

Prague Meeting on Epileptology and Pediatric Neurology

16th November 2016
Vila Lanna, V Sadech 1,
Prague 6



13,00 **Introduction** (Pavel Kršek, Vladimír Komárek, Jakub Otáhal)

13,15 **1. Connectome in neurodevelopmental disorders**

Lieven Lagae: Connectome in autism and other neurodevelopmental disorders

Rosa Vydrová: Connectome in specific language impairment

Petr Ježdík: Electrophysiological characteristics of altered connectivity in specific language impairment

14,15 **Coffee break**

14,40 **2. Genetic causes of epilepsy and malformations of cortical development**

Tom Jacques: Cellular pathology of focal cortical dysplasia

Barbora Beňová: What is the role of somatic mutations in malformations of cortical development? Experience from EPNS fellowship on the Institute of Child Health UCL and GOSH

Petra Laššuthová: New insights into genetic causes of epileptic encephalopathies

15,40 **Coffee break**

16,00 **3. Pathogenesis of epilepsy in cortical dysplasia**

Eleonora Aronica: Molecular mechanisms and pathogenesis of epilepsy in cortical dysplasia

Martin Balaščík: Semaphorin signaling in brain development and disease

Přemysl Jiruška: Experimental models of malformations of cortical development

17,00 **Overall discussion**

17,15 **Social event / reception**

This scientific event is organized within the program "QUALITAS - Wellbeing in health and disease" of the Strategy AV21 of the Czech Academy of Sciences



Lieven Lagae

Lieven Lagae is Full Professor at the University of Leuven, Belgium (KUL), Head of the Paediatric Neurology Department of the KUL University Hospitals, and Director of the Childhood Epilepsy Program at the KUL University Hospitals. Lieven Lagae is the current President of the European Pediatric Neurology Society and serves as an elected Board Member of the International Child Neurology Association (ICNA). Since 2004, he is the Editor-in-Chief of the European Journal of Paediatric Neurology. His main scientific interest is the relationship between childhood epilepsy and cognitive development. Current epilepsy research projects include event-related potential (ERP) study of prefrontal functions in childhood epilepsy; wireless and miniaturised EEG systems for the detection of seizures; new anti-epileptic drugs in childhood epilepsy and brain stimulation in childhood epilepsy.



Tom Jacques

Tom Jacques runs a research group at the University College London Institute of Child Health focussing on brain tumours and paediatric epilepsy and provides the diagnostic neuropathology service for GOSH. He has held a Clinician Scientist Award for the past 6 years and has recently been awarded a nationally competitive HEFCE Clinical Senior Lectureship. Tom Jacques' research focuses on the role of stem cells in the development of paediatric brain disease. Specifically, he has recently shown that the major types of brain tumour can arise from stem cells and that the type of tumour is determined by the initiating genetic mutation. Tom has also isolated a pathological stem cell from a malformation of cortical development in children with severe epilepsy.



Eleonora Aronica

Eleonora Aronica has both a clinical and fundamental scientific background. She is actively involved in various research areas including neuro-oncology, neurodegenerative diseases and epilepsy. Her research focuses on the origins of epilepsy (epileptogenesis) and the causes of pharmacoresistance in brain conditions associated with epilepsy. Working with the Swammerdam Institute for Life Sciences (SILS), she is researching how molecular infection can alter the communication between glia cells and neurones, and how this can contribute to the genesis of epileptic incidents and the emergence of neuronal damage. Her research group is currently researching the mechanisms involved with chronic infections associated with epilepsy. Another of her research areas focuses on the mechanisms of early onset and progressive neurodegeneration associated with epilepsy. In 2011 she was awarded the Michael Prize (international award for the best contribution to scientific and to clinical research). She is the author of more than 200 peer-reviewed original articles and reviewer for various scientific journals.