, Aalborg University, Denmark*
- 12.00 Lunch
- 13.00 Plastic changes after experimental pain: from the neurophysiology to the epigenetics Massimiliano Valeriani, Bambino Gesù Childrens Hospital, Italy
- 13.45 Use of EEG/MEG to explore plasticity in cortical nociceptive pathways Ulf Baumgärtner, Centrum für Biomedizin und Medizintechnik Mannheim (CBTM), Universität Heidelberg, Germany
- 14.25 Break

#### **Modulating Pain Neuroplasticity**

- 14.45 Effects of Repeated TMS on Neuropathic Pain Daniel Ciampi de Andrade, Universidade de São Paulo, Brazil
- 15.30 The neuromodulatory effects of tDCS and rTMS in pain and neuro-rehabilitation Mohit Kothari, Hammel Neurorehabilitation Centre and University Research Clinic, Aarhus University, Denmark
- 16.00 End of Day I



# **Tuesday 19 June 2018: Epigenetic Factors in Pain Neuroplasticity**

## **Epigenetics and Pain**

9.00	General introduction on epigenetics and pain
	Maria Carla Gerra, Center for Neuroplasticity and Pain, Aalborg University, Denmark
9.45	Environmental stimuli and epigenetic plasticity, from embryo to adulthood Annamaria Buschini, Department of Chemistry, Life Sciences and Environmental Sustainability, University of Parma, Italy
10.30	Break
10.45	Epigenetics: biomarkers research or mechanism for pathological condition development
	Inge Søkilde Pedersen, Aalborg University Hospital, Denmark
11.30	Questions / discussion
12.00	Lunch
13.00	Neutrophil extracellular traps in ulcerative colitis colon mucosa: A proteomics study of colon biopsies and perspectives for pain neuroplasticity
	Tue Bjerg Bennike, Laboratory of Medical Mass Spectrometry, Department of Health Science and Technology, Aalborg University, Denmark
13.45	MicroRNA as a preoperative biomarker for chronic postoperative pain following total knee arthroplasty – a preliminary analysis
	Rocco Giordano, Center for Neuroplasticity and Pain, Aalborg University, Denmark
14.05	My love story with DNA methylation - from drug addiction to pain Maria Carla Gerra, Center for Neuroplasticity and Pain, Aalborg University, Denmark
14.25	Questions / discussion

14.45 End of Day II