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

13,15  1. Connectome in neurodevelopmental disorders

Liéven 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

Renzo Guerrini: Genetic background of cortical dysplasia and other MCDs
Katalin Štěrbová: New insights into genetic causes of epileptic encephalopathies
Barbora Beňová: Revealing genetic causes of cortical malformations: Experience from EPNS fellowship in Great Ormond Street Hospital, London, UK

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 Balaštík: 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.

Renzo Guerrini

Renzo Guerrini is a Professor of Child Neurology and Psychiatry at the University of Florence, Italy. He is also Head and Director of the Paediatric Neurology Unit and Laboratories and of the Neuroscience Department at Children’s Hospital A. Meyer, Florence. His research focuses on the neurophysiology and neurogenetics of epilepsies, brain development and mental retardation. Between 2002 and 2006, Renzo Guerrini chaired the International League against Epilepsy Commission on Paediatrics. In 2003, he received the Ambassador of Epilepsy award from the League. He is Associate Editor of Epilepsia and is a member of the editorial board for a number of other professional journals. He has published over 280 peer-reviewed papers and written 12 books.

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.