<table>
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<tr>
<th>Time</th>
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<tbody>
<tr>
<td>09:00 - 12:30</td>
<td><strong>Teaching Course 1 - Year in review - Sleep mechanisms and functions</strong></td>
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<tr>
<td>09:00 - 10:10</td>
<td>Circadian System</td>
</tr>
<tr>
<td></td>
<td>T. DeBoer (Leiden, NL)</td>
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<tr>
<td>10:10 - 11:20</td>
<td>Human sleep functions</td>
</tr>
<tr>
<td></td>
<td>P. Peigneux (Bruxelles, BE)</td>
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<tr>
<td>11:20 - 12:30</td>
<td>Sleep mechanisms and functions</td>
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<tr>
<td></td>
<td>P.-H. Luppi (Lyon, FR)</td>
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<tbody>
<tr>
<td>09:00 - 12:30</td>
<td><strong>Teaching Course 3 - Without sleep but during sleep - the dilemma of cardio-respiratory polygraphy. A practical scoring course</strong></td>
</tr>
<tr>
<td>09:00 - 09:20</td>
<td>Introduction: Scoring cardiorespiratory polygraphy: Rules, obstacles and strategies</td>
</tr>
<tr>
<td></td>
<td>L. Grote (Gothenburg, SE)</td>
</tr>
<tr>
<td>09:20 - 09:40</td>
<td>Scoring of central sleep disordered breathing events</td>
</tr>
<tr>
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<td>H. Schneider (Baltimore, US)</td>
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<tr>
<td>09:40 - 10:15</td>
<td>Arterial tonometry: A new approach to address diagnostic procedures with level 3 devices - Theory and practical examples</td>
</tr>
<tr>
<td></td>
<td>H. Schneider (Baltimore, US)</td>
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<td></td>
<td>L. Grote (Gothenburg, SE)</td>
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<tr>
<td>10:15 - 10:30</td>
<td>Break</td>
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<tr>
<td>10:30 - 12:30</td>
<td>Sleep medicine clinics - Practical scoring of patients cases studied with cardiorespiratory polygraphy - a guided, interactive scoring session</td>
</tr>
<tr>
<td></td>
<td>H. Schneider (Baltimore, US)</td>
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<td>L. Grote (Gothenburg, SE)</td>
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<tbody>
<tr>
<td>09:00 - 12:30</td>
<td><strong>Teaching Course 5 - Techniques in sleep research and medicine</strong></td>
</tr>
<tr>
<td>09:00 - 09:35</td>
<td>Evaluation of sleep and daytime function: Questionnaire - Uses, application and limitations in sleep research and medicine</td>
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<td></td>
<td>D. Riemann (Freiburg, DE)</td>
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</table>
### Scientific Programme

<table>
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<tr>
<th>Time</th>
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</table>
| **09:35 - 10:10** | Polysomnography/polygraphy. Indications, evaluation, uses of manual, semiquanted and quantitated evaluations. Pro and cons  
P. Jennum (Glostrup, DK) |
| **10:10 - 10:45** | Measures for vigilance: Multiple Sleep Latency Test (MSLT), Maintenance Wakefulness Test (MWT), The Sustained Attention to Response Test (SART). Strength and limitations  
M. Partinen (HELSINKI, FI) |
| **10:45 - 11:20** | Circadian measures: actigraphy, temperature. Wearable devices for long term polygraphic recordings, smart phones in sleep research  
T. Penzel (Berlin, DE) |
| **11:20 - 11:55** | Imaging techniques (visualization of brain structures including brain stem and midbrain, fMRI, PET, others)  
D. Analdi (Genoa, IT) |
| **11:55 - 12:30** | Molecular methods in diagnosing sleep and sleep disorders (orexin, melatonin, cortisol, MCH, adenosine, histamine, GWA)  
Y. Dauvilliers (Montpellier, FR) |

**Track Human Sleep, Other Session, Boston 3**

<table>
<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td><strong>09:00 - 12:30</strong></td>
<td><strong>NATUS - Clinical PSG/PG scoring &amp; interpretation workshop - Part I</strong></td>
</tr>
<tr>
<td><strong>09:00 - 09:45</strong></td>
<td>Recommended &amp; Alternative sensors</td>
</tr>
<tr>
<td><strong>09:45 - 10:30</strong></td>
<td>AASM Guidelines for Scoring Sleep Stages &amp; Arousals</td>
</tr>
<tr>
<td><strong>10:30 - 11:00</strong></td>
<td>Coffee Break</td>
</tr>
<tr>
<td><strong>11:00 - 12:30</strong></td>
<td>Case discussion I - Scoring Sleep Stages &amp; Arousals</td>
</tr>
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</table>

**Track General, Teaching Course, Darwin**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td><strong>13:00 - 16:30</strong></td>
<td><strong>Teaching Course 2 - Year in review - Clinical</strong></td>
</tr>
</tbody>
</table>
| **13:00 - 14:10** | Sleep related movement disorder  
M. Manconi (Lugano, CH) |
| **14:10 - 15:20** | Narcolepsy and hypersomnia  
Y. Dauvilliers (Montpellier, FR) |
| **15:20 - 16:30** | Sleep disordered breathing (SDB)  
W. Randerath (Solingen, DE) |
Scientific Programme

Track General, Teaching Course, Boston 1

13:00 - 16:30  **Teaching Course 4 - Digital Sleep: Internet and Smartphone Application for Sleep**

13:00 - 14:10  Digitalization, miniaturization and networks: medicinal-technical innovation for sleep medicine  
H. Malberg (Dresden, DE)

14:10 - 15:20  Mobile and wearable systems for monitoring sleep and sleep disorders  
W. Karlen (Zürich, CH)

15:20 - 16:30  Can we use smartphone behavior to learn how sleep-wake disease impacts our day-to-day lives?  
A. Ghosh (Leiden, NL)

Track General, Early Career Day, Boston 2

13:00 - 16:30  **Early Career Day - Media training with Nelleke Koop and 'How to write a paper' by Erna Sif Arnardottir**

13:00 - 13:05  Welcome and introduction

13:05 - 15:00  Media training  
N. Koop (Amsterdam, NL)

15:00 - 15:30  Coffee break

15:30 - 16:20  How to write a paper  
E.S. Arnardottir (Reykjavik, IS)

16:20 - 16:30  Election for new ECRN committee members

Track Human Sleep, Other Session, Boston 3

13:00 - 17:00  **NATUS - Clinical PSG/PG scoring & interpretation workshop - Part II**

13:00 - 13:45  AASM Guidelines for scoring respiratory events

13:45 - 14:30  Case discussion II-Scoring Respiratory events

14:30 - 15:00  Coffee Break

15:00 - 15:45  AASM Guidelines for scoring LMs

15:45 - 16:15  Case Discussion III- Scoring Limb Movements

16:15 - 17:00  What are you missing from the interpretation of PG recording?

Track General, Opening/Closing Session, San Francisco

17:00 - 19:00  **Opening Session**
### Scientific Programme

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<tr>
<th>Time</th>
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<th>Title</th>
<th>Author(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>17:00 - 17:15</td>
<td>O001</td>
<td>Preserved neuron reactivity dynamics during prolonged wakefulness is linked to cognitive fitness in aging, independently of tau and amyloid beta burden</td>
<td>M. Van Egroo (Liège, BE)</td>
</tr>
<tr>
<td>17:15 - 17:30</td>
<td>O002</td>
<td>Discovering the role of miR-709 in the sleep homeostatic process</td>
<td>K. Kompotis (Lausanne, Vaud, CH)</td>
</tr>
<tr>
<td>17:30 - 17:45</td>
<td>O003</td>
<td>Symptom-based clinical subtypes of obstructive sleep apnoea show differences in spectral power and immediate post-arousal dynamics</td>
<td>D. Mazzotti (Philadelphia, PA, US)</td>
</tr>
<tr>
<td>17:45 - 18:00</td>
<td>O004</td>
<td>The impact of treating insomnia upon functional health, psychological wellbeing and sleep-related quality of life: a randomised controlled trial with mediation analysis</td>
<td>A.I. Luik (Oxford, Oxfordshire, UK)</td>
</tr>
</tbody>
</table>
## Scientific Programme

### Wednesday, 26 September 2018

**Neuropsychiatry Track, Symposium, San Francisco**

**08:30 - 10:30**  
Unraveling the neurobiology of sleep in normal ageing and in neurodegeneration

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<tr>
<th>Time</th>
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<tbody>
<tr>
<td>08:30</td>
<td>Sleep oscillations and the pathogenesis of Alzheimer’s disease</td>
<td>R. Osorio</td>
<td>New York, US</td>
</tr>
<tr>
<td>09:00</td>
<td>Orexin and Alzheimer’s disease</td>
<td>C. Liguori</td>
<td>Rome, IT</td>
</tr>
<tr>
<td>09:30</td>
<td>Isolated RBD, an early stage of α-synucleinopathy</td>
<td>B. Högl</td>
<td>Innsbruck, AT</td>
</tr>
<tr>
<td>10:00</td>
<td>Is OSA associated with pathological aging? A neuropsychological and neuroimaging perspective</td>
<td>N. Gosselin</td>
<td>Montreal, CA</td>
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</table>

**Track Human Sleep, Symposium, Montreal**

**08:30 - 10:30**  
The Big Sleep: unraveling insomnia using big data

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<tr>
<td>08:30</td>
<td>Epidemiology, genetic models and epigenetics of insomnia</td>
<td>T. Paunio</td>
<td>Helsinki, Finland, FI</td>
</tr>
<tr>
<td>09:00</td>
<td>Trait and life history profiles reveal stable insomnia subtypes</td>
<td>T.F. Blanken</td>
<td>Amsterdam, NL</td>
</tr>
<tr>
<td>09:30</td>
<td>Genome-wide analysis of insomnia in UK Biobank and 23andMe identifies novel loci and functional pathways</td>
<td>P. Jansen</td>
<td>Amsterdam, Zuid-Holland, NL</td>
</tr>
<tr>
<td>10:00</td>
<td>Modelling sleep disorders in mice</td>
<td>V. Tucci</td>
<td>Genoa, IT</td>
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</table>

**Track Translational, Symposium, Sydney**

**08:30 - 10:30**  
Circadian modulation of EEG brain activity and cognition, and the impact of light on sleep

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<tr>
<td>08:30</td>
<td>The role of light in regulating alertness and performance in mice</td>
<td>S. Peirson</td>
<td>Oxford, UK</td>
</tr>
<tr>
<td>09:00</td>
<td>Effects of the circadian system and circadian misalignment on cognition in non-shift workers and chronic shift workers</td>
<td>S. Chellappa</td>
<td>Boston, US</td>
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</table>
### Scientific Programme

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<tbody>
<tr>
<td>09:30 - 10:00</td>
<td>15</td>
<td>Relationship between daytime light exposure and EEG sleep architecture, slow-wave activity, and sleep quality in young healthy office workers</td>
<td>M. Gordijn (Groningen, NL)</td>
</tr>
<tr>
<td>10:00 - 10:30</td>
<td>16</td>
<td>Impact of different light exposures in the evening on EEG slow-wave activity and REM sleep</td>
<td>M. Münch (Berlin, DE)</td>
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<tbody>
<tr>
<td>08:30 - 09:30</td>
<td></td>
<td><strong>Sleep and driving</strong></td>
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<tr>
<td>08:30 - 08:42</td>
<td>O017</td>
<td>Maintenance of Wakefulness Test, real and simulated driving in narcolepsy/hypersomnia patients</td>
<td>P. Sagaspe (Bordeaux, FR)</td>
</tr>
<tr>
<td>08:42 - 08:54</td>
<td>O018</td>
<td>To predict sleep related accidental risk of patients with obstructive sleep apnea syndrome: self reported sleepiness at the wheel versus Apnea Hypopnea Index</td>
<td>P. Philip (BORDEAUX, FR)</td>
</tr>
<tr>
<td>08:54 - 09:06</td>
<td>O019</td>
<td>Diagnostic patterns of sleep- and vigilance tests in distinct causes of excessive daytime sleepiness</td>
<td>D. Andres (Bern, CH)</td>
</tr>
<tr>
<td>09:06 - 09:18</td>
<td>O020</td>
<td>Moderate and severe OSA in males impair psychomotor reaction times assessed by CRD-series testing</td>
<td>Z. Dogas (Split, HR)</td>
</tr>
<tr>
<td>09:18 - 09:30</td>
<td>O021</td>
<td>A pre-drive ocular assessment predicts subsequent driving impairment: a naturalistic driving study in shift workers</td>
<td>M.D. Mulhall (Melbourne, VIC, AU)</td>
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<tr>
<td>08:30 - 10:30</td>
<td></td>
<td><strong>New methods in basic and clinical sleep research</strong></td>
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<tr>
<td>08:30 - 08:42</td>
<td>O022</td>
<td>Environmental influence on the behaviorally defined sleep (rest) in a wild nocturnal primate Nycticebus javanicus</td>
<td>K. Reinhardt (Oxford, UK)</td>
</tr>
<tr>
<td>08:42 - 08:54</td>
<td>O023</td>
<td>Two million nights to characterize sleep heterogeneity: what objective and self report big data tell us</td>
<td>R.J. Raymann (Carlsbad, CA, US)</td>
</tr>
<tr>
<td>08:54 - 09:06</td>
<td>O024</td>
<td>Studying the Temporal Dynamics of Human Sleep in Real Life and Large Numbers</td>
<td>E. Winnebeck (Munich, DE)</td>
</tr>
<tr>
<td>09:06 - 09:18</td>
<td>O025</td>
<td>Scoring sleep with artificial intelligence enables quantification of sleep stage ambiguity</td>
<td>P. Anderer (Vienna, AT)</td>
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<tr>
<td>09:18 - 09:30</td>
<td>O026</td>
<td>New spectral analysis method to identify trait-like features in NREM sleep power spectra</td>
<td>G. Hammad (Liège, BE)</td>
</tr>
<tr>
<td>09:30 - 09:42</td>
<td>O027</td>
<td>Cognitive functioning following sleep deprivation is moderated by time-of-day: results from the Karolinska WakeApp</td>
<td>B.C. Holding (Stockholm, SE)</td>
</tr>
<tr>
<td>09:42 - 09:54</td>
<td>O028</td>
<td>A computer algorithm to quantify REM sleep without atonia</td>
<td>A. Papakonstantinou (Berlin, DE)</td>
</tr>
<tr>
<td>09:54 - 10:06</td>
<td>O029</td>
<td>Evaluation of night-to-night variability of sleep apnea in home polysomnography</td>
<td>L. Rohling (Zwolle, Overijssel, NL)</td>
</tr>
<tr>
<td>10:06 - 10:18</td>
<td>O030</td>
<td>Accuracy of detecting sleep apnea using machine-held submental ultrasonography</td>
<td>P.-L. Lee (Taipei, TW)</td>
</tr>
<tr>
<td>10:18 - 10:30</td>
<td>O031</td>
<td>Cerebral free-water imaging with obstructive sleep apnea severity</td>
<td>A.-A. Baril (Montreal, QC, CA)</td>
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### Track General, ESST Meeting, Rio

**08:30 - 10:30**

**ESST Meeting - Session 1 - The state of the art in sleep technology**

- 08:30 - 09:00  
  Sign in and welcome  
- 09:00 - 09:30  
  New technologies in sleep monitoring
  T. Penzel (Berlin, DE)  
- 09:30 - 10:00  
  CPAP telemonitoring
  P. Murphie (Edinburgh, UK)  
- 10:00 - 10:30  
  Paediatric polygraphy scoring
  K. Russo (UK)

### Basic Track, Oral Session, Singapore

**09:30 - 10:30**

**Sleep, - omics and novel cellular and molecular mechanics**

- 09:30 - 09:42  
  Predicted gene expression in the brain is associated with sleep macrostructure in healthy young individuals
  P. Ghaemmaghami (Liege, BE)  
- 09:42 - 09:54  
  The cortical synaptic transcriptome is organized by clocks, but its proteome is driven by sleep
  S. Noya (Zurich, Zurich, CH)
mGluR5-dependent nuclear speckle assembly drives sleep-wake transcriptomics
A. Spinnler (Zürich, CH)

RNA-Seq analysis of the impact of sleep deprivation in medial prefrontal cortex of young and old mice
X. Guo (Philadelphia, PA, US)

The effects of insufficient sleep on microglial morphology and functional state
H.-K. Wigren (Helsinki, FI)

Case Discussion, San Francisco

Case Discussion - Parasomnias, movement disorders of sleep and paroxysmal disorders
11:00 - 11:20
Standing up and walking during the night: not always a disorder of arousal
F. Provini (Bologna, IT)

11:20 - 11:40
RBD or something else?
A. Iranzo (Barcelona, ES)

11:40 - 12:00
PLMS without RLS: Video and case discussion
M. Manconi (Lugano, CH)

Basic Track, Round Table, Montreal

Preclinical systematic reviews and meta-analysis in sleep research
11:00 - 11:07
Introduction to systematic review and meta-analysis of preclinical animal studies
R. de Vries (Nijmegen, NL)

11:07 - 11:14
Meta-analysis on the relationship between sleep deprivation and anxiety in rodents
G. Pires (São Paulo, BR)

11:14 - 11:21
Adenosine and sleep: a systematic review and meta-analyses of the preclinical literature
C.H. Leenaars (Nijmegen, NL)

11:21 - 11:28
Systematic review on the relationship between monoamines and sleep
J.M. Menon (Nijmegen, NL)

11:28 - 12:00
Discussion
### Scientific Programme

#### Basic Track, Oral Session, Sydney

11:00 - 12:00  
**Lack of sleep: effects on periphery and the brain**

11:00 - 11:12  
**Effects of sleep restriction on glucose tolerance in adolescents**  
J. Gooley (Singapore, SG)

11:12 - 11:24  
**The relationship between adolescents’ sleep spindles and cognitive performance following experimental sleep restriction**  
C.M. Reynolds (Adelaide, SA, AU)

11:24 - 11:36  
**Association between individual impairments in glucose metabolism and cognitive performance in response to sleep restriction**  
E.-M. Elmenhorst (Cologne, DE)

11:36 - 11:48  
**Investigation of the neural substrates underlying the homeostatic sleep response in the basal forebrain**  
H. Bouaouda (West Roxbury, MA, US)

11:48 - 12:00  
**‘Waking at a lower cost’: running wheel access reduces sleep propensity**  
L. Milinski (Oxford, UK)

#### Track General, ESST Meeting, Rio

11:00 - 13:30  
**ESST Meeting - Session 2 - Hot topics in sleep medicine**

11:00 - 12:00  
**Keynote: Sleep and dementia**  
A. Lim (Toronto, CA)

12:00 - 12:30  
**Talk: Sleep apnoea in women**  
A. Ryckx-Gheeraert (Basel, CH)

12:30 - 13:15  
**Lunch break**

13:15 - 13:30  
**Compumedics lunchtime talk (sponsored)**  
D. Vermeiren (Brussels, BE)

#### Poster Session, Poster, Poster Exhibition

**Poster Session 1 - Poster viewing**

#### Cellular, molecular biology & genetics

**P001 Insulin resistance and leptin levels in patients with obstructive sleep apnea**  
A. Khajeh-Mehrizi (Tehran, IR)

**P002 Genetic risk factors for schizophrenia associate with sleep spindle activity in healthy adolescents**  
I. Merikanto (helsinki, FI)
Scientific Programme

P003  Neuron-specific interleukin-1 receptor accessory protein is required for the maturation of small network emergent sleep-like electrophysiological properties
J. Nguyen (Spokane, WA, US)

P004  Effect of cyclical intermittent hypoxia on mouse model of Ad5CMVCre induced solitary lung cancer progression and spontaneous metastases in KrasG12D+; p53fl/fl; myristolated p110fl/fl ROSA-gfp
D. Lim (Philadelphia, PA, US)

P005  Key elements in biology and physiology of Hcrt and Mch cells affecting normal sleep
A. Seifinejad (Lausanne, VD, CH)

P006  Oxidative stress in Caucasian and Asian menopausal women with sleep disorders
N. Semenova (Irkutsk, RU)

P007  Melatonin receptor type 1A gene linked to intolerance to shift work and Alzheimer’s disease in old age
S. Sulkava (Helsinki, FI)

P008  The impact of insufficient sleep on microglia morphology
S. Steffens (Helsinki, Uusimaa, FI)

P009  Epigenetic age and sleep quality in adolescence
L. Kuula (Helsinki, FI)

P010  Autoreactive T cells in narcolepsy patients target multiple antigens of hypocretin-producing neurons
U. Kallweit (Hagen, DE)

P011  GABAA receptors of the thalamic reticular nucleus regulate NREM delta oscillations: an in vivo investigation by CRISPR-Cas9 genetic abscission
D.S. Uygun (West Roxbury, MA, US)

P012  CLOCK gene polymorphism (rs1801260) in menopausal women of two ethnic groups with insomnia
N. Semenova (Irkutsk, RU)

P013  The role of melanin concentrating hormone and orexin/hypocretin neurons in the Prader-Willi syndrome
M. Pace (Genova, IT)

P014  Characterization of sleep architecture and oscillations in a mouse model with reticular thalamic nuclear dysfunction
C. Gutierrez Herrera (Bern, CH)

P015  CDK5-mediated phosphorylation of PER2 regulates circadian clock
U. Albrecht (Fribourg, CH)

P016  Sleep-wake and thermoregulatory changes in Panx1-/- mice
K. Kovalzon (Moscow, RU)

Poster Session, Poster, Poster Exhibition

Dreaming
Scientific Programme

P017  The degree of lucidity experienced in dreaming could reflect the capacity of conflict resolution in cognitive control
M.-R. Loo (Taoyuan, TW)

P018  A technique for inducing high levels of signal-verified lucid dreams in a laboratory morning nap
M. Carr (Swansea, UK)

P019  Electrophysiological response to emotional voices during sleep and wakefulness as a function of stimulus-reactivity
M. Moyne (Geneva, CH)

P020  Is waking well-being related to dream affect: the importance of peace of mind
P. Sikka (Turku, FI)

P021  Relationship between EEG frontal alpha asymmetry and dream affect
P. Sikka (Turku, FI)

P022  Increase of both bottom-up and top-down attentional processes in high dream recallers
P. Ruby (Bron Cedex, FR)

P023  PTSD-like symptoms, morning affect and intrusive memories in nightmare disorder
B. Blaskovich (Budapest, HU)

P024  Testing the empathy theory of dreaming: the relationship between trait empathy and positive attitude towards dreams and the frequencies of listening to and telling dreams
M. Blagrove (Swansea, UK)

P025  Emotions in dreams correlate with coping style
A. Coppola (Caserta, IT)

P026  Dreams of children with neurodevelopmental disorders: autism spectrum and attention deficit/hyperactivity
R. Godbout (Montreal, QC, CA)

P027  Efficacy of cognitive behavioral therapy for insomnia on nightmares in veterans with PTSD
H. Barilla (Philadelphia, PA, US)

P028  Emotions in REM dream reports in healthy women
T. Paiva (Lisbon, PT)

P029  Sleep inertia and functional connectivity between brain regions at awakening in high and low dream recallers: an EEG-fMRI study
P. Ruby (Bron Cedex, FR)

Poster Session, Poster, Poster Exhibition

Sleep Physiology 1

P030  Sleep EEG topography as an endophenotype: insights from an adolescent twin study
A. Markovic (Bern, CH)
Scientific Programme

P031  Event-related analysis of awakenings due to road traffic noise at night: a polysomnographic field study
S. Weidenfeld (Cologne, DE)

P032  Light-induced sleep is homeostatically regulated in mice
S. Hasan (Oxford, OXON, UK)

P033  Wanderlust - travelling and stationary sleep oscillations
L. Himmer (Tübingen, DE)

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P195  Upper airway resistance syndrome with a small mandible is not rare among Japanese female
Y. Fuse-Nagase (Ibaraki, JP)

P196  Detection of microsleep episodes with machine learning tools
J. Skorucak (Zurich, CH)

P197  Solriamfetol (JZP-110) in the treatment of excessive sleepiness in narcolepsy and obstructive sleep apnoea: maintenance of wakefulness test results across the day
P. Schweitzer (Chesterfield, MO, US)

P198  A 5-year post-authorization safety study (PASS) relative to Wakix® (pitolisant) use and its long-term safety in narcolepsy with or without cataplexy in routine medical practice
G. Plazzi (Bologna, IT)

P199  Effects of solriamfetol on primary OSA therapy use in a 12-week phase 3 trial
G. Mayer (Schwalmstadt-Treysa, DE)

P200  Uncontrollable cataplexies: have a look to the cervical spine
D. Cugy (Bordeaux, FR)

P201  Test-retest validity of the Epworth Sleepiness Scale within a substantial short time frame
B. Faludi ( Pécs, HU)

P202  Predictors of daytime sleepiness improvement in a population-based 5-year longitudinal study
I. Jaussent (Montpellier, FR)
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P203  Quality of life, functional evaluation, and work productivity in patients with narcolepsy: results from a phase 3 study of solriamfetol (JZP-110)
H. Emsellem (Chevy Chase, MD, US)

P204  A long-term study of the safety and maintenance of efficacy of solriamfetol (JZP-110) for treatment of excessive sleepiness associated with narcolepsy or obstructive sleep apnoea
J.L. Pepin (Grenoble, FR)

P205  Sodium oxybate treatment of narcolepsy in pediatric patients: long-term efficacy and safety
M. Lecendreux (Paris, FR)

Poster Session, Poster, Poster Exhibition

Neurological disorders 1

P206  Polysomnographic evaluation of sleep in Chiari type 1 malformation before surgical decision and after surgery
D. Cugy (Bordeaux, FR)

P207  Central sleep apnoeas in a female patient with pharmaco-resistant epilepsy and vagus nerve stimulation
N. Plos (Ljubljana, SI)

P208  The association between shift work and migraine, tension-type headache and medication-overuse headache - a cross-sectional study among a large population of nurses
B. Bjorvatn (Bergen, NO)

P209  Nocturnal eye movements in patients with idiopathic rapid eye movement sleep behaviour disorder and patients with Parkinson’s disease
J.A.E. Christensen (Glostrup, DK)

P210  Apathy and depression in Parkinson’s disease with parasomnias: gender matters
M. Ntafouli (Bern, CH)

P211  Cheyne-Stokes respiration and the outcome of acute stroke
S.-Y. Lee (Chuncheon-si., KR)

P212  Clinical utility and diagnostic significance of hepcidin as a biomarker of restless leg syndrome
H.-J. Im (Seoul, KR)

P213  Mild motor abnormalities in ‘idiopathic’ REM sleep behavior disorder: a diagnostic window to early neurodegeneration
S. Rupprecht (Jena, DE)

P214  Sleep disturbances, fatigue, anxiety and depression in multiple sclerosis (MS): results of the German SLEEP-MS Survey
S. Rupprecht (Jena, DE)

P215  Long sleep duration is associated with cognitive decline in patients with multi domain mild cognitive impairment
M. Basta (VOUTES-HERAKLION, CRETE, GR)
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<td>I. Nopper (Tübingen, DE)</td>
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**Psychiatric & behavioural disorders 1**

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<td>Rapid eye movement sleep abnormalities in female adolescents with borderline personality</td>
<td>A. Saleh (Cairo, EG)</td>
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<td>Insomnia trajectories prior to episodes of high mood in individuals with bipolar disorder: results from an online mood monitoring system</td>
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<td>A. Rehman (Glasgow, UK)</td>
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P230  Treating insomnia and depression: using network analysis to explore working mechanisms
T. van der Zweerde (Amsterdam, NL)

P231  Chronotype and depressive symptoms: an investigation of possible mechanisms
N. Antypa (Leiden, NL)

P232  Sleep problems and daytime sleepiness in adolescents with and without attention-deficit/hyperactivity disorder
S. Becker (Cincinnati, OH, US)

P233  The impact of cytokines on sleep and emotional risk improvement in adolescents with an eveningness chronotype
M. Dolsen (Berkeley, CA, US)

P234  Transdiagnostic sleep and circadian intervention for youth with eveningness: do pubertal hormones have a moderating effect?
M. Dolsen (Berkeley, CA, US)

P235  Proton magnetic resonance spectroscopy of brain in obstructive sleep apnea in Egyptian subjects
H. Gharraf (Alexandria, EG)

P236  Sleep deprivation triggers shared temporal dynamics of time and mood perception in bipolar depression
T. Yoshiike (Milano, IT)

P237  Athens Insomnia Scale detects depression with moderate accuracy in three Japanese settings
H. Kadotani (Otsu, Shiga, JP)

P238  Does sleep moderate the relationship between work-life balance and depression differentially in men and women? Findings from the North West Adelaide Health Study
A.C. Reynolds (Adelaide, SA, AU)

Poster Session, Poster, Poster Exhibition

Sleep & aging 1

P239  Sleep loss and circadian phase modulate cortical connectivity but not neuronal complexity in young and older individuals
G. Gaggioni (Liège, BE)

P240  Sleep and circadian timing are associated with subjective and objective memory in older adults with subjective memory impairment - evidence for early targeted interventions
J.E. Manousakis (Melbourne, VIC, AU)

P241  Effects of aerobic exercise on sleep in healthy older adults at increased genetic risk for late-onset sporadic Alzheimer's disease
V. Guadagni (Calgary, CA)

P242  Postural stability upon being awakened in the middle of the night and in the morning: comparison of lemborexant versus zolpidem extended release
P. Murphy (Woodcliff Lake, NJ, US)
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**Healthcare services & education**

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<td>E. Sõõru (TALLINN, EE)</td>
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<td>E. Sõõru (TALLINN, EE)</td>
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P257  The effect of self-care interventions on sleep quality in post coronary artery bypass graft surgery patients  
H. Ghavami (Urmia, IR)

P258  Techniques of developing the diagnostic and treatment skills in sleep apnea in students/interns in Pulmonology Clinic Tirgu Mures, Romania  
G. Jimborean (Tirgu Mures, Mures, RO)

P259  Parent-based sleep education as a possible intervention for sleep problem in school aged children with autism spectrum disorder  
F. Sun (Guangzhou, CN)

P260  The impact of rotating work schedules on sleep quality among hospital female nurses and midwives  
Y. Nagaura (Nagasaki, JP)

P261  Primary care treatment of pain-related insomnia: a feasibility study of a hybrid cognitive behavioural therapy approach  
N. Tang (Coventry, UK)

P262  Influence of regular physical exercise on sleep quality and presence of sleep disorders in patients assisted at the Basic Health Units of Divinópolis, Brazil  
L.T. Pasqualotto (Divinópolis, Minas Gerais, BR)

P263  Sleep disorders in subjects assisted in Basic Health Units and Family Health Program of the city of Divinopolis, Brazil  
L.T. Pasqualotto (Divinópolis, Minas Gerais, BR)

P264  Sleep quality and risk for obstructive sleep apnea in a sample of the Portuguese population  
A.M.C.d. Almendra (Braga, PT)

P265  Sleep study for suspected sleep apnea - are we overtesting?  
M.A. Galego (Matosinhos, PT)

P266  A curriculum for a two day PAP, oral appliance and hypoglossal stimulator handling expertise course for nursing staff in geriatric medicine  
N. Netzer (Bad Aibling, DE)

P267  What makes doctors ask patients about their sleep even if they do not consult for a sleep complaint? A cross sectional study  
M. Maalej (Sfax, TN)

Respiratory Track, Round Table, Montreal

12:15 - 13:15  Pulse wave analysis during sleep - a meaningful tool for improved phenotyping in sleep disorders?

12:15 - 12:22  46  Pulse wave analysis during sleep - physiology and methodology  
T. Penzel (Berlin, DE)

12:22 - 12:29  Pulse wave analysis during sleep in respiratory disease  
H. Schneider (Baltimore, US)
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<td>Pulse wave analysis during sleep in insomnia</td>
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#### Poster Session 1 - Poster viewing

### Neuropsychiatry Track, Joint Symposium, San Francisco

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<td>13:30 - 13:54</td>
<td>An animal model of DOA: is it possible?</td>
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<td>13:54 - 14:18</td>
<td>Local aspect of sleep and wakefulness: implications for DOA</td>
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<td>14:18 - 14:42</td>
<td>Diagnostic criteria for DOA: A video-polysomnographic assessment</td>
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<td>R. Lopez (Montpellier, FR)</td>
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<td>Clinical and PSG features distinguishing DOA from Sleep Related</td>
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<td>Hypermotor Epilepsy-SHE</td>
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<td>15:06 - 15:30</td>
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### Respiratory Track, Symposium, Montreal

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<td>13:30 - 15:30</td>
<td>Asymptomatic sleep disordered breathing: who should be treated?</td>
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13:30 - 14:00  51  Predictors and biomarkers of negative outcomes in obstructive sleep apnea  
R. Heinzer (Lausanne, CH)

14:00 - 14:30  52  Plasma miRNAs as predictor of CPAP response in resistant hypertension  
M. Sánchez-de-la-Torre (Lleida, ES)

14:30 - 15:00  53  Breath analysis in OSA patients, new biomarkers?  
M. Kohler (Zurich, CH)

15:00 - 15:30  Health consequences of untreated central sleep apnea  
W. Randerath (Solingen, DE)

Track Translational, Symposium, Sydney

13:30 - 15:30  Temporal constraints on sleep and cognition: importance for brain health during ageing

13:30 - 14:00  54  The translational potential of sleep and circadian rhythm disturbances as a biomarker of Alzheimer's disease  
B. Kent (Vancouver, CA)

14:00 - 14:30  55  Brain molecular, histopathological and structural measures linking sleep, circadian rhythms, and dementia in community-dwelling older adults  
A. Lim (Toronto, CA)

14:30 - 15:00  56  Age-related changes in circadian sleep-wake regulation: impact on cognitive performance and cerebral correlates  
C. Schmidt (Liège, BE)

15:00 - 15:30  57  Dynamic LED lighting: Finding the right light at the right time for severely demented residents  
K. Wulff (Oxford, oxfordshire, UK)

Basic Track, Oral Session, Singapore

13:30 - 14:30  Electrophysiology of sleep

13:30 - 13:42  O058  Sharpening the paradox of REM sleep: cortical oscillations, synchronization and topographical aspects during phasic and tonic REM microstates  
P. Simor (Budapest, HU)

13:42 - 13:54  O059  Bidirectional interactions between slow waves and synaptic plasticity  
M.C. Kahn (Oxford, UK)

13:54 - 14:06  O060  Orexin-independent decreases in sleep propensity mark the onset of spontaneous torpor bouts in calorically-restricted mice  
G. Zoccoli (Bologna, IT)
## Scientific Programme

### 14:06 - 14:18  O061
**Electrophysiological correlates of sleep and wakefulness in Aplysia californica**  
A. Vorster (Tübingen, DE)

### 14:18 - 14:30  O062
**Intranasal leptin treats sleep disordered breathing in obese mice**  
V.Y. Polotsky (Baltimore, MD, US)

### 13:30 - 15:30
**Sleep problems in early childhood - perspectives into epidemiology and treatment**

#### 13:30 - 14:00  63
**Disturbed sleep during early infancy: findings from the CHILD-SLEEP cohort**  
E.J. Paavonen (Helsinki, FI)

#### 14:00 - 14:30  64
**Developmental trajectories of sleep problems in toddlers and later emotional and behavioral problems**  
B. Sivertsen (Bergen, NO)

#### 14:30 - 15:00  65
**Clinically oriented subtyping of chronic insomnia of childhood**  
O. Bruni (Rome, IT)

#### 15:00 - 15:30  66
**What have we learnt in the last 5 years of pharmacological treatments for children with sleep problem?**  
P. Gringras (London, UK)

### 13:30 - 15:30
**ESST Meeting - Session 3 - Interactive workshops**

#### 13:30 - 14:30
**Workshop: Interactive PSG case studies**  
M. van der Mierden (NL)  
H. Steinebach (NL)

#### 14:30 - 15:30
**Workshop: Sleep in healthcare professionals**  
M. Farquhar (London, UK)

### 14:30 - 15:30
**Case discussion**

### 16:00 - 16:45
**Keynote Lecture - Emmanuel Mignot**

#### 16:00 - 16:10
**Sleep analytics and biomarkers**  
E. Mignot (Palo Alto, US)
### Scientific Programme

**Basic Track, Keynote Lecture, Montreal**

**16:00 - 16:45**  
**Keynote Lecture - Charalambos P. Kyriacou**

**16:00 - 16:45**  
Molecular analysis of biological clocks: beyond circadian rhythms  
C. Kyriacou (Leicester, UK)

**Respiratory Track, European Network Session, San Francisco**

**17:00 - 18:30**  
**European Network Session - New insights in the clinical picture of sleep apnea - findings from the European Sleep Apnea Database (ESADA)**

**17:00 - 17:20**  
Introduction: The 10th Anniversary of the ESADA database - lessons learned and visions for the future.  
M. Bonsignore (Palermo, IT)

**17:20 - 17:40**  
Clinical Phenotypes of obstructive sleep apnea - a cluster analysis using 'Big data'  
S. Bailly (Grenoble, FR)

**17:40 - 18:00**  
Mild sleep apnea - the European perspective  
I. Bouloukaki (Heraklion, Crete, GR)

**18:00 - 18:20**  
Metabolic consequences of sleep apnea and the impact of treatment  
C. Gunduz (Izmir, TR)

**Track General, European Network Session, Montreal**

**17:00 - 18:30**  
**European Network Session - EURLSSG - You**

**17:00 - 17:10**  
Welcome and opening  
L. Rijsman (The Hague, NL)  
B. Högl (Innsbruck, AT)

**17:10 - 17:40**  
PLMS Scoring demystified: a practical guide to the new scoring rules  
S. Fulda (Lugano, CH)

**17:40 - 17:55**  
Q&A  
S. Fulda (Lugano, CH)

**17:55 - 18:20**  
Discussion  
B. Högl (Innsbruck, AT)  
L. Rijsman (The Hague, NL)

**Track General, European Network Session, Sydney**

**17:00 - 18:30**  
**European Insomnia Network Session - What's new?**
Scientific Programme

17:00 - 17:20  An introduction to the European guideline for the diagnosis and treatment of insomnia
               K. Spiegelhalder (Freiburg, DE)

17:20 - 17:40  The European Academy for CBT-I - an interim report
               C. Baglioni (Freiburg, DE)

17:40 - 18:00  Ongoing work on insomnia at the SCNI in Oxford
               S. Kyle (Oxford, UK)

18:00 - 18:10  Ongoing work on insomnia in Amsterdam
               E. Van Someren (Amsterdam, NL)

18:10 - 18:30  Theoretical considerations on the relationships between epigenetics, early trauma, insomnia and depression
               L. Palagini (Pisa, IT)

Basic Track, Oral Session, Singapore

17:00 - 18:30  Sleep and cognition

17:00 - 17:12  O068  Selective tracking of relevant speech during human sleep
               T. Andrillon (Melbourne, VIC, AU)

17:12 - 17:24  O069  Maintaining vigilance with limited sleep opportunity: is it better to consolidate or split sleep?
               M. Chee (Singapore, SG)

17:24 - 17:36  O070  Effect of total sleep deprivation on the recall of active avoidance response in rats
               T. Oniani (Tbilisi, GE)

17:36 - 17:48  O071  The sleeping brain not only monitors the environment, but also detects relevant information
               M. Wislowska (Salzburg, AT)

17:48 - 18:00  O072  Neural correlates of human cognitive abilities during sleep: an EEG-fMRI study
               S. Fogel (Ottawa, CA)

18:00 - 18:12  O073  Effect of interictal epileptic spikes on sleep spindles in medial temporal regions during NREM sleep: are there consequences on memory long-term consolidation? A SEEG study
               I. Lambert (Marseille, FR)

18:12 - 18:24  O074  Bad sleepers' night sleep quality improves after pre-sleep cognitive training
               F. Conte (Caserta, IT)

Track General, European Network Session, Osaka

17:00 - 18:30  European Network Session - Narcolepsy
Scientific Programme

17:00 - 17:15  EU-NN Data base: Update  
               R. Khatami (Barmelweid, CH)
17:15 - 17:30  Etiology of human narcolepsy: What is new?  
               B. Kornum (Copenhagen, DK)
17:30 - 17:45  Treatment of narcolepsy: What is new?  
               G. Plazzi (Bologna, IT)
17:45 - 18:00  Genetics of familial narcolepsy  
               M. Tafti (Lausanne, CH)
18:00 - 18:15  Narcolepsy and opiates  
               R. Fronczek (Leiden, NL)
18:15 - 18:30  EU-NN-EAN-ESRS Narcolepsy guidelines and EU-NN centers of excellence: Update  
               C. Bassetti (Bern, CH)

Track General, ESST Meeting, Rio

17:00 - 17:45  ESST Meeting - Session 4 - The future of sleep technology
17:00 - 17:30  Future of polysomnography: have we reached a tipping point?  
               C. Teixeira (Porto, PT)
17:30 - 17:45  The future of the ESST & closing remarks  
               L. Hill (Edinburgh, UK)

Track General, ESST Meeting, Rio

17:45 - 18:45  ESST Meeting - ESST AGM / National delegates meeting

Satellite Symposium, Satellite Symposium, Montreal

18:40 - 19:40  Satellite Symposium - Toshiba
18:40 - 18:52  Keynote: The effect of light on sleep and human wellness  
               C. Cajochen (Basel, CH)
18:52 - 19:04  TRI-R LED Spectrum technology designed for circadian rhythm  
               K. Kobayashi (JP)
19:04 - 19:16  Effects of light on human sleep, alertness and mental effort  
               O. Stefani (Basel, CH)
19:16 - 19:28  The potential of circadian lighting in elderly homes  
               M. Münch (Berlin, DE)
19:28 - 19:40  Q & A
Scientific Programme

18:40 - 19:40
Satellite Symposium - SomnoMed AG

19:15 - 20:15
Public Sleep Forum - Sleep Apnea (D)

19:15 - 20:15
Atemlos durch die Nacht - wann ist Schnarchen gefährlich?
S. Ott (Bern, CH)

19:15 - 20:15
Public Sleep Forum - Insomnia (D)

19:15 - 20:15
Schlaf, Schlaflosigkeit und Psyche
D. Riemann (Freiburg, DE)
## Thursday, 27 September 2018

### Neuropsychiatry Track, Symposium, San Francisco

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<tr>
<th>Time</th>
<th>Session</th>
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<th>Authors</th>
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<tbody>
<tr>
<td>08:30 - 10:30</td>
<td>REM sleep fragmentation and emotional dysregulation: Evidence for a new mechanism linking sleep and affect?</td>
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<tr>
<td>08:30 - 09:00</td>
<td>Restless REM sleep impedes overnight emotional resolution in insomnia</td>
<td>R. Wassing (Amsterdam, NL)</td>
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<tr>
<td>09:00 - 09:30</td>
<td>Awakening thresholds and (REM) sleep perception in insomnia patients and good sleeper controls</td>
<td>B. Feige (Freiburg, Please choose..., DE)</td>
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<tr>
<td>09:30 - 10:00</td>
<td>REM sleep fragmentation and depressive symptoms in late adolescence: evidence from a community cohort</td>
<td>A.-K. Pesonen (Helsinki, FI)</td>
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<tr>
<td>10:00 - 10:30</td>
<td>Does school-aged children’s anxiety reduce after sleep restriction therapy via REM sleep consolidation?</td>
<td>M. Gradisar (Adelaide, AU)</td>
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### Basic Track, Symposium, Montreal

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<tr>
<td>08:30 - 10:30</td>
<td>Information processing during sleep: recent developments and future perspectives</td>
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<tr>
<td>08:30 - 09:00</td>
<td>Associative learning during human sleep: an interplay between behavior, sleep stages and brain activity</td>
<td>A. Arzi (Cambridge, UK)</td>
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<td>09:00 - 09:30</td>
<td>Neural markers of perceptual processing and learning during sleep</td>
<td>S. Kouider (Paris, FR)</td>
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<td>09:30 - 10:00</td>
<td>The MemoSleep-Hypothesis: how does cognition influence sleep?</td>
<td>B. Rasch (Freiburg, CH)</td>
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<tr>
<td>10:00 - 10:30</td>
<td>What can be learned during sleep? Neurophysiological evidence for limitations and boundary conditions</td>
<td>P. Peigneux (Bruxelles, BE)</td>
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### Track Translational, Symposium, Sydney

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<tr>
<td>08:30 - 10:30</td>
<td>Recent advances in Fatigue Risk Management: from fatigue countermeasure strategies to sleep science-based policy making</td>
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Scientific Programme

08:30 - 09:00 82 Basic and clinical sleep and circadian science as a foundation for fatigue risk management in occupational settings
H. Van Dongen (Spokane, US)

09:00 - 09:30 83 Fatigue risk management for the offshore oil and gas industry
V. Riethmeister (Groningen, NL)

09:30 - 10:00 84 Alertness management strategies among long-haul truck drivers and airline pilots
M. Sallinen (Helsinki, FI)

10:00 - 10:30 85 Fatigue proofing: the next generation of fatigue risk management
D. Dawson (Wayville, AU)

08:30 - 10:30 Cardiovascular and other consequences and sleep apnea

08:30 - 08:42 O086 Risk factors for increased daytime sleepiness in sleep apnea - results from the National Swedish Sleep Apnea Registry
L. Grote (Gothenburg, SE)

08:42 - 08:54 O087 Differences in arousal probability and duration after apnea and hypopnea events in adult obstructive sleep apnea patients
T. Leppänen (Kuopio, FI)

08:54 - 09:06 O088 Analysing morphine-induced respiratory depression in obstructive sleep apnoea patients using new technologies: a randomised double-blind placebo-controlled study
D. Wang (Glebe, NSW, AU)

09:06 - 09:18 O089 Long-term mortality depending on severity of sleep apnea in patients after acute myocardial infarction
O. Ludka (Brno, CZ)

09:18 - 09:30 O090 Nonfatal and fatal cardiovascular events in continuous positive airway pressure adherent obstructive sleep apnoea syndrome patients - a retrospective observational study
M. Myllylä (Turku, FI)

09:30 - 09:42 O091 Arrhythmias and sleep related breathing disorders: data from the European Sleep Apnoea Database (ESADA)
C. Lombardi (Milan, IT)

09:42 - 09:54 O092 Associations of heart rate variability and sleep apnea with hypertension
R. Adams (Woodville, SA, AU)

09:54 - 10:06 O093 The predictive value of loop gain measurements in determining continuous positive airway pressure efficacy in patients with obstructive sleep apnea
Y. Li (Beijing, Beijing, CN)

10:06 - 10:18 O094 Psychological distress and depression preceding sleep apnea
P. Salo (Turku, FI)
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<tr>
<td>10:18 - 10:30</td>
<td>O095</td>
<td>Relationship between risk factors for obstructive sleep apnea and cognitive function in middle-aged and older adults: cross-sectional analysis of the Canadian Longitudinal Study on Aging</td>
<td>C. Thompson (Montreal, QC, CA)</td>
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**Track General, Joint Symposium, Osaka**

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<td>08:30 - 09:00</td>
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<td>Gene expression changes associated with chronic sleep/wake disorders: insights from Drosophila</td>
<td>L. Seugnet (Lyon, FR)</td>
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<td>09:00 - 09:30</td>
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<td>Sleep-activity cycles drive global dynamics of protein and phosphorylation in synapses</td>
<td>C. Robles (München, DE)</td>
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<td>09:30 - 10:00</td>
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<td>Human sleep and circadian metabolomics studies</td>
<td>D. Skene (Guildford Surry, UK)</td>
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<td>10:00 - 10:30</td>
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<td>A search for glymphatic like mechanisms in healthy human sleep</td>
<td>S. Holst (Copenhagen, DK)</td>
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**Neuropsychiatry Track, Oral Session, San Francisco**

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<td>11:00 - 12:00</td>
<td>Restless legs syndrome and dementia</td>
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<td>11:00 - 11:12</td>
<td>O097</td>
<td>Non-dipping pattern in restless legs syndrome</td>
<td>S. Chenini (Montpellier, FR)</td>
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<td>11:12 - 11:24</td>
<td>O098</td>
<td>Stroke-related restless legs syndrome: an anatomo-clinical entity with clues to pathophysiology</td>
<td>E. Ruppert (Strasbourg, FR)</td>
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<td>11:24 - 11:36</td>
<td>O099</td>
<td>Sleep-wake fragmentation is linked to amyloid beta brain deposition in healthy ageing</td>
<td>J. Narbutas (Liège, BE)</td>
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<td>11:36 - 11:48</td>
<td>O100</td>
<td>EEG functional connectivity during REM sleep: a marker of cognitive status?</td>
<td>A. Lafrenière (Montréal, QC, CA)</td>
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<td>11:48 - 12:00</td>
<td>O101</td>
<td>Serotine melatonin timing secretion in real life conditions in Alzheimer patients of mild to moderate severity</td>
<td>R. Manni (Pavia, IT)</td>
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**Case Discussion, Montreal**

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<td>11:00 - 12:00</td>
<td>Case discussion</td>
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Scientific Programme

Track Translational, Symposium, Sydney

11:00 - 13:00

**Rhythms of (un)healthy sleep: understanding and modulation of multi-system oscillations**

11:00 - 11:30

102

EEG correlates of multi-system oscillations: from visual identification to the analysis of complexity

R. Ferri (Troina, IT)

11:30 - 12:00

103

Autonomic background of multi-system oscillations: from humans to model organisms

A. Silvani (Bologna, IT)

12:00 - 12:30

The interplay between periodic leg movements, arousals and breathing events

M. Manconi (Lugano, CH)

12:30 - 13:00

104

The interplay between sleep bruxism, arousals and breathing or period movement related events

G. Lavigne (Montreal, CA)

Basic Track, Other Session, Singapore

11:00 - 12:30

**ANSS Networking Meeting**

11:00 - 11:10

The European situation and the main difficulties among the different national sleep societies

L. Parrino (Parma, IT)

11:10 - 11:20

A brief story of the ANSS activities in the last 4 years

J. Verbraecken (Edegem, Antwerp, BE)

11:20 - 11:30

The Beyond AHI Task Force: an update

E.S. Arnardottir (Reykjavik, IS)

11:30 - 11:40

Open challenges and future perspectives for the ANSS

B. Strazisar (Ljubljana, SL)

11:40 - 11:50

Panel Discussion

L. Parrino (Parma, IT)

J. Verbraecken (Edegem, Antwerp, BE)

E.S. Arnardottir (Reykjavik, IS)

B. Strazisar (Ljubljana, SL)

O.C. Deleanu (Bucuresti, RO)

S. Khachatryan (Yerevan, AM)

L. Korostovtseva (St Petersburg, RU)

Y. van der Werf (Amsterdam, NL)

Poster Session, Poster, Poster Exhibition

**Poster Session 2 - Poster viewing**
Scientific Programme

**12:00 - 13:00**
Neuropsychiatry Track, Oral Session, San Francisco

**Parasomnias**

12:00 - 12:12  O105  Negative stress coping is associated with structural integrity of posterior cingulate cortex in sleep walking
M. Ramm (Münster, DE)

12:12 - 12:24  O106  Topographical spectral power changes associated with NREM parasomnia episodes - a high-density EEG study
J. Cataldi (Lausanne, CH)

12:24 - 12:36  O107  Regional patterns of neuronal activity in REM sleep behavior disorder using high-density EEG
A. Valomon (Madison, WI, US)

12:36 - 12:48  O108  Actigraphic differences in the rapid eye movement sleep behavior disorder patients
D. Kemlink (Praha, CZ)

12:48 - 13:00  O109  Efficacy of prolonged release melatonin for REM sleep behaviour disorder in Parkinson’s disease: a double blind, randomised, placebo-controlled trial
N. Marshall (Camperdown, AU)

**Case Discussion, Montreal**

12:00 - 13:00  **Case Discussion**

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**Poster Session, Poster, Poster Exhibition**

**Biochemistry & Neurobiology 1**

**P281**  Dynamic metabolic changes in the waking and sleeping brain - insights from MR spectroscopy
M. Lehmann (Zurich, CH)

**P282**  Randomized, single dose, double-blind, 4-way crossover study determining the abuse potential of pitolisant compared to phentermine and placebo, in healthy, non-dependent recreational stimulant users
C. Scart-Grès (Paris, FR)

**P283**  Olanzapine influence on brain activity shown in standardized low resolution brain electromagnetic tomography and heart rate variability during sleep in healthy subjects
Y. Abshir Ahmed (München, Bayern, DE)

**P284**  Relationship between early and late components of the evoked response to two different auditory stimuli applied during slow wave sleep by means of closed-loop technique
E. Krugliakova (Zürich, CH)

**P285**  Differential regulation of theta and fast-gamma oscillations in the waking state of mice disrupted in Hypocretin/Orexin Receptor-1, or 2 selectively in noradrenergic, or dopaminergic neurons
A. Vassalli (Lausanne, CH)
Scientific Programme

P286 Homer1a upregulation in the claustrum, a neuronal super-hub, may influence sleep/wake behavior
N. Naidoo (Philadelphia, PA, US)

P287 Gray matter volume correlates of sleepiness: a voxel-based morphometry study in younger and older adults
T. Åkerstedt (Stockholm, SE)

P288 Effects of habenular stimulation frequencies on obstructive sleep apnea induced by stimulation of insular cortex
M. Li (Changchun, CN)

P289 Scale invariance attenuation and altered sleep parameters following increasing dim-light-at-night duration periods
T. DeBoer (Leiden, NL)

P290 Individual waking alpha EEG power correlates negatively with adenosine receptor density measured with PET
D. Elmenhorst (Jülich, DE)

P291 Ambient temperature warming and the role of the lateral hypothalamus in REM sleep expression
M. Schmidt (Bern, CH)

P292 Caring for those with brain injury: investigating sleep disturbances and fatigue
M. Gardani (Glasgow, UK)

P293 Habitual daily caffeine consumption and its cessation changes human grey matter density independent from the effect of cerebral blood flow: a multimodal study
Y.-S. Lin (Basel, CH)

Poster Session, Poster, Poster Exhibition

Sleep Physiology 2

P294 Measures of interoception during changes in conscious state from wakefulness to sleep and their potential significance for altered awareness in psychiatric conditions
J. Lechinger (Kiel, DE)

P295 Genetic contribution to slow wave energy in adolescents
A. Markovic (Bern, CH)

P296 Slow-wave enhancement reduces trauma-induced APP overexpression in novel mouse model of traumatic brain injury compatible with EEG/EMG headset
M.M. Morawska (Zurich, CH)

P297 The 0.02 Hz-oscillation in sigma power times spontaneous transitions from non-REM sleep
R. Cardis (Lausanne, CH)

P298 Sleep under cold pressure: rats vs hamsters
O. Shylo (Kharkiv, UA)

P299 Sigma power topography maturation across the first two decades of life
S. Kurth (Zurich, CH)
Scientific Programme

P300  Cortical perturbations reveal local sleep-like down states in cortical perilesional area
S. D’Ambrosio (Milan, IT)

P301  Peripheral sympathetic activations underlying PWA drops induce significant changes in EEG activity in a sleep-stage-specific manner
M. Betta (Lucca, Lucca, IT)

P302  Sleep orchestrates input-specific plasticity and global stability of neural assemblies in the human cortex
J.G. Maier (Bern, CH)

P303  Bidirectional and context-dependent changes in theta and gamma oscillatory brain activity in noradrenergic cell-specific Hcrt1 KO mice
S. Li (Lausanne, CH)

P304  Is the sleep structure vulnerable to microbiological indoor air contaminants?
M. Meira e Cruz (Lisboa, PT)

P305  Sleep quality and daytime sleepiness among primary care physicians
A. Wichniak (Warsaw, PL)

P306  Night-shift work and work hours among primary care physicians - consequences for sleep quality, body weight and risk of primary sleep disorders
K. Gustavsson (Sroślak) (Warszawa, Mazowieckie, PL)

P307  A case study: increased spectral power and correlations of multimodal neuroimaging data during N1 sleep as a link to glymphatic mechanism
H. Helakari (Oulu, FI)

P308  Nonparametric approach for sleep stage classification using cardiorespiratory and movement features
S. Kumar (Zurich, CH)

P309  Spectral power as predictor of subjective sleep quality in healthy individuals
A. Gabryelska (Łódź, PL)

Poster Session, Poster, Poster Exhibition

Chronobiology 2

P310  Does Light with variation in spectrum and intensity during night shift prevent delay of circadian rhythm and sleepiness?
S. Higuchi (Fukuoka, JP)

P311  Larks, owls, swifts and woodcocks among fruit flies: maladaptive responses of the sleep-wake cycle to hot and/or long summer days are modified by heritable chronotype
A. Putilov (Novosibirsk, RU)

P312  Sleep homeostasis during daytime food entrainment in mice
R.C. Northeast (Oxford, County (optional), UK)

P313  Melatonin circadian rhythms in menopausal women with insomnia: ethnic aspect
N. Semenova (Irkutsk, RU)
Scientific Programme

P314  **Evening and bedtime use of electronical devices and its effects on subjective sleep characteristics. Are blue light filters effective?**  
M. Šmotek (Klecany, CZ)

P315  **Effects of lighting with continuously changing color temperature and illuminance on subjective sleepiness and melatonin profiles**  
S. Veitz (Basel, CH)

P316  **The impact of shift-work on human energy intake: a systematic review**  
E. Cayanan (Camperdown, NSW, AU)

P317  **The effects of a split-sleep schedule on vigilance and sleep in nurses working night shifts**  
T. Weysen (Eindhoven, NL)

P318  **Interaction of chronotype subscales and their association with single nucleotide polymorphisms in shift-working drivers**  
A. Puchkova (Moscow, Russia, RU)

P319  **No circadian activity rhythm in single-handed racing sailors**  
R.V. Rial (Palma de Mallorca, ES)

P320  **Effects of short exposure to different light illuminance in regular rest breaks on melatonin suppression and sleepiness during simulated night work**  
S.-I. Lee (Sapporo, JP)

P321  **Social jetlag in Chinese assessed with wearable devices**  
Z. Zhang (Barmelweid, CH)

P322  **Is sleepiness in shift work different according to work schedule?**  
S.D.B. Garnier (Quebec, QC, CA)

P323  **The relationship between vitamin D deficiency and daytime sleepiness in workers of a general hospital**  
H.J. Lee (Seongnam-si, KR)

P324  **Pilot study to investigate sleep disorders in blind and severe visual impairment**  
C. Dirks (Muenster, DE)

P325  **Daytime siesta is associated with increased HbA1c community cross-sectional study**  
M. Al-Abri (Muscat, OM)

P326  **Variability of total sleep time in patients with delayed sleep-wake phase disorder**  
T. Kitajima (Toyoake, Aichi, JP)

P327  **Sleep coaching in a population-based RCT improves adolescent sleep**  
A.-K. Pesonen (Helsinki, FI)

P328  **Tasimelteon for jet lag disorder: results of the JET8 study, a randomized placebo controlled phase 3 trial**  
C. Polymeropoulos (Washington, DC, US)
Scientific Programme

Poster Session, Poster, Poster Exhibition

Behavior 2

P329 Quantifying the risk of poor sleep outcomes for high and very high adolescent social media users: findings from the nationally representative UK Millennium Cohort Study
H. Scott (Glasgow, UK)

P330 Effects of bright light on sleepiness and cognitive performance during simulated night shift work
J. Mrdalj (Bergen, NO)

P331 Daytime sleep following bright light exposure during simulated night shifts
J. Mrdalj (Bergen, NO)

P332 Social media use and sleep in adults: a vulnerability perspective
L. Exelmans (Leuven, BE)

P333 Bedtime and behavioral problems in Finnish students
L. Kortesoja (Helsinki, FI)

P334 The pleasure of sleeping
R.V. Rial (Palma de Mallorca, ES)

P335 No effect by daily coffee consumption on the association between a common gene variant of the melatonin receptor 1B and fasting blood glucose
X. Tan (Uppsala, SE)

P336 Which characteristics predict the preference for later school start times in Zurich adolescents?
H. Werner (Zurich, CH)

P337 Young children´s sleep and maternal sleep-related cognitions: a comparison between three different Arab societies in Israel
I. Haimov (Nazareth, IL)

P338 Equality of sleep disturbances in parents is associated with reduced stress
G. Hardelin (Stockholm, SE)

P339 Romantic love - another reason to sleep less during adolescence
L. Kuula (Helsinki, FI)

P340 To snooze or not to snooze: effects of intermittent morning awakenings 30 minutes before final awakening.
T. Sundelin (Stockholm, SE)

P341 Sleep complaints and well-being in shiftworkers of different occupational groups
I. Hrytsyuk (Kiev, UA)

P342 Reactivation of hypothalamic inhibitory neurons during REM sleep maintains appetite
L. Oesch (Bern, CH)

P343 Benefits of a short afternoon nap: Investigating the parallel effects on physiological arousal and cognitive performance
T. Ru (Guangzhou, Guangdong, CN)
Scientific Programme

P344 Glucose tolerance following a 6-week sleep extension protocol in overweight short sleepers
I. Hartescu (Loughborough, UK)

P345 Is it possible to adjust the driving and resting times when operating highly autonomous trucks?
C. Ahlström (Linköping, SE)

P346 Excessive daytime sleepiness and traffic accidents among taxi drivers: a cross-sectional survey in Izmit
Ç. Çaglayan (Kocaeli, TR)

Poster Session, Poster, Poster Exhibition
Learning, memory & cognition 2

P347 Neural correlates of autobiographical memory and self in patients of stroke and head injury
P. Taylor (Bangalore, Karnataka, IN)

P348 Sleeping after an emotional event leads to long-term decreases in visceral and subjective emotional responses associated with memory
E. Bolinger (Tübingen, DE)

P349 A daytime nap facilitates the consolidation of and modulates the autonomic response to emotional memories
N. Cellini (Padova, IT)

P350 Assessing the sequential hypothesis for memory consolidation in narcoleptic patients
M. Strauss (Gif/Yvette, FR)

P351 Lack of frequency-tagged magnetic responses suggests statistical regularities remain undetected during NREM sleep
P. Peigneux (Bruxelles, BE)

P352 Perinatal memory and the influence of prenatal stimulation on newborns sleep
A. Lang (Salzburg, AT)

P353 Brain connectivity during the consolidation of procedural learning in quiet rest versus sleep
Z. Zavecz (Budapest, HU)

P354 Reinstatement of emotional associations during human sleep: an intracranial EEG study
G. Legendre (Genève, CH)

P355 Pre-attentive auditory perception during slow-wave sleep: a study of event-related potentials in response to violation of global and local regularity in the sound sequence
K. Liaukovich (Moscow, RU)

P356 The impact of sleep on complex gross-motor adaptation in adolescents
K. Bothe (Salzburg, Salzburg, AT)

P357 Does sleep benefit prospective intention realization: comparing valence and neutral cues
N. Kashyap (Guwahati, IN)
Scientific Programme

P358  Well done! Effects of post-learning positive reinforcement on motor memory recall performance 12 hours and 1 month after learning
F. Rångtell (Uppsala, SE)

Sleep deprivation 1

P359  The effect of sleep deprivation on recognition of ambiguous emotional facial expressions in individuals with ADHD
O. Dan (Shimshit, IL)

P360  The sleepiness curve of young men with and without Attention Deficit Hyperactivity Disorder (ADHD)
A. Cohen (Yezreel Valley, IL)

P361  The effect of short sleep on lipid metabolism in Japanese university students
S. Miyata (Nagoya, JP)

P362  Homeostatic response to sleep restriction in adolescents
J. Skorucak (Zurich, CH)

P363  Intrinsic nonlinearity of psychomotor vigilance test metrics as a function of hours awake during sleep deprivation
S. Riedy (Spokane, WA, US)

P365  Cognitive performance and self-reported sleepiness are modulated by time-of-day during a mountain ultramarathon
R. Hurdiel (Dunkerque, FR)

P366  Chronic sleep restriction only reduces performance when it accrues rapidly
T.L. Signal (Wellington, NZ)

P367  The alerting effects during the wake maintenance zone vary with prior duration of wakefulness
J. de Zeeuw (Berlin, DE)

P368  Effect of a single night of total sleep deprivation and a night of recovery sleep on plasma melatonin and cortisol profiles and the metabolome
A. Homma (Guildford, UK)

P369  Sleep deprivation alters affective and neural responses to erotic stimuli in heterosexual males
L. Riontino (Genève, CH)

P370  Work organization reduces sleep quality among airline pilots
E.C. Marqueze (São Paulo, São Paulo, BR)

P371  Decreased inhibitory control after partial sleep deprivation in individuals reporting binge eating
A. Ballesio (Rome, IT)

P372  State anxiety over 62 hours of sleep deprivation and recovery
T.J. Doty (Silver Spring, MD, US)
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<th>P373</th>
<th>Specified brain states determined by dynamic functional connectivity occur with higher frequencies after 52h sleep deprivation compared to recovery</th>
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<td>C. Li (Jülich, DE)</td>
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**Methodology & Computation 2**

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<th>P374</th>
<th>Comparison between the use of APAP and manual titration during split night polysomnography for diagnosis and treatment of OSA</th>
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<td>H. Gharraf (Alexandria, EG)</td>
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<th>P375</th>
<th>OUTCOMES OF TORS AS PART OF MULTILEVEL SURGERY IN SELECT OSA PATIENTS</th>
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<td>K. Nagpal (New Delhi, IN)</td>
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<th>Agreement of mobile app with SleepSense and polysomnography in patients with sleep-disordered breathing</th>
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<td>P. Song (Gyeonggi-do, KR)</td>
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<th>P377</th>
<th>Methods for detecting abnormal ventilation in children with snoring and with different genetic features</th>
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<td>P. Nokelainen (Tampere, FI)</td>
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<th>Evaluation of home polysomnography for making a sleep diagnosis</th>
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<td>L. Rohling (Zwolle, Overijssel, NL)</td>
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<th>P379</th>
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P388  Development of predictive models of obstructive sleep apnea by using decision tree
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P389  Developing minimum data set for information management systems of obstructive sleep apnea
M. Amini (Mashhad, IR)

P390  Extracting association rules from polysomnographic data of obstructive sleep apnea subjects
M. Amini (Mashhad, IR)

Poster Session, Poster, Poster Exhibition
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P392  Estimation of obstructive sleep apnea severity using additive Bayesian networks
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P393  The effectiveness of remote monitoring in improving CPAP compliance: a randomised, controlled study
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P394  Home sleep apnea testing with Polywatch® - comparison with polysomnography
M. Ferreira (Coimbra, PT)

P395  Comparing electrocardiographic differences in patients with complex sleep apnea using four different adaptive servo-ventilation devices
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P396  Effect of gender on obstructive sleep apnea severity change according to age-group
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P397  Distinct EEG-EMG-coherence patterns associated with sleep-disordered breathing severity grade
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P398  Imaging of obstructive sleep apnoea anatomic risk factors after bariatric surgery weight loss: a pilot study
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P399  Craniofacial photography for assessment of obstructive sleep apnoea risk in an Icelandic general population sample
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P400  Sleepiness, fatigue, anxiety and depression in overlap syndrome
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P403 Decreased thickness of peripapillary retinal nerve fibre layer and macular layer in patients with moderate and severe obstructive sleep apnoea syndrome
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P405 Does CPAP treatment lead to increased light and moderate-vigorous physical activity in OSA patients with cardiac or cerebrovascular events?
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P407 Positional dependency in mild obstructive sleep apnoea in the European Sleep Apnoea Database (ESADA) study
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Breathing disorders 4

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P411 Characterization and severity assessment of patients with obstructive sleep apnea
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P415  Severe obstructive sleep apnea: positional patients (PP) vs. non-positional patients (NPP)  
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P420  Obstructive sleep apnoea syndrome with cranio facial abnormalities: case report and review of literature  
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P421  Psychometric properties of the 9-item Ethos brief among obstructive sleep apnea patients  
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P423  Obstructive sleep apnea-hypopnea syndrome and comorbidities: a retrospective Moroccan study  
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P424  Vitamin D deficiency by obstructive sleep apnea (OSA) severity: the importance of an adequate supplementation.  
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P425  Central sleep apnea and cardiovascular burden: sex differences in a retrospective Romanian population  
O.C. Deleanu (Bucuresti, RO)

P426  Hypertension in obstructive sleep apnea is associated with increased carbonic anhydrase activity  
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P427  Association between sleep disordered breathing symptoms, sleep apnea and socioeconomic status: a systematic review of the literature  
O. Guglielmi (Genoa, Italy, IT)

P428  Daytime dyspnea is a strong predictor of sleep apnea in an unselected population of COPD patients  
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Poster Session, Poster, Poster Exhibition

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M. Salanitro (Swansea, UK)

P430  **Modelling sleep state misperception at sleep onset**  
L. Hermans (Eindhoven, NL)

P431  **Sleep quality related with exercise duration and timing in community dwelling adults**  
J. Lee (Chunchon, KR)

P432  **Patient’s perception of comorbid anxiety and insomnia: a qualitative approach**  
S.-E. Nadeau (Québec, QC, CA)

P433  **The efficacy of cognitive and behavior therapies for insomnia on daytime symptoms: a systematic review and network meta-analysis**  
F. Benz (Freiburg, DE)

P434  **Neural correlates of cognitive control functioning in individuals with insomnia disorder**  
C. Muscarella (Brussels, BE)

P435  **Tracking nightly changes in pre-sleep cognitive arousal during sleep restriction therapy**  
L.F. Maurer (Oxford, Oxfordshire, UK)

P436  **Internet-based CBT for insomnia in the general population - a description of design, measurements and interventions in recent RCT studies**  
S. Siebmanns (Jönköping, SE)

P437  **“You can’t always get what you want” - methodological challenges with an internet-based CBT intervention for insomnia among patients with cardiovascular disease**  
S. Siebmanns (Jönköping, SE)

P438  **The association between insomnia, stress reactivity and hyperarousal in women in menopausal transition**  
O. Ballot (Quebec, QC, CA)

P439  **Racing thoughts in insomnia are associated with insomnia severity and mood instability: towards a better characterisation of a key clinical symptom**  
L. Weiner (Strasbourg, FR)

P440  **Evaluation of Insomnia among workers of a cast iron factory**  
M. Saraei (Tehran, IR)

P441  **Searching for paradoxical insomnia**  
D. Neutel (Lisbon, PT)

P442  **Sleep quality in shift workers of offshore petroleum industry**  
A. Zahabi (Tehran, IR)

P443  **Insomnia and cognitive function in older adults: a cross-sectional analysis of the Canadian Longitudinal Study on Aging**  
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Scientific Programme

P444  Chronic insomnia in morning and evening persons, and short and long-term effects of unguided internet-based cognitive behavior therapy for insomnia
Ø. Vedaa (Trondheim, NO)

P445  Smartphones may serve as efficient sleep therapists
A. Baharav (Petach Tiqva, IL)

P446  The genetic liability for insomnia is associated with the number of awakenings during sleep in young and healthy individuals
P. Ghaemmaghami (Liege, BE)

Poster Session, Poster, Poster Exhibition

Hypersomnia 2

P447  Serum of narcolepsy type 1 patients does not decrease hypocretin receptor 2 function
M. Schinkelshoek (Leiden, NL)

P448  Sleep-state and dream perception in sleep disorders
M. Schinkelshoek (Leiden, NL)

P449  Personality traits in subjective perception of hypersomnolence
E. Miletinova (Klecaný, CZ)

P450  Disturbed nighttime sleep in patients with central disorders of hypersomnolence
R. Wix Ramos (Madrid, ES)

P451  The role of emotion regulation in narcolepsy with cataplexy
U. Kallweit (Hagen, DE)

P452  Anterior hippocampus volume loss in narcolepsy with cataplexy
V. Nemcova (Praha, CZ)

P453  Relationship between efficacy endpoints and measures of functional status and health-related quality of life (HRQoL) in narcolepsy patients treated for excessive sleepiness
T.E. Weaver (Chicago, IL, US)

P454  Delayed diagnosis and burden of excessive sleepiness associated with obstructive sleep apnea
L. Tesler Waldman (Mill Valley, CA, US)

P455  Impact of narcolepsy on educational skills in young Polish patients
A. Wierzbicka (Warsaw, PL)

P456  Relationship between efficacy endpoints and measures of functional status and health-related quality of life (HRQoL) in obstructive sleep apnea patients treated for excessive sleepiness
S.D. Mathias (Winter Park, FL, FL, US)

P457  Motor vehicle accidents in patients with excessive daytime sleepiness
K. Sadeghniat-Haghighi (Tehran, IR)
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| P459 | Kleine-Levin syndrome or migraine with brainstem aura? | C. Gutierrez Muñoz (Santander, ES) |
| P460 | Polysomnographic features related to REM sleep of patients with narcolepsy | T. Yagi (Kawasaki, Kanagawa, JP) |

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| P461 | Sleep disorders in patients with Leber hereditary optic neuropathy | I. Příhodová (Praha, CZ) |
| P462 | Does the excessive daytime sleepiness in advanced Parkinson`s disease depend on the quality of night time sleep? | K. Shevtsova (Moscow, RU) |
| P463 | Insomnia, nightmares and daytime sleepiness in university students with ADHD | A. Schlarb (Bielefeld, DE) |
| P464 | Alteration of cyclic alternating pattern correlates with impairment of heart rate variability in patients affected by amyotrophic lateral sclerosis | M.M.F. Puligheddu (Monserrato, IT) |
| P465 | Sleep fit: a new app to assess sleep symptoms in Parkinson’s disease | A. Mascheroni (Manno, CH) |
| P466 | Nocturnal stridor treated with continuous positive airway pressure in a patient with multiple system atrophy: a case study | P. Peřínová (Prague, CZ) |
| P467 | A young man with multiple system atrophy - how does polysomnography help? | I. Luzeiro (Coimbra, PT) |
| P468 | Brain white matter damage and its association with neuronal synchrony during sleep | E. Sanchez (Montreal, QC, CA) |
| P469 | Visual dysfunction and neurodegeneration in Rem sleep behavior disorder and Parkinson’s disease: a visual evoked potentials study | R. Cremascoli (porto Valtravaglia, VA, IT) |
| P470 | Total sleep deprivation unmasks subjective daytime sleepiness and impairments in alertness unique to mild traumatic brain injury | A. McKeon (Silver Spring, MD, US) |
| P471 | Daytime sleepiness in patients with chronic fatigue syndrome | I. Bileviciute-Ljungar (Stockholm, SE) |
Scientific Programme

P472  Positional difference between patients with obstructive sleep apnea with and without Parkinsonism
       D.L. Koo (Seoul, KR)

P473  Effects of ischemic stroke on sleep architecture: a retrospective study
       L. Pichler (Vienna, AT)

P474  Regular exercise program impacts positively on sleep disturbances, depression and fatigue in female patients with multiple sclerosis
       D. Sadeghi Bahmani (Basel, CH)

P475  Among patients with multiple sclerosis (MS) both objective and subjective sleep, depression, fatigue and paresthesia improved after three weeks of intense rehabilitation
       D. Sadeghi Bahmani (Basel, CH)

P476  SLOW WAVE ACTIVITY (SWA) UNDER CONDITIONS OF MICROGRAVITY: THE EFFECTS OF 7 DAYS OF WHOLE BODY UNLOADING USING A HYPERBUOYANCY FLOATATION (HBF) BED
       V. Gnoni (London, UK)

P477  Which patients have abnormal spindles and K complexes on routine PSGs?
       S. Parreira (Lisboa, PT)

Poster Session, Poster, Poster Exhibition

Medical disorders 1

P478  Poor sleep quality in patients with type 2 diabetes in association with melatonin and other factors.
       N. Limba (Riga, LV)

P479  Sleep disorders in patients with rheumatoid arthritis
       S. Wali (Jeddah, SA)

P480  The comparison of dexmedetomidine and midazolam for sleep in critically ill patients
       S.J. Kim (Ras Al Khaimah, UAE, AE)

P481  Sleep quality and executive function among school aged children with autism spectrum disorder
       M. Cao (Guangzhou, CN)

P482  Hypopharyngeal surgery for OSAS - side effects
       A. Katbeh (Tel Aviv, IL)

P483  Sleep in ATR-X
       P. van Mierlo (Heeze, NL)

P484  Non-apnoea sleep disorder increases the risk of incident heart failure-a nationwide population-based cohort study
       I.-D. Wang (Taipei, -- no selection --, TW)

P485  Opioid use in adults referred for sleep disorder assessment and associated long-term consequences: a population-based study
       T. Kendzerska (Ottawa, ON, CA)
Scientific Programme

**P486** Analysis of tissue metalloproteinase inhibitor-1 gene polymorphism (C536T) in non-valvular atrial fibrillation patients with concomitant obstructive sleep apnea-hypopnea syndrome
T. Balabanovich (Grodno, BY)

**P487** Effects of sleep extension on glucose metabolism in chronically sleep-deprived individuals
A. So-ngern (Khon Kaen, TH)

**P488** Respiratory events, heart rate and oxygen parameters in obstructive sleep apnea - chronic obstructive pulmonary disease patients
S. Mihaicuta (Timisoara, RO)

**P489** Anthropometric and comorbidity differences in patient with obstructive sleep apnea and chronic obstructive pulmonary disease
S. Mihaicuta (Timisoara, RO)

**P490** Sleep bruxism, low back pain and quality of life
I. Luzeiro (Coimbra, PT)

**P491** Can screening for obstructive sleep apnea predict cardiopulmonary events in patients undergoing bronchoscopy with conscious sedation? Preliminary results
J. Cho (Seoul, KR)

**P492** The role of chronotype and sleep hygiene in the treatment of obesity
E. Fátková (Klecany, Česká republika, CZ)

**P493** Are subjective measurements of insomnia sufficient in chronic pain?
K. Abeler (Tromsø, NO)

Poster Session, Poster, Poster Exhibition

**Psychiatric & behavioural disorders 2**

**P494** Insomnia disorder as a predictor of mental disorders and pain: a systematic review and meta analysis
E. Hertenstein (Bern, CH)

**P495** Sleep in individuals at risk of bipolar disorder
P. Jawinski (Berlin, DE)

**P496** Family irregularity disturbs the development of sleep in children
M.E. Koopman-Verhoeff (Rotterdam, NL)

**P497** Sleep quality during pregnancy and at postpartum is associated with delusional ideation
E. Solomonova (Montreal, QC, CA)

**P498** Bi-directional relationship between sleep and psychiatry illness
J. Isaac (Beja, PT)

**P499** Which daytime impairments are specific to insomnia and which overlap with depression: a case-control study
X.W. Ji (Quebec, QC, CA)
Scientific Programme

P500  Impact of sleep restriction on mood and emotion regulation in adolescents with attention-deficit/hyperactivity disorder  
S. Becker (Cincinnati, OH, US)

P501  Therapeutic auditory stimulation during sleep in depression: preliminary findings  
K.V. Danilenko (Novosibirsk, RU)

P502  The effect of sleep deprivation, daily life stress and happiness on academic performance in Korean adolescent students  
G. Ju (Cheongju-si, KR)

P503  Digital media use before bedtime and sleep quality among Finnish adolescents  
N. Sandman (Turku, FI)

P504  Daylight exposure, depression and sleep in adolescents  
C. Moreno (Sao Paulo, BR)

P505  Auditory closed-loop stimulation of the sleep slow oscillations in patients with schizophrenia  
R. Göder (Kiel, DE)

P506  High risk of OSA increases affect dysregulation among patients with schizophrenia spectrum disorder: an effect mitigated by the presence of a concurrent substance use disorder  
A. Gosselin (Brockville, ON, CA)

P507  Severity of paranoid thoughts in a non-clinical sample moderates the relationship between previous night sleep and next-day paranoia: a prospective study using experience sampling methodology  
J. Barton (Manchester, UK)

P508  Daily activity levels, sleep quality and chronotypes in the early phase of psychosis  
J.-M. Petit (Lausanne, CH)

P509  Sleep as a moderator of the relationship between child maltreatment and romantic relationship patterns  
A. Schlarb (Bielefeld, DE)

Poster Session, Poster, Poster Exhibition

Paediatrics 1

P510  Sleep mediates the association between school pressure, physical activity, screen-time and psychological distress in adolescents

P511  The impact of a teacher-led, classroom-based, sleep education programme on adolescent sleep in UK schools: the Teensleep study

P512  Association between REM sleep EEG connectivity and daytime core symptoms in children with Autism Spectrum Disorder  
R. Godbout (Montreal, QC, CA)

P513  The relationship between sleep and temperament in early childhood

P514  A full sleep assessment in children with attention deficit hyperactivity disorders (ADHD)
Scientific Programme

P515 Clinical and patient global impression in a study of sodium oxybate in children and adolescents with narcolepsy with cataplexy
P516 The impact of experimental sleep restriction on adolescent mood
P517 The predictive value of polysomnography combined with quality of life for treatment decision of children with habitual snoring related to adenotonsillar hypertrophy
P518 Adenotonsillectomy improved quality of life better versus nonsurgical management for children with controversial diagnoses of obstructive sleep apnea: a prospective cohort study
P519 Sleep onset latency and psychologic problems in Siberian adolescents: the school-based study
P520 Sleep spindles features in obesity obstructive sleep apnea adolescents
P521 The relationship between sleep habits and positive and negative emotions in infants and toddlers: a preliminary study
P522 Polysomnographic study in primary-school children with Attention Deficit Hyperactivity Disorder
P523 Night-to-night sleep variability and objective short sleep duration are associated with impaired sympathetic-parasympathetic balance in adolescents
P524 Self-assessed sleep quality and it influencing factors in Latvian adolescents
P525 Infants’ sleep development during the 1 year after birth under nocturnal co-sleep conditions
P526 The association of sleep disturbances and gastroesophageal reflux in adolescents

Poster Session, Poster, Poster Exhibition

**Sleep & aging 2**

P268 Morning physiological changes after a dawn simulation light
V. Gabel (Palo Alto, CA, US)

P269 Sleep in Alzheimer’s disease spectrum disorders measured by WatchPAT, a home-based polysomnography
S. Park (Seoul, KR)

P270 Sleep disorders, age-related estrogen deficiency and melatonin in therapy
N. Semenova (Irkutsk, RU)

P271 Sleep quality of older adults living in different housing arrangements
A. Koscec Bjelajac (Zagreb, HR)

P272 From RBD to AD or mixed neurodegeneration? A case report
A. Galbiati (Milan, IT)

P273 Links between circadian rhythm fragmentation, regular physical activity and amyloid burden in healthy older adults
S. Rehel (Caen, FR)
Scientific Programme

P274  Sleep quality, excessive daytime somnolence and quality of life of elderlies.
G.S. Brandão (Senhor do Bonfim, BA, Brazil., BR)

P275  Sleep-wake patterns in older adults with mild cognitive impairment
P. Peirano (Santiago, Region Metropolitana, CL)

P276  Subjective sleepiness and executive functions over a 14-hour wake period in elderly subjects
B. Albinni (Caserta, IT)

P277  Home exercise improves the quality of sleep and daytime sleepiness of elderlies
L.V.F. Oliveira (Anapolis (GO), BR)

P278  Age related sleep stage trends as measured using remote sleep sensing hardware
B. Quinlivan (Dublin, IE)

P279  Sleep disorders and cognitive impairment: a longitudinal study
C.A.M. Lo Iacono (Rome, Rome, IT)

P280  Nightly Hypoxemia in the elderly inpatient population and its link to dementia
S. Wimmer (Bad Aibling, DE)

Poster Session, Poster, Poster Exhibition

Poster Session 2 - Poster viewing

13:05 - 13:50  ESRS Women’s Forum

Track General, ESRS Women’s Forum, Montreal

13:05 - 14:05  Satellite Symposium - Nox Medical: Beyond the AHI

13:05 - 13:25  Title to be announced
13:25 - 13:45  Title to be announced
13:45 - 14:05  Title to be announced

Satellite Symposium, Satellite Symposium, Sydney

13:05 - 14:05  Satellite Symposium - Jazz Pharmaceuticals: New approach to the management of excessive sleepiness in narcolepsy and obstructive sleep apnea

13:05 - 13:20  New wake promoting agents, what do we know?
M. Tafti (Lausanne, CH)
Scientific Programme

13:20 - 13:25 Q & A

13:25 - 13:40 Efficacy of Solriamfetol on the excessive sleepiness in narcolepsy and in obstructive sleep apnea
Y. Dauvilliers (Montpellier, FR)

13:40 - 13:45 Q & A

13:45 - 14:00 Maintenance of efficacy and safety of the benefit of Solriamfetol on Excessive Sleepiness in narcolepsy and in obstructive sleep apnea
G. Mayer (Schwalmstadt-Treysa, DE)

14:00 - 14:05 Q & A

14:15 - 16:15 Joint Symposium ESRS - ERS Interaction between sleep and obstructive airway disease: a cocktail party

14:15 - 14:45 Sleep disorders in COPD: etiology and consequences
W. McNicholas (Dublin, IE)

14:45 - 15:15 Asthma control and disturbed sleep
O. Marrone (Palermo, IT)

15:15 - 15:45 Management of sleep disorders in COPD and asthma
J. Hedner (Gothenburg, SE)

15:45 - 16:15 NIV in patients with (hypercapnic) COPD
P. Wijkstra (Groningen, NL)

14:15 - 16:15 The different enigmatic faces of REM sleep behavior disorder

14:15 - 14:45 Does isolated REM sleep behavior disorder exist? Lesson learned from the longstanding non-convertors
A. Stefani (Innsbruck, AT)

14:45 - 15:15 How to design a neuroprotective trial for idiopathic rem sleep behavior disorder
A. Iranzo (Barcelona, ES)

15:15 - 15:45 Why do not all patients with Parkinson disease have RBD?
F. Provini (Bologna, IT)

15:45 - 16:15 The universal presence of RBD in autoimmune/neurodegenerative disorders: the anti-IgLON5 disease
A. Heidbreder (Münster, DE)
Scientific Programme

**Neuropsychiatry Track, Oral Session, Sydney**

**14:15 - 15:15**

**Insomnia disorder**

14:15 - 14:27  O115  
*Feeling awake while asleep: a high-density EEG assessment of sleep perception*  
S. Lecci (Lausanne, CH)

14:27 - 14:39  O116  
*Insomnia with objective short sleep duration is associated with cardiometabolic, cardiovascular and cerebrovascular disease risk*  
J. Fernandez-Mendoza (Hershey, PA, US)

14:39 - 14:51  O117  
*Bedtime social media use and insomnia in adults*  
S. Hyvämäki (Turku, FI)

14:51 - 15:03  O118  
*Treatment response of insomnia disorder phenotypes and subtypes to standardised digital cognitive behavioural therapy*  
C. Gordon (Camperdown, AU)

15:03 - 15:15  O119  
*How best to sequence cognitive behavioural therapy and medication when treating chronic insomnia with and without psychiatric comorbidity?*  
C.M. Morin (Quebec, QC, CA)

**Basic Track, Symposium, Singapore**

**14:15 - 16:15**

**Local Network Sleep in vivo and in vitro**

14:15 - 14:45  120  
*The slow oscillation in vitro: a model for sleep regulation*  
M. Tafti (Lausanne, CH)

14:45 - 15:15  121  
*Neuronal network dynamics of sleep and wakefulness in C. elegans*  
M. Zimmer (Vienna, AT)

15:15 - 15:45  122  
*Local origin of slow EEG waves during sleep*  
I. Timofeev (Quebec, CA)

15:45 - 16:15  123  
*Gene-dependent state oscillations in vivo and in vitro*  
J. Krueger (Spokane, WA, US)

**Track Translational, Round Table, Osaka**

**14:15 - 15:15**

**Should we bank our sleep and clocks? How and why creating large multimodal databases**

14:15 - 14:22  124  
*Regulations and ethics in biobanking*  
G. Vandewalle (Liege, BE)

14:22 - 14:29  125  
*The Canadian Sleep Research Biobank*  
S. Warby (Montreal, CA)

14:29 - 14:36  126  
*Knowledgebased, data integration and analysis : from diabetes to sleep*  
I. Xenarios (Lausanne, CH)
Scientific Programme

14:36 - 14:43  126  Web diffusion of neuroimaging datasets  
S. Jodogne (Liège, BE)

14:43 - 15:15  Discussion

Basic Track, Oral Session, Sydney

15:15 - 16:15  Chronobiology

15:15 - 15:27  O127  Objective sleepiness is reduced by daytime polychromatic white light exposures depending on melanopic lux  
J. de Zeeuw (Berlin, DE)

15:27 - 15:39  O128  Influence of habitual caffeine intake and its withdrawal on circadian phase and nap sleep in the evening  
J. Weibel (Basel, CH)

15:39 - 15:51  O129  Entrainment of circadian system and sleep to extremely long photoperiods in modern life and nature  
J.R. Guzzetti (Stockholm, SE)

15:51 - 16:03  O130  Greater sleep inertia in young adults in early biological morning  
K.-M. Zitting (Boston, MA, US)

16:03 - 16:15  O131  Subjective sleepiness and waketime are related to light perception  
R. Lasauskaite (Basel, CH)

Neuropsychiatry Track, Oral Session, Osaka

15:15 - 16:15  Sleep in real life

15:15 - 15:27  O132  Sleep, fatigue and cognitive performance on different types of fishing vessels  
A. á Høvdanum (Tórshavn, FO)

15:27 - 15:39  O133  Do rats avoid a radiofrequency exposed environment to sleep?  
A. Pelletier (AMIENS, FR)

15:39 - 15:51  O134  Exercise effects on the circadian rhythm of adolescents with extreme evening-type circadian preference: a novel treatment to improve sleep health  
C. Lang (Basel, CH)

15:51 - 16:03  O135  Chronotype, social jetlag and work performance in a sample of Japanese workers  
Y. Komada (Tokyo, JP)

16:03 - 16:15  O136  Dreaming of Mars: inter-individual differences in sleep, sleepiness and performance during a year-long stay in Antarctica  
O. Mairesse (Brussels, BE)
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<td><strong>Respiratory Track, Keynote Lecture, San Francisco</strong></td>
<td><strong>Keynote Lecture - Susan Redline</strong></td>
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<td>16:45 - 17:30</td>
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<td><strong>Sex and gender differences in sleep apnea: a window into understanding disease susceptibility</strong></td>
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<td><strong>S. Redline (Boston, US)</strong></td>
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<td><strong>Basic Track, Keynote Lecture, Montreal</strong></td>
<td><strong>Keynote Lecture - Wenbiao Gan</strong></td>
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<td>16:45 - 16:55</td>
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<td><strong>Track General, ESRS Business Meeting, Montreal</strong></td>
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Friday, 28 September 2018

08:30 - 10:30  
Neuropsychiatry Track, Symposium, San Francisco

**Headache and Sleep**

08:30 - 09:00  
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**Headache and sleep**  
P. Jennum (Glostrup, DK)

09:00 - 09:30  
140  
**Cluster headache & the clock**  
R. Fronczek (Leiden, NL)

09:30 - 10:00  
141  
**Hypnic headache - the undesired alarmer**  
C. Schankin (Bern, CH)

10:00 - 10:30  
142  
**Hypothalamic pathways in headache & sleep**  
P. Holland (London, UK)

08:30 - 10:30  
Basic Track, Symposium, Montreal

**Biomarkers for sleep disruption and sleep disorders**

08:30 - 09:00  
143  
**Computational approaches to identify and validate blood transcriptome biomarkers for sleep and circadian health**  
E. Laing (Guildford, UK)

09:00 - 09:30  
144  
**Systems genetics of sleep loss in the mouse**  
M. Jan (Lausanne, CH)

09:30 - 10:00  
145  
**Transcriptomic biomarkers of sleep disturbances and other symptoms induced by chronic stress in mice**  
M. Nollet (London, UK)

10:00 - 10:30  
146  
**DNA methylation in blood leukocytes as putative biomarkers for insufficient sleep**  
A. Lahtinen (Helsinki, FI)

08:30 - 10:30  
Respiratory Track, Symposium, Sydney

**Pharmacological therapy of obstructive sleep apnea. Novel tools and principles.**

08:30 - 09:00  
146  
**The challenge of designing trials in OSA**  
J. Verbraecken (Edegem, Antwerp, BE)

09:00 - 09:30  
147  
**Pathophysiological phenotyping as a rational for drug development**  
D.J. Eckert (Sydney, AU)

09:30 - 10:00  
148  
**Cannabinoid receptor modulation in sleep apnea**  
D. Carley (Chicago, US)
Scientific Programme

10:00 - 10:30  149  Carbonic anhydrase activity modulation in sleep apnea
                E. Hoff (Göteborg, SE)

08:30 - 09:30  Neuropsychiatry Track, Oral Session, Singapore

08:30 - 08:42  O150  Kleine-Levin syndrome is associated with LMOD3 variants
                A. BaHammam (Riyadh, Riyadh, SA)

08:42 - 08:54  O151  ADHD symptoms in H1N1-vaccinated youths with narcolepsy type 1
                S. Knudsen (Oslo, NO)

08:54 - 09:06  O152  Repeated measures of hypocretin-1 level in individuals with narcolepsy type 1 and clinical controls
                E.W. Torstensen (Glostrup, DK)

09:06 - 09:18  O153  Sustained attention to response task (SART) shows impaired vigilance versatility in narcolepsy type 1: a simultaneous EEG-fMRI study
                J.K. Gool (Amsterdam, NL)

09:18 - 09:30  O154  Alternative MSLT cutoffs for diagnosis of pediatric narcolepsy type 1
                F. Pizza (Bologna, IT)

08:30 - 09:30  Track Translational, Round Table, Osaka

08:30 - 08:37  155  Mechanisms of caffeine’s effect on sleep
                T. Porkka-Heiskanen (Helsinki, FI)

08:37 - 08:44  156  Deeper sleep during chronic caffeine consumption in mice
                T. DeBoer (Leiden, NL)

08:44 - 08:51  157  Acute and chronic caffeine intake and human sleep
                H.-P. Landolt (Zurich, CH)

08:51 - 08:58  158  Effects of chronic caffeine consumption and caffeine withdrawal on human waking performance, sleep and brain structure
                C.F. Reichert (Basel, CH)

08:58 - 09:30  Discussion

09:30 - 10:30  Neuropsychiatry Track, Oral Session, Singapore

09:30 - 10:30  Sleep in psychiatric disorders
### Scientific Programme

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<td>09:30 - 09:42</td>
<td>O159</td>
<td>The role of sleep spindles in procedural memory consolidation in depression</td>
<td>A. Steiger (Munich, DE)</td>
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<td>09:42 - 09:54</td>
<td>O160</td>
<td>Poor sleep and its relation to impulsivity in forensic psychiatric patients with antisocial or borderline personality disorders</td>
<td>M. Van Veen (Assen, NL)</td>
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<td>09:54 - 10:06</td>
<td>O161</td>
<td>The influence of genetic variants on sleep and health improvement in adolescents with an eveningness chronotype</td>
<td>M. Dolsen (Berkeley, CA, US)</td>
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<td>10:06 - 10:18</td>
<td>O162</td>
<td>Synaptic mechanisms of therapeutic sleep deprivation in major depression</td>
<td>C. Nissen (Bern, CH)</td>
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<td>10:18 - 10:30</td>
<td>O163</td>
<td>Let there be (blue-depleted) light in psychiatry</td>
<td>D. Vethe (Trondheim, NO)</td>
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<td>09:30 - 10:30</td>
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<td><strong>Epidemiology of sleep</strong></td>
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<td>09:30 - 09:42</td>
<td>O164</td>
<td>Sleep duration and mortality-does weekend sleep matter?</td>
<td>T. Åkerstedt (Stockholm, SE)</td>
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<td>09:42 - 09:54</td>
<td>O165</td>
<td>Sleep fragmentation in sleep disordered breathing based on a large database (ESADA)</td>
<td>T. Penzel (Berlin, DE)</td>
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<td>09:54 - 10:06</td>
<td>O166</td>
<td>Sleep disturbances associated with increased risk of mortality: UK Biobank Study</td>
<td>M. von Schantz (Guildford, Surrey, UK)</td>
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<td>10:06 - 10:18</td>
<td>O167</td>
<td>Sleep in major psychiatric disorders: results from nationwide SUPER Finland study</td>
<td>E. Cederlöf (Helsinki, FI)</td>
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<td>10:18 - 10:30</td>
<td>O168</td>
<td>Seasonal differences in obstructive sleep apnea severity. Results from the European Sleep Apnea Database (ESADA)</td>
<td>R. Staats (Lisbon, PT)</td>
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<td>11:00 - 13:00</td>
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<td>11:00 - 11:30</td>
<td>169</td>
<td>Brain iron metabolism and its effects on brain neurocircuitry in RLS</td>
<td>R.P. Allen (Baltimore, US)</td>
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<td>11:30 - 12:00</td>
<td>170</td>
<td>Balance-shift of spinal dopamine receptors during long-term treatment. A possible mechanism for augmentation</td>
<td>S. Clemens (Greenville, NC, US)</td>
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12:00 - 12:30  171  Hypoadenosinergic state as a driving force leading to hyperdopaminergic and hyperglutamatergic states in RLS  
S. Ferre (Baltimore, MD, US)

12:30 - 13:00  172  The search for new therapeutic targets  
D. Garcia-Borreguero (Madrid, ES)

Respiratory Track, Round Table, Montreal

11:00 - 12:00  Transcutaneous carbon dioxide during sleep in sleep-disordered breathing: the reverse side of the coin

11:00 - 11:07  Principles and practice of transcutaneous pCO2 measurement during sleep  
O. Polo (Tampere, FI)

11:07 - 11:14  Transcutaneous pCO2 for titration and follow-up of non invasive ventilation  
J.L. Pepin (Grenoble, FR)

11:14 - 11:21  173  Transcutaneous carbon dioxide during sleep-disordered breathing  
V. Rimpilä (Tampere, FI)

11:21 - 12:00  Discussion

Basic Track, Round Table, Sydney

11:00 - 12:00  ESRS-WSS Education and accreditations procedures for Sleep Medicine: meeting the needs

11:00 - 11:15  Accreditation of sleep centres in Europe - current status  
D. Pevernagie (Gent, BE)

11:15 - 11:30  ESRS Examination in Sleep medicine: the scope, content and vision  
T. Paunio (Helsinki, Finland, FI)

11:30 - 11:45  Sleep medicine examination by WSS worldwide  
T. Penzel (Berlin, DE)

11:45 - 12:00  Sleep Medicine examination: past present and future  
M. Schmidt (Bern, CH)

Track Translational, Symposium, Singapore

11:00 - 13:00  The relationship between brain oscillations during sleep, neuroplasticity and stroke

11:00 - 11:30  Sleep and neuroplasticity during stroke recovery  
C. Bassetti (Bern, CH)
Scientific Programme

11:30 - 12:00  A role for sleep-like bistability in stroke perilesional cortex?  
M. Massimini (Milan, IT)
12:00 - 12:30  What can we learn from sleep EEG changes during development for stroke recovery processes  
R. Huber (Zurich, CH)
12:30 - 13:00  Perilesional induction of sleep slow waves improves motor recovery after ischemic stroke  
L. Facchin (Bern, CH)

Poster Session, Poster, Poster Exhibition

Poster Session 3 - Poster viewing

12:00 - 13:00  Case Discussion

Case Discussion, Sydney

Poster Session, Poster, Poster Exhibition

Biochemistry & Neurobiology 2

P590  The possible role of P2X7 receptors of ATP in the induction of recovery sleep following sleep deprivation  
Z. Lelkes (Szeged, HU)
P591  Elevated glutamate levels in the anterior cingulate cortex after a sleep-inducing dose of gamma-hydroxybutyrate in humans: a magnetic resonance spectroscopy study  
D.A. Dornbierer (Zurich, CH)
P592  Preclinical evaluation of the potential use of Pitolisant as new intervention for sleep abnormalities in Prader-Willi syndrome  
M. Pace (Genova, IT)
P593  Optogenetic control of sleep slow waves to improve recovery after ischemic stroke  
L. Facchin (Bern, CH)
P594  Functional consequences of brain glycogen deficiency on the sleep-wake cycle regulation in PTG-KO mice  
S. Burlet-Godinot (Prilly, Choisir une province, CH)
P595  Acoustic modulation of slow-wave sleep in rats: effect of boosting or inhibiting delta activity in SWS on motor learning  
C. Gonçalves Moreira (Zurich, Zurich, CH)
P596  Extended photoperiod alters sleep, circadian rhythmicity and expression of synaptic plasticity-associated genes. The impact of blue-enriched light  
J. Grønli (Bergen, NO)
Scientific Programme

P597  Variability in habitual nighttime sleep predicts white matter integrity of neural impulsivity network  
      P. Peirano (Santiago, Region Metropolitana, CL)

P598  Local non-REM sleep enabled through heterogeneous thalamic burst propensity  
      L.M. Fernandez (Lausanne, CH)

P599  Thalamic dual-control of sleep and wakefulness  
      T. Gent (Bern, CH)

P600  Volume of subcortical brain areas is associated with sleep macrostructure in healthy young individuals  
      P. Ghaemmaghami (Liege, BE)

P601  IL-1β, IL-6 and TNF-α, induced by upper airway resistive breathing, downregulates respiratory controller response to hypercapnic stimuli  
      F. Perlikos (Athens, GR)

P602  Carotid Body Deafferentiation in mice with upper airway resistive breathing downregulates respiratory controller response to hypoxic stimuli  
      F. Perlikos (Athens, GR)

P603  Diurnal changes in Glutamate levels from childhood to adulthood assessed by Magnetic Resonance Spectroscopy  
      C. Volk (Zurich, CH)

Poster Session, Poster, Poster Exhibition

Chronobiology & Circadian rhythms 3

P604  Heart rate variability and its circadian variation in patients with disorders of consciousness: a diagnostic tool?  
      M. Angerer (Salzburg, AT)

P605  Sleep, chronotype and social jet lag in a sample of Portuguese college students  
      M. Gonçalves (Porto, PT)

P606  Daytime sleepiness, salivary cortisol and melatonin levels during four-week blue light blockade. Do we adapt?  
      H. Oginska (Krakow, PL)

P607  Two dimensions of chronotype - some personality, mood, and behavioural correlates of subjective circadian phase and amplitude  
      H. Ogińska (Kraków, PL)

P608  Human iPSC-derived fibroblasts as a model to investigate genetic and epigenetic contributions to regulation of circadian rhythms  
      N.-H. Du (Zurich, CH)

P609  Validation of the French version of Children's Chronotype Questionnaire in school-aged children: a study in Luxembourgish population  
      S. Figueiredo (Lisbon, PT)
### Scientific Programme

**P610**  
Not all circadian disruption protocols are created equal  
A. Fisk (Oxford, UK)

**P611**  
Chronotypes differ influence in the weekday/weekend variability of pain in patients with fibromyalgia  
S.-C. Fang (Taipei, TW)

**P612**  
Chronotypes differ influence in the weekday/weekend variability of pain in patients with fibromyalgia  
S.-C. Fang (Taipei, TW)

**P613**  
In bed electronic media use as an underlying mechanism of the association between circadian preference and sleep outcomes  
L. Exelmans (Leuven, BE)

**P614**  
Investigation of sleep structure with polysomnography in the patients with first episode psychosis  
E. Kizilay (Ankara, TR)

**P615**  
Phase advance jet lag disorder: results of the JET study  
C. Polymeropoulos (Washington, DC, US)

**P616**  
A proposal of circadian markers and indexes for the study of chronodisruption in sleep and circadian pathologies  
B. Rodríguez-Morilla (Murcia, ES)

**P617**  
Sleep structure and awakening threshold in delayed sleep-wake phase disorder (DSWPD)  
T. Sand (Trondheim, NO)

**P618**  
Comparisons of subjective and actigraphic measurements of sleep between shift-working and daytime psychiatric nurses  
B.-H. Yoon (Naju, Jeonnam, KR)

**P619**  
A new monitoring tool for detecting human circadian rhythms: a mathematical approach using a thoracic temperature sensor  
A. Chkeir (Troyes, FR)

**P620**  
A new monitoring tool to detect an irregular Sleep-Wake circadian rhythm based on the automatic dichotomy index computation  
R. Soubra (Troyes, FR)

**Poster Session, Poster, Poster Exhibition**  
**Learning, memory and cognition 3**

**P621**  
The relationship of stimulus emotionality to sleep-dependent memory consolidation: Testing contrasting theories using memory for negative, neutral and positive emotionally-toned photographs and stories  
M. Blagrove (Swansea, UK)

**P622**  
The impact of memory strength for sleep-dependent memory consolidation  
D.P.J. Heib (Salzburg, Salzburg, AT)
Scientific Programme

P623  Academic performance, sleep duration and chronotype in Korean adolescents  
J.H. Kim (Cheonan, SEOUL, KR)

P624  Are prenatally learned nursery rhymes recognized at birth? A high-density EEG study  
M. Schabus (Salzburg, AT)

P625  Gross motor adaptation benefits from NREM2 sleep and fast spindle activity during nocturnal sleep after training  
K. Hoedlmoser (Salzburg, AT)

P626  Subjectively defined optimal/non-optimal time of day modulates controlled but not automatic retrieval processes in verbal memory  
P. Peigneux (Bruxelles, BE)

P627  Obstructive sleep apnea and non-invasive ventilation treatment-related effects on semantic memory integration in a false memory generation paradigm  
P. Peigneux (Bruxelles, BE)

P628  Clustered and temporally organised occurrence of NREM-stage2 sleep spindles mediates motor memory consolidation  
A. Boutin (Montreal, QC, CA)

P629  Split sleep is superior to consolidated nocturnal sleep for memory retention in sleep restricted adolescents  
E. van Rijn (Singapore, SG)

P630  Phase amplitude coupling facilitates pre-post-sleep consolidation of declarative and but not of procedural memories  
C. Mikutta (Bern, Bern, CH)

P631  Sleep and memory consolidation of reward-motivated encoding  
E. van Rijn (Singapore, SG)

P632  The effect of sex hormones on sleep and cognitive performance  
K. Hoedlmoser (Salzburg, AT)

Poster Session, Poster, Poster Exhibition

Sleep deprivation 2

P633  Poor housing quality is associated with short sleep duration in New Zealand  
T.L. Signal (Wellington, NZ)

P634  Sleep-wake dependent changes in molecular markers of synaptic plasticity in humans: a PET/MRS study  
S. Weigend (Zürich, CH)

P635  On the high levels of delta power after prolonged wakefulness: reflection of a continuous process or a discrete NREM sleep sub-state?  
J. Hubbard (Lausanne, CH)

P636  Working memory performance is better maintained in older compared with young adults after sleep deprivation  
A. Gerhardsson (Stockholm, SE)
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<td>Mood impairment is less strong in older than in young adults after sleep deprivation</td>
<td>A. Gerhardsson</td>
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<td>C. Mühl</td>
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<td>C. Li</td>
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<td>Theta and alpha oscillatory activity changes during visual and auditory cognitive tasks after sleep deprivation</td>
<td>S. Montamat</td>
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<td>Sleep deprivation impairs social memory</td>
<td>T. Sundelin</td>
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<td>Investigation of the possible effects of the BDNF Val66Met polymorphism on the sleep EEG in a large, homogenous sample</td>
<td>D.M. Baur</td>
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<td>Excessive daytime sleepiness and occupational accidents among resident doctors in Kocaeli city</td>
<td>U. Urgan</td>
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<td>Sleep loss in shift-working long-haul truck drivers</td>
<td>J. Onninen</td>
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<td>P645</td>
<td>A questionnaire study on sleep-wake pattern and sleep quality in TMJ &amp; orofacial pain clinic</td>
<td>S. Kim</td>
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<td>Sleep quality of first year vs. sixth year medical students from the State University of Medicine and Pharmacy of the Republic of Moldova</td>
<td>A. Lupușor</td>
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**Methodology & Computation 3**

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<td>A. Wichniak</td>
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<td>P650</td>
<td>Gender differences in PSQI according to the main sleep disorders groups</td>
<td>C. Reis</td>
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P651  Comparison between polysomnography scoring of auto-analyzing software with trained technician
R. Heidari (Tehran, IR)

P652  Improved actigraphy-based sleep monitoring through optimal parameter tuning
F. Ryser (Zurich, CH)

P653  A smartphone based machine learning method for the fine characterization of snoring
D. Colas (Lyon, FR)

P654  If you’re sleepy and you know it, ...
B. Delwiche (Brussels, BE)

P655  Cardiac activity and wrist movements: SomnoArt a new technology to assess sleep architecture in healthy, depressed and insomniac patients
A. Viola (Colmar, FR)

P656  Correlation between the score of “STOP BANG” questionnaire and the severity of the OSA
S. Arbutina (Skopje, MK)

P657  Can smartphone sleep applications reliably assess sleep-wake cycle? Preliminary findings from a PSG study
E. Fino (Bologna, IT)

P658  Does mattress zoning affect the biomechanics of sleep?
H. Shore (Preston, UK)

P659  Automatic human sleep stage scoring using Deep Neural Networks
A. Malafeev (Zurich, CH)

P660  Finding the ideal sleep solution: are you sleeping comfortably?
H. Shore (Preston, UK)

P661  Validation of Russian version of the dysfunctional beliefs about children’s sleep scale
D. Kudryashov (Moscow, RU)

P662  Classification of obstructive sleep apnea with and without REM sleep behavior disorder based on convolutional neural network using cardiopulmonary coupling spectrogram
J.-U. Park (Wonju, KR)

P663  Activity monitor setup with two sensors
J. Virkkala (Helsinki, FI)

P664  The influence of between shift recovery duration and time of day on sleep: an analysis of 14 field actigraphy studies
R. Matthews (Stockholm, SE)

P665  A new tool for automatic detection of microsleeps during sleep restriction: validation in healthy volunteers
S. Takillah (Brétigny-sur-Orge, FR)

P666  Level of consciousness during anesthesia and sleep is indexed by the spectral scaling exponent of resting EEG
M. Colombo (Milan, IT)
Scientific Programme

P667  Representation of polysomnography recordings as low dimensional trajectories in latent space
G. Solelhac (Paris, FR)

Poster Session, Poster, Poster Exhibition

Breathing disorders 5

P668  Prevalence of reported excessive daytime sleepiness among Moroccan patients diagnosed with Obstructive sleep apnea-hypopnea syndrome and it's correlation with Epworth sleepiness scale
A. Jniene (Rabat, MA)

P669  Hypertension control in OSA - data from the European Sleep Apnea Database
S. Svedmyr (Gothenburg, SE)

P670  Napping in patients with OSAHS is associated to diurnal fatigue
A. Jniene (Rabat, MA)

P671  Discrimination of hypopnea in everyday practice: is it worthwhile?
S. Correia (Porto, PT)

P672  Contactless monitoring of breathing rate improves measurement robustness
M. Rullan (Basel, CH)

P673  Catestatin serum levels in male patients with obstructive sleep apnea
J. Bozic (Split, HR)

P674  Depression associated to cardiovascular and/or metabolic comorbidities in Patients with obstructive sleep apnea-hypopnea syndrome
A. Jniene (Rabat, MA)

P675  Prevalence of sleep apnea syndrome in a cohort of acromegalic patients
S. Correia (Porto, PT)

P676  The best formula for predicting cpap pressure? We have any?
D. Rocha (Vila Real, PT)

P677  Sleep apnea: before and after heart transplant
E. Matos (Vila Real, PT)

P678  Association of respiratory mechanic instability and respiratory parameters in adults with obstructive sleep apnea
J.H. Choi (Bucheon, KR)

P679  Investigation of KL-6, ET-1 and S100A9 levels in idiopathic pulmonary fibrosis (IPF) patients with Obstructive sleep apnea (OSA)
I. Bouloukaki (Heraklion, Crete, GR)

P680  Hypoglossal nerve stimulation for obstructive sleep apnea
S. Gradanska (Varna, BG)
Scientific Programme

P681 Comparison between auto-trilevel and bilevel positive airway pressure ventilation for treatment of obesity hypoventilation syndrome patients
X. Zhang (Nanjing, CN)

P682 Snoring causes OSA: sensory nervous lesions in the palate worsen over time in untreated snorers but not in CPAP-treated patients
E. Svanborg (Linköping, SE)

P683 First successful mechanical splint for OSA with an orally administrable pharyngeal stenting device
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