2nd International Conference on Sleep Spindling and Related Phenomena

24 - 26 May, 2018 / Budapest, Hungary / Danubius Hotel Gellért

Scientific Programme

24 May / Thursday		
08:30-09:30	60	**Registration /** Tea Hall Foyer
09:30-09:40	10	**Opening thoughts /** all presentations will be held at Tea Hall
		Sleep spindles and epilepsy / *Section chair: Magor Lőrincz*
09:40-10:30	50	Keynote lecture / Vincenzo Crunelli: Firing dynamics of cortico-thalamic neuronal assemblies during absence seizures
10:30-10:45	15	Evgenia Sitnikova: Low-frequency precursors of sleep spindles in EEG in a rat model of absence epilepsy
10:45-11:10	25	**Coffee /** Tea Hall Foyer
		Sleep slow waves, spindles and thalamic gating - I. / *Section chair: Péter Barthó*
11:10-12:00	50	Keynote lecture / László Détári: Delta waves and Up/Down states - are they separate entities?
12:00-12:15	15	Christine Blume: (No) Need to Wake up? Inhibitory Function of Sleep Spindles is Tuned to Stimulus Salience
12:15-12:30	15	Manuel Schabus: Continued Evaluation of Own Name Stimuli in deep NREM sleep – A hd-EEG study
12:30-12:45	15	Thomas Gent: Thalamic dual-control of sleep and wakefulness
12:45-14:00	75	**Lunch /** Panoráma Restaurant
		Thalamocortical mechanisms of sleep spindle generation - I. / *Section chair: Péter Przemyslaw Ujma*
14:00-14:50	50	Keynote lecture / David McCormick: State dependent activity of wake and sleep
14.50-15:05	15	Laura M. J. Fernandez: Local, spindle-enriched non-REM sleep in mouse somatosensory cortex enabled through heterogeneous thalamic burst propensity
15:05-15:20	15	Mojtaba Bandarabadi: Dissecting local sleep spindles in the thalamocortical system
15:20-16:00	40	**Coffee /** Tea Hall Foyer
		The frequency of sleep spindle oscillations / *Section chair: Péter Barthó*
16:00-16:50	50	Keynote lecture / Igor Timofeev: In a search of fast and slow spindles
16:50-17:20	30	Invited talk / Róbert Bódizs: Reflections on sleep spindle frequencies
		Sleep slow waves, spindles and thalamic gating - II. / *Section chair: Vincenzo Crunelli*
17:20-18:10	50	Keynote lecture / Magor Lőrincz: State-dependent activity in the visual thalamus
18:10-18:25	15	Valentina Zapata: Coupling gamma and sleep spindles activities through acoustic stimulation during NREM sleep: evidences from direct intracranial EEG recordings
18:30-20:30	120	**Welcome reception /** Panoráma Restaurant
25 May / Friday		
		From sleep spindles to infraslow oscillation, circadian rhythms, and REM sleep / *Section chair: Róbert Bódizs*
09.00-09.50	50	Keynote lecture / Alpár S. Lázár: The circadian and sleep dependent regulation of sleep spindles and associated brain oscillatory activity
		in health and neurological disease
09.50-10.05	15	Anita Luthi: The 0.02 Hz-oscillation in sigma power times spontaneous transitions out of undisturbed non-REM sleep in mouse
10.05-10.20	15	Péter Simor: The heterogeneity of REM sleep: Oscillatory activity during phasic and tonic microstates
10.20-10.40	20	**Coffee /** Tea Hall Foyer
		Sleep spindle oscillations, REM sleep behavior disorder, and alpha-synucleinopathies / *Section chair: Péter Simor*
10.40-11.10	30	Invited talk / Carlos Schenck: REM Sleep Behavior Disorder (RBD) and alpha-Synuclein Neurodegenerative Disorders
11:10-11:40	30	Invited talk / Poul Jørgen Jennum: Sleep spindle alterations in REM sleep Behavior Disorder and Parkinson's disease

11:40-12:10	30	Invited talk / André Achim: The group effect in phase-amplitude coupling of sleep spindles in Parkinson's Disease collapses when filter frequencies
		are adapted to each sleeper. What does this say about the brain changes?
12.10-13.30	80	**Lunch /** Panoráma Restaurant
		Sleep spindles, memory and neural plasticity - I. / *Section chair: Manuel Schabus*
13.30-14:20	50	Keynote lecture / Sara C. Mednick: Tracking the role of sleep spindles in human memory consolidation
14.20-14:35	15	James W. Antony: Sleep spindle refractoriness segregates periods of memory reactivation
14.35-14:50	15	Penny A. Lewis: Recasting reality: how memory replay in sleep boosts creative problem solving
14.50-15:05	15	Ivaylo B. Iotchev: A case for strong analogy – The features of human sleep spindles and analogue bursts in the dog change similarly
		in response to age, sex and learning demand
15.05-15.30	25	**Coffee /** Tea Hall Foyer
		Sleep spindles, memory and neural plasticity - II. / *Section chair: Martin Dresler*
15.30-16.20	50	Keynote lecture / Julie Carrier: Spindling in aging: a window on cerebral and cognitive integrity
16.20-16:35	15	Leonore Bovy: Sleep spindles in depression
16.35-16:50	15	Frederik D. Weber: Decoding the 'DNA' of sleep: Dynamics, Networks and Associations of sleep EEG phenomena
16:50-17:05	15	Takuji Izuno: Increase of sleep spindle density induced by rTMS for major depression
17.05-17.20	15	David L. Henao: Enhancement of sleep spindles through closed-loop Transcranial Electrical Stimulation of NREM slow oscillations
19.00-22.00	180	**Dinner cruise - optional** / Rapszódia Boat / Meeting point: Entrance of Danubius Hotel Gellért at 18:45
26 May / Saturday		
		Sleep spindles in different cortical layers / *Section chair: Péter Barthó*
09.00-09.50	50	Keynote lecture / István Ulbert: Heterogeneous origins of human sleep spindles in different cortical layers
09.50-10.20	30	Invited talk / Péter Przemyslaw Ujma: The intracortical profile of sleep spindles in humans does not differ by spindle frequency and globality
10:20-10:45	25	**Coffee /** Tea Hall Foyer
		Replication crisis and methodological aspects / *Section chair: Róbert Bódizs*
10.45-11.15	30	Invited talk / Martin Dresler: Replication in sleep research
11:15-11:30	15	Christian O'Reilly: How slow waves modulate the timing of sleep spindles
11:30-11:45	15	Benjamin D. Yetton: The MODA sleep spindle dataset: A large, open, high quality dataset of annotated spindles
11:45-12:00	15	Simon Warby: Heritability of spindles and spindle characteristics is influenced by spindle detection method used
12:00-12:15	15	Group photo
12:15-13:30	75	**Lunch /** Panoráma Restaurant
13:30-14.30	60	Poster section: The several aspects of sleep spindles (Gobelin Hall)
		Thalamocortical mechanisms of sleep spindle generation - II. / *Section chair: Róbert Bódizs*
14:30-15:20	50	Keynote lecture / Péter Barthó: Cortical feedback and thalamocortical oscillations
15:20-15:45	25	**Coffee /** Tea Hall Foyer
		Developmental atypicalities and individual differences / *Section chair: Péter Przemyslaw Ujma*
15:45--16:00	15	Claudia Schilling: Fast sleep spindle density is associated with rs4680 (Val108/158Met) genotype of Catechol-O-Methyltransferase (COMT)
16:00-16:15	15	Anu-Katriina Pesonen: Attention deficit/hyperactivity disorder (ADHD) symptoms are associated with decreased activity of fast sleep spindles
		and poorer procedural overnight learning during adolescence
16:15-16:30	15	Roy Cox: Large-scale structure and individual fingerprints of locally coupled sleep oscillations
		Disorders of consciousness, disorders of sleep / *Section chair: Péter Simor*
16:30-16:45	15	Malgorzata Wislowska: Sleep spindles indicate recovery from severe brain injury
16:45-17:00	15	Lieke Hermans: Sleep onset misperception is associated with sleep instability
17:00-17:15	15	Nathan E. Cross: Withdrawal from benzodiazepines in older adults with chronic insomnia is associated with a reduction in sleep spindles

26 May, Saturday	**Poster presentations: The several aspects of sleep spindles /** Gobelin Hall
	Mohamed Ameen: The effect of auditory stimulation on the density, duration and frequency of sleep spindles
	Cristina Blanco Duque: GluA1 knockout mice show reduced EEG sleep spindle activity without presenting long-term memory deficits
	Mariangela Cerasuolo: Cognitive training increases the frequency of occurrence of fast spindles and sleep stability in subsequent night sleep
	Nathan E. Cross: Wonambi: an open source toolbox for the analysis of sleep spindles and related EEG oscillations
	Raly James Custodio: Decreased NREM sigma, delta, and beta oscillations in a Transgenic mouse with learning and memory impairments
	Martin Dresler: Sleep spindles and general intelligence: a meta-analysis
	Zsuzsa Emri: Modulation of spindle activity through the alterations of intrathalamic connections – a modelling study
	Michael Hahn: Developmental changes of sleep spindles and slow wave-spindle coupling from childhood to adolescence – a longitudinal study
	Vasil Kolev: Different dynamic coupling between sleep spindles and down - and up- states of slow waves in human SWS
	Gábor Kozák: Long-term evolution of absence epilepsy in Long-Evans
	Liisa K. M. Kuula: Schizotypal traits are associated with sleep spindles and REM in adolescence
	Miguel Gonzalo Navarrete Mejia: Timing and phase of closed-loop acoustic stimulation predicts the enhancement of slow oscillations but not the efficiency of spindles in young and aged adults
	Chelsea M. Reynolds: The relationship between sleep spindles and cognitive performance following sleep restriction and sleep extension in adolescents
	Anne Richards: Deficits in sleep spindle characteristics in progressive nuclear palsy vs. healthy controls
	Anna Sakovics: “Sleep” spindles during wakefulness in the hippocampal formation
	Will T. Schneider: Characterising sleep spindles and electroencephalography activity in sheep (Ovis aries)
	Julie Seibt: Reassessment of cortical spindles in rodents: characteristics and underlying physiology
	Evgenia Sitnikova: 4 Hz rhythmic precursors of sleep spindles in rat EEG
	Péter Przemyslaw Ujma: Individual slow wave morphology is a marker of ageing
	Gwen M. van der Wijk: REM sleep microstates: a high density EEG study of phasic and tonic REM sleep
	Márta Virág: The role of sleep spindles in overnight verbal memory consolidation in temporal lobe epilepsy patients
	Simon Warby: A spindle detection algorithm that emulates human sleep spindle scoring
	Frederik D. Weber: SpiSOP – Spindles, Slow Oscillations, Power density and fast replication of basic sleep EEG analyses in one tool
	Oren M. Weiner: Associations between EEG cross-frequency coupling during sleep and declarative learning in healthy older adults: A pilot study
	Juliana Yordanova: Dynamic coupling between slow waves and sleep spindles depends differently on NREM sleep stages (SWS and S2)