1st International Conference on Sleep Spindling

Thursday, May 12, 2016

08:00-09:00	**Registration**
09:00-09:10	**Opening Remarks** **Róbert BÓDIZS** Semmelweis University, Chair of the Scientific Committee
09:10-10:00	Basic mechanisms and rhythmogenesis-1 **Keynote Lecture** Thalamic cellular interactions and the duration of sleep spindles **László ACSÁDY** Institute of Experimental Medicine of the Hungarian Academy of Sciences, Hungary
10:00-10:25	**Invited Talk** Thalamic reticular nucleus, thalamic bursts and cortical spindles **Michael M. HALASSA** New York University, United States
10:25-10:40	Identification of higly connected brain sites associated with sleep spindles activity **Mario VALDERRAMA** Universidad de los Andes, Colombia
10:40-10:55	Spatiotemporal characteristics of the sleep spindle in human electrocorticography **Giovanni PIANTONI** Massachusetts General Hospital, United States
10:55-11:15	**Coffee break**
11:15-12:05	Gatekeepers of sleep **Keynote Lecture** Relationships between Spindles and K-complexes, as gatekeepers of our conscious awareness **George KOSTOPOULOS** University of Patras, Greece
12:05-12:20	Are sleep spindles inhibitory for pain? **Helene BASTUJI** Lyon Neuroscience Research Center (CRNL), France
12:20-14:00	**Lunch break**
14:00-14:50	Mesiotemporal structures and cross-frequency coupling **Keynote Lecture** Nature of sleep spindles in mesiotemporal structures **Zsófia CLEMENS** University of Pécs, Hungary
14:50-15:05	Slow oscillations, spindles and ripples are hierarchically nested in the human hippocampus **Til O. BERGMANN** University Hospital Tübingen, Germany
15:05-15:20	Phase-amplitude coupling of sleep spindles predicts risk of evolution to dementia in Parkinson disease **André ACHIM** Université du Québec à Montréal, Canada
15:20-15:40	**Coffee break**
15:40-16:30	Basic mechanisms and rhythmogenesis-2 **Keynote Lecture** Sleep spindles in the mouse: so small, yet so powerful **Anita LÜTHI** **University of Lausanne, Switzerland** Characterization of topographically specific sleep spindles in mice
16:30-16:45	**Jee Hyun CHOI** Korea Institute of Science and Technology, South Korea
16:45-17:35	Sleep regulation and sleep disorders **Keynote Lecture** Cortical spindles and sleep homeostasis **Vladyslav VYAZOVSKIY** University of Oxford, United Kingdom Changes of sleep spindle characteristics during split-night studies in patients with obstructive sleep apnea
17:35-17:50	**Peter ANDERER** Philips Austria GmbH, Austria
17:50-18:05	Sleep spindle characteristics before and after sleep deprivation in obstructive sleep apnea **Anna E. MULLINS** Woolcock Institute of Medical Research, Australia
18:05-20:00	**Welcome Reception**

Friday, May 13, 2016

09:00-09:50	Memory consolidation **Keynote Lecture** The role of sleep spindles for systems consolidation of memory **Jan BORN** University of Tübingen, Germany
09:50-10:15	**Invited Talk** Spindles: Coordination with other oscillations and the timing of replay **Lisa GENZEL** University of Edinburgh, United Kingdom
10:15-10:30	Sleep-dependent motor memory consolidation from adolescence to adulthood **Kerstin HOEDLMOSER** University of Salzburg, Austria
10:30-10:45	Local spindle networks in the right hemisphere enhance awareness of regularity after sleep **Juliana YORDANOVA** Bulgarian Academy of Sciences, Bulgaria
10:45-11:05	**Coffee break**
11:05-11:55	Networks and functions **Keynote Lecture** Sleep spindles: what are they for? **György BUZSÁKI** NYU School of Medicine, United States
11:55-14:00	**Lunch break**
14:00-14:15	Methodological corner A new, minimal assumption, spindle analysis method, applied to PTSD sleep **Lucia M.TALAMINI** University of Amsterdam, The Netherlands
14:15-14:30	SPISOP – fast replication and sharing of sleep EEG analyis in one toolbox **Frederik D. WEBER** University of Tübingen, Germany
14:30-15:20	Phenotypic variation and neurobehavioral correlates **Keynote Presentation** Sleep spindles are sexually dimorphic developmental and trait neurobehavioral markers **Róbert BÓDIZS** Semmelweis University, Hungary
15:20-15:35	Sleep spindles and intelligence in early childhood - developmental and trait-dependent aspects **Péter P. UJMA** Semmelweis University, Hungary
15:35-15:55	**Coffee break**
15:55-16:05	Is white matter diffusion implicated in age-related modifications of sleep spindles? **Pierre-Olivier GAUDREAULT** University of Montreal, Canada
16:05-16:20	Decreased sigma-band EEG connectivity in aging **Maude BOUCHARD** University of Montreal, Canada
16:20-16:35	Characterizing sleep spindles in 11,630 Individuals **Shaun M. PURCELL** Icahn School of Medicine at Mount Sinai, United States
16:35-18:35	**Poster Session** Behaviour, cognitive performance and memory Clinical corner and biomarkers: Sleep disorders, Neurology, Psychiatry
19:00-22:00	**Gala Dinner (optional)**

Saturday May 14, 2016

09:00-09:50	Epilepsy / Biomarkers-1 **Keynote Presentation** Sleep spindles in epilepsy **Dániel FABÓ** National Institute of Neuroscience, Hungary
09:50-10:05	Sleep spindles and absence epilepsy in WAG/Rij rats **Evgenia Yu. SITNIKOVA** Institute of Higher Nervous Activity Russian Academy of Sciences, Russia
10:05-10:20	Genetic absence-related spike-and-wave discharges turn off while spindles turn on during the wake-sleep transition **Didier PINAULT** French National Institute of Health and Medical Research (INSERM), France
10:20-10:40	**Coffee break**
10:40-11:30	Affective processes / consciousness, memory **Keynote Presentation** Spindles and their significance for insominia and disorders of consciousness **Manuel SCHABUS** University of Salzburg, Austria
11:30-11:55	**Invited Talk** Sleep spindle-dependent mechanisms to reorganize the forebrain **Gina R. POE** University of Michigan, United States
11:55-12:10	Role of sleep spindles and sigma power across multiple sleep bouts on emotional memory in early childhood **Rebecca M. C. SPENCER** University of Massachusetts, Amherst, United States
12:10-14:00	**Lunch break**
14:00-15:00	**Poster Session** Basic mechanisms and rhythmogenesis / Methodology
15:00-15:25	Epilepsy / Biomarkers-2 **Invited Talk** Reduced sleep spindles in schizophrenia: a treatable endophenotype that links risk genes to impaired cognition? **Dara S. MANOACH** Massachusetts General Hospital, United States
15:25-15:40	Sleep spindle deficit in schizophrenia: a critical overview and novel findings **Armando D'AGOSTINO** The University of Milan, Italy
15:40-15:55	Microstructue of sleep spindles in a multiple sclerosis animal model **Alejandro OSORIO-FORERO** Universidad de los Andes, Colombia
15:55-16:15	**Coffee break**
16:15-16:40	Stimulating sleep spindles **Invited Talk** Invited review: rational design of non-invasive brain stimulation to target oscillations **Flavio FRÖHLICH** University of North Carolina at Chapel Hill, United States
16:40-16:55	The impact of transcranial electrical stimulation during sleep on motor sequence learning **Philipp FUCHS** University of Salzburg, Austria
16:55-17:10	Spatial organization of sleep spindles during acoustic phase-locked stimulation of NREM slow waves **Miguel G. NAVARRETE** Universidad de los Andes, Colombia
17:10-17:20	**Closing Ceremony** **Róbert BÓDIZS** Semmelweis University, Chair of the Scientific Committee
