Dear Colleagues and Friends,

On behalf of the World Association of Sleep Medicine (WASM) and the Korean Society of Sleep Medicine (KSSM), we are delighted to invite you to our joint congress: the 6th World Congress on Sleep Medicine in Seoul, Korea from March 21-25, 2015. The congress provides an international discussion forum of sleep professionals from the entire world. It focuses particularly on the interdisciplinary character of our field. Sleep clinicians, technologists, trainees, educators and scientists from around the world will meet to advance knowledge on sleep science, sleep in public health, sleep health and the sleep-wake disorders, their diagnosis and treatments. We seek to maximize learning both from formal presentations by the leading experts in their fields and from informal discussion groups emphasizing opportunities for your participation.

The social events and collaboration during scientific discussions will support productive professional and personal interactions. The global character and reach of WASM in collaboration with the knowledge of the local Korean Society of Sleep Medicine brings the best of sleep medicine to Seoul. Your involvement in this congress is greatly valued. You may learn and also share knowledge and skills that will advance sleep health around the world.

We hope that you’ll join us for the science, learning, collegiality and social events at our world sleep conference in this historic city.

Sincerely,

Richard Allan, PhD
Johns Hopkins University
Baltimore, Maryland
President
World Association of Sleep Medicine

Seung Bong Hong, MD, PhD
Samsung Medical Center
Sungkyunkwan University School of Medicine
Seoul, Korea
Past President
Korean Society of Sleep Medicine
WASM Mission Statement

The fundamental mission of the WASM is to advance sleep health worldwide. WASM will fulfill this mission by promoting and encouraging education, research and patient care throughout the world, particularly in those parts of the world where the practice of sleep medicine is less developed. WASM will act as a bridge between different sleep societies and cultures, supporting and encouraging worldwide exchange of clinical information and scientific studies related to sleep medicine. WASM will seek to encourage development and exchange of information for world-wide and regional standards of practice for sleep medicine.

Because sleep health will be advanced by information, WASM will strive to advance knowledge about sleep and its disorders amongst both healthcare workers and the general public. This will include both education about the means to “healthy sleep” as well as awareness of the adverse consequences of sleep dysfunction on the quality of life and the health of an individual. To address the concerns of specific areas of the world, WASM will provide a forum for discussion and consideration of issues of relevance to particular regions and cultures.

To achieve these goals, WASM will act in several directions including but not limited to: WASM will share information both through its scientific congresses and by organization of intercontinental and regional educational courses, symposia and workshops.

• WASM will encourage international and regional collaborative research, keeping in mind that the customs, cultures and priorities for sleep medicine may vary among different continents of the world.

• WASM will help develop national and regional sleep organizations where none exist.

• WASM will participate in preparation of reviews, guidelines, and standards emphasizing preventive measures for the practicing sleep specialists and taking into consideration regional customs, cultures and habits.

• WASM will collaborate with lay and professional sleep organizations in order to disseminate information about sleep health to the public and the profession.

• WASM will encourage collaboration between sleep clinicians and basic scientists to bring sleep medicine from the bench to the bedside, promoting sleep medicine around the globe. In particular WASM will encourage development of clinical methods appropriate for regional conditions and cultures.

• WASM will be open to establishing closer relationships with individuals and regional associations by offering memberships at a modest cost, taking into consideration local economic issues.

• WASM will maintain an official journal available at a modest fee to its members that will focus on the full range of sleep medicine around the world.
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6th World Congress on Sleep Medicine Committees

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Seung Bong Hong, co-chair
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Seung Chul Hong
Jung Hie Lee
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Allan O’Bryan
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Claudia Trenkwalder
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Chang-Ho Yun

Organizing Secretariats
World Association of Sleep Medicine Foundation
3270 19th St. NW Suite 109
Rochester, MN 55901 USA

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Chae-Seo Rhee
Chol Shin
Won Chul Shin
In-Young Yoon
Ho-Kee Yoon
Chang-Ho Yun

Cheng-Hui Lin
Song Tar Toh
Jingying Ye
The World Association of Sleep Medicine and the Spanish Sleep Society would like to thank the following institutions, scientific societies and universities for their support of the 6th World Congress on Sleep Medicine.
WASM Committees Chair and Co-Chairs

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Scientific Affairs Committee
Sonia Ancoli-Israel
Kingman Strohl

Nominating Committee
Sudhansu Chokroverty

Awards Committee
Antonio Culebras
Manvir Bhatia

Publication Committee
Christian Guilleminault
General Information

Location
COEX Convention & Exhibition Center
159 Samseong dong, Gangnam-gu
Seoul 135-731, Korea • www.coex.co.kr/eng

On-site Registration Hours
Friday, March 20, 2015: 5:00pm – 9:00pm
Saturday, March 21, 2015: 7:00am – 8:00pm
Sunday, March 22, 2015: 7:00am – 8:00pm
Monday, March 23, 2015: 7:00am – 8:00pm
Tuesday, March 24, 2015: 7:00am – 8:00pm
Wednesday, March 25, 2015: 7:00am – 7:00pm

Registration materials (including badges, final programs, tickets, etc.) will be provided at the registration counter located at the COEX convention center.

Tickets are required for entry for Saturday and Sunday’s pre-congress courses, Monday and Tuesday’s discussion symposia, and Monday’s presidential dinner. Tickets can be purchased online at www.wasmonline.org or at the registration desk.

Guest Passes
A registered attendee may elect to buy a guest pass at cost of US$50. Guest passes are for family members only and allow entrance to the exhibit hall and industry sponsored events only. Guests are not permitted to attend any of the general scientific sessions or ticketed sessions.

Badge Identification
All congress participants and guests must wear a WASM congress badge. Badges allow entrance to the scientific sessions and access to the convention center. Your cooperation with this policy is appreciated. Recycle your badge holder after the congress by dropping it off at the registration desk area. Replacement badges can be obtained at the registration desk for a fee.

Exhibits and Exhibiting Hours
The 6th World Congress on Sleep Medicine provides an opportunity for commercial companies to network, educate, and provide information about sleep related products and services. Exhibiting is open during the following hours:

Monday, March 23, 2015: 10:00AM to 4:00PM
Tuesday, March 24, 2015: 10:00AM to 4:00PM
Wednesday, March 25, 2015: 10:00AM to 4:00PM

The exhibition areas will be closed and monitored by security before 10:00AM and after 4:00PM. Exhibitor personnel are allowed in their booths one hour prior and one hour after exhibition times. We require that all exhibit booths be staffed only during the exhibit hours.

Speaker Ready Room
Presenting speakers can use the Speaker Ready Room to upload their PowerPoint presentations, test software, and make changes and adjustments to their presentations. Speakers are required to upload their presentation in the speaker ready room 12 hours prior to their session. A technician will be available to assist as needed.

Speaker Ready Room hours are:
Friday, March 20, 2015: 5:00pm – 9:00pm
Saturday, March 21, 2015: 7:00am – 5:00pm
Sunday, March 22, 2015: 7:00am – 5:00pm
Monday, March 23, 2015: 7:00am – 8:00pm
Tuesday, March 24, 2015: 7:00am – 8:00pm
Wednesday, March 25, 2015: 7:00am – 5:00pm

Press Room
Members of the press are encouraged to utilize the Speaker Ready Room to work on their stories, internet access, and other resources that are needed.

WASM Membership Booth
WASM membership records may be reviewed and purchased at the WASM Booth #440. Details about WASM membership can be directed to registration or WASM booth staff.

Recording Device Policy
No recording devices, audio or visual, may be used during College of Medicine, Mayo Clinic CPD activities. Duplication, distribution, or excerpting of this program, without the express written permission of Mayo Clinic and the World Association of Sleep Medicine, is strictly prohibited.

All of the proceedings of this program, including the presentation of scientific papers, are intended for limited publication only, and all property rights in the material presented, including common-law copyright, are expressly reserved by the Faculty, World Association of Sleep Medicine, and/or Mayo Clinic. No statement of presentation made is to be regarded as dedicated to the public domain. Any sound reproduction, transcript or other use of the material presented at this CME activity without the permission of the World Association of Sleep Medicine and Mayo Clinic is prohibited to the full extent of common-law copyright in such material.

Cameras and recording devices are not allowed to be used in the scientific meeting rooms at any time. Violation of this rule could result in removal from the WASM 6th World Congress on Sleep Medicine congress and COEX convention center along with the confiscation of the film and/or recording device.
Electronic Devices
Please turn all electronic devices (cellular telephones, pagers, etc.) to silent mode. As a courtesy to the presenters and other participants, phone calls should be taken outside of the scientific sessions.

Seating
Scientific sessions are filled on a first-come, first-served basis. WASM along with the Program Committee reviewed the scientific sessions to anticipate demand to match the room size with expected seating. Occasionally, a talk will have higher demand than expected. Seating limits are strictly enforced by the COEX convention center and city of Seoul. We encourage delegates to arrive early for the best possible seating.

Abstract Supplement
Abstracts from the 6th World Congress on Sleep Medicine are published in an online abstract supplement of the journal Sleep Medicine. To view a PDF of the abstracts, please visit: www.wasmcongress.com/abstracts/.

Continuing Medicine Education
Continuing Medical Education (CME) Credit for Physicians Accreditation Statement
This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of Mayo Clinic College of Medicine and World Association of Sleep Medicine. Mayo Clinic College of Medicine is accredited by the ACCME to provide continuing medical education for physicians.

Mayo Clinic College of Medicine designated this live activity for a maximum of 43 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

CME is awarded for pre-congress courses, keynote lectures, symposia sessions, oral presentations, and technologist workshops. A CME fee of US$10 is payable online at www.wasmonline.org or at the registration desk to obtain CME documentation.

CME Record of Attendance
A Record of Attendance is provided to all attendees at on-site registration. The Record of Attendance allows attendees to calculate their own credits of participation in the educational activity.

The total number of credits participants can earn per day is noted on the Record of Attendance. Below each day is a line to record the actual number of credits during which you participated in the educational activity. It is recommended that you record your actual credits daily as you proceed through the CME activity.

Upon conclusion of the CME activity, please total the number of credits you have recorded on the top half of the form, sign it, and return it to the registration desk.

The bottom half of the form represents your Record of Attendance, which you must retain for your records. Please make sure the number of credits claimed in both sections coincide. No other documentation is provided to you after this CME activity. The Record of Attendance has replaced the certificate.

The Record of Attendance can be used for requesting credits in accordance with state licensing boards, specialty societies, or other professional associations.

CME Activity Evaluation
The overall CME activity evaluation will be emailed following the activity to the email address that was provided when you registered. The CME activity evaluation is brief and will only take a few minutes to complete.

Faculty evaluation forms will be provided electronically via email to registrants. Completed faculty evaluation forms should be completed online at the conclusion of the CME activity and within one week of the congress. Your feedback is very important to us and will be used for planning future programs, as well as identifying faculty strengths and opportunity for growth.
Opening Ceremony

Join us for the **Opening Ceremony** of the 6th World Congress on Sleep Medicine!

**Sunday, March 22, 2015**
7:00pm to 8:00pm - Opening Ceremony
8:00pm to 9:00pm - Reception

The Opening Ceremony will take place at the COEX Convention & Exhibition Center.

Awards will be presented to the following individuals and sleep societies:

**Christian Guilleminault Award:**

**Lugaresi Award:**

**World Sleep Day – Distinguished Activities Awards:**

**Young Investigators**

Gala Dinner

Join us for the **Gala Dinner**! Do not miss this opportunity to network with colleagues from around the world. Dinner ticket includes cocktail drink, dinner, and traditional Korean Entertainment. Individual tickets or tables of 8 can be purchased.

**Monday, March 23, 2015**
7:00pm to 9:00pm

The Gala Dinner will take place at the COEX Convention & Exhibition Center.

Closing Ceremony

**Wednesday, March 25, 2015**
7:30pm to 8:00pm
COEX Convention & Exhibition Center.

Join us for a final presentation as we acknowledge the hard work of the 2015 Program Committee and listen to a special presentation from the 2017 Program Committee co-chairs. Afterwards, join us for a toast and a last chance to say good-bye to your colleagues.

Sponsorship & Exhibition

For more information on corporate support opportunities within the 6th World Congress on Sleep Medicine please contact Bryan Weiss, WASM Associate Director, at weiss@wasmonline.org or 507-316-0084.
Tourism and Hotels

The capital city of South Korea is Seoul, it is a metropolis with over half of South Korea's population living here.

**Seoul-Skyline**
If you plan on arriving in Seoul a few days before the Congress begins or staying afterwards to see the city here are just a few of the amazing sites to see and things to do!

**The War Memorial of Korea**
Perspective from someone who recently visited the War Memorial of Korea: “The grounds and the exhibits are massive and showcase a wide range of aircraft, armor and ships. I especially loved being able to view close up the Phantom and Cobra aircraft. You can also learn more about Korea's military history as well as the UN's key involvement”

**Bukhansan National Park**
One of the most popular pastimes in Seoul is hiking and this stunning national park just outside the city is a local favorite. Aside from a variety of hiking trails for every skill level, you'll also see lots of flora and fauna, temples and ancient fortresses.

**Seoul Arts Center**
The Seoul Arts Center is an architecturally impressive complex of theaters and exhibition halls that are constantly and concomitantly in activity the whole year round. Great local and international concerts, operas, ballets, painting exhibitions and other attractions are always in function at any moment of the year and frequently places the visitor at loss on which of the not to be missed spectacles to choose. Definitely a must place for arts lover.

**Bongeunsa Temple**
It's hard to believe that this large, beautiful Buddhist temple is situated in the middle of a bustling metropolis. It's impossible not to be moved by the beauty and serenity of this enchanting temple. You can even stay overnight for a fee.

**Dongdaemun**
Dongdaemun is a sprawling market area that has no fewer than 20 shopping malls, and more than 30,000 individual shops. It's also a place of residence, manufacture, transport and much more.

**Seoul Museum of History**
Seoul's main historical museum is very large, very interesting, and one of the city's best places in which to while away a rainy day. The permanent exhibits chart each segment of the city's fascinating past, from the Stone Age to present times. A more recent creation is the large floor map of Seoul, which children find particularly riveting. These permanent exhibitions have free entry, but some wings of the museum host temporary exhibitions of art or photography – this is almost always work of extremely high quality, so it's worth giving the museum's website a look to see what's going on. Also on the complex is Kongdu Iyagi, a restaurant serving delectable neo-Korean food.

**Kimchi Field Museum**
The Kimchi Field Museum specializes in anything and everything to do with Korea's spicy national side dish. Most entertaining are the hands-on sessions, in which you get to learn how to make the stuff yourself. Booking a dining tour or a cooking class in Korea is one of the must do activities and a great experience you will never regret.

**The Korean Demilitarized Zone**
A four-kilometer-wide strip of land runs clean across the Korean peninsula from east to west, dividing the communist North and democratic south. Despite its distance from Seoul (doable in a day trip), it's also one of the country's most popular tourist draws.

**Ground Transportation**
Coach buses are available from Incheon International Airport (ICN) directly to COEX conference center and surrounding area hotels. The ticket prices range from 12,000 to 16,000 WON (about US$10). Tickets can be purchased directly at the airport with busses typically not filling up and leave every 15-30 minutes.
CME Registration Required

*Please complete the following steps to receive CME credit:*

1. Purchase the $10 CME fee at www.wasmonline.org or at registration desk.

2. Obtain the CME Record of Attendance at registration desk.

3. Turn in CME Record of Attendance once completed to registration desk or email to info@wasmonline.org by _________________.

4. Complete the faculty, session, and congress evaluations. Evaluations will be collected electronically and sent via e-mail each day.

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**Tourism and Hotels**

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<thead>
<tr>
<th>Hotel</th>
<th>Website</th>
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<tbody>
<tr>
<td>InterContinental Seoul COEX</td>
<td><a href="http://www.seoul.intercontinental.com">www.seoul.intercontinental.com</a></td>
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<td>Ramada Seoul</td>
<td><a href="http://www.ramadaseoul.co.kr">www.ramadaseoul.co.kr</a></td>
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<tr>
<td>Mercure Seoul Ambassador</td>
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<td>Gangnam Sodowe</td>
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<td>Ibis Ambassador Seoul</td>
<td>ibis.ambatel.com</td>
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<td>Aloft Seoul Gangnam</td>
<td><a href="http://www.aloftseoulgangnam.com">www.aloftseoulgangnam.com</a></td>
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<tr>
<td>Seoul Residence</td>
<td><a href="http://www.seoulresidence.co.kr">www.seoulresidence.co.kr</a></td>
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Koconex is the official organizer of the hotel accommodations for the 6th World Congress on Sleep Medicine. You may also send an email to wasm2015@koconex.com or visit www.wasmcongress.com.

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**Map of Seoul**

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Keynote Speakers

Dr. Allan Pack  
*Genetics of Sleep and Its Disorders*  
Monday March 23rd, 2015 • 8:00am-9:00am

Dr. Emmanuel Mignot  
*Genetic and Pathophysiology of Narcolepsy*  
Monday March 23rd, 2015 • 2:30pm-3:30pm

Dr. Danielle Friberg  
*The Evidence for Uvulopalatopharyngoplasty, How Effective and Safe is it to Treat OSA Patients?*  
Monday March 23rd, 2015 • 2:30pm-3:30pm

Dr. Bob Stickgold  
*Sleep, Cognition and Learning*  
Tuesday March 24th, 2015 • 8:00am-9:00am

Dr. Kasey Li  
*Maxillomandibular Advancement for Obstructive Sleep Apnea Syndrome – What I have Learned from 852 Cases*  
Tuesday March 24th, 2015 • 2:30pm-3:30pm

Dr. Till Roenneberg  
*Sleep Research in the Real World – First Steps Towards a Human Sleep Project*  
Wednesday March 25th, 2015 • 8:00am-9:00am

Dr. Bradley F. Boeve  
*Wayne Hening Memorial Speaker*  
*Update on the Pathophysiology of REM Sleep Behavior Disorder and Relevance to Neurodegenerative Disease*  
Wednesday March 25th, 2015 • 12:45pm-2:15pm

Dr. Yun-Kwok Wing  
*Insomnia from Epidemiology to Intervention – What Does the Future Hold?*  
Wednesday March 25th, 2015 • 2:30pm-3:30pm
### Program at a Glance

**Friday, March 20, 2015**
- 5:00pm - 10:00pm On-Site Registration

**Saturday, March 21, 2015**
- 7:00am - 9:00am On-Site Registration
- 8:00am - 6:45pm International RLS Study Group Annual Meeting I Committee Room 1
- 8:00am - 5:00pm Course 1: Dental reconfiguration and reconstruction for SDB management
- 8:00am - 12:00pm Course 3: Medical treatment of SDB – beyond nasal positive pressure
- 1:00pm - 5:00pm Course 4: Circadian dysfunction in health and disease

**Sunday, March 22, 2015**
- 7:00am - 9:00am On-Site Registration
- 8:00am - 5:00pm Course 5: Advances in the management of pediatric sleep disorders
- 8:00am - 12:00pm Course 6: Restless legs and motor activation during sleep
- Course 7: Insomnia disorder: From epidemiology to dissemination of evidence-based therapeutic approaches
- 8:30am - 4:30pm Spanish Sleep Society General Meeting I Sercotel Hotel
- 9:00am - 5:00pm Technologist Meeting I Committee Rooms 1 and 2
- 1:00pm - 5:00pm: Course 8: Update in sleep medicine technology
- Course 9: Sleep and the heart
- Course 10: Recording and scoring of movement disorders of sleep and RBD
- 7:00pm - 8:30pm Opening Ceremony I Palau de les Arts Reina Sofia

**Monday, March 23, 2015**
- 7:00am - 9:00am On-Site Registration
- 8:30am - 9:00am Announcements
- 9:00am - 10:00am Keynote: Sleep, Death and the Heart Virend Somers I Auditorium 1
- 10:00am - 11:30am S1: New Diagnostic Technologies for Sleep Disordered Breathing I Auditorium 2
- S2: Cognitive Behavioral Therapy for Insomnia (CBT-I): Knowledge Transfer and Treatment Dissemination I Multipurpose Room 1
- S3: Converging Understanding of the Biology of Restless Legs Syndrome I Auditorium 3
- S4: The Autonomic Nervous System and Sleep in Human Narcolepsy: Do Patients Have an Increased Cardiovascular Risk? I Committee Rooms 1 and 2
- 11:30am - 12:00pm Coffee Break and Exhibition
- 12:00pm - 1:30pm S5: The Role of Sleep in Emotional Memory Processing and Development or Prevention of PTSD I Multipurpose Room 1
- S6: Sleep Disorders and Cancer I Auditorium 2
- S7: Brain Imaging Studies in Sleep Disorders and Sleep Deprivation I Auditorium 1
- O-01: Aging and Developmental Issues I Committee Room 1
- O-02: Sleep Breathing Disorders I Auditorium 3
- Technologist Program: W1 ADULT PSG Masterclass: Sleep Montage Hook-up; Sleep Staging and Event Scoring I Committee Rooms 3 and 4
- 1:40pm - 3:10pm Industry Symposium: Emerging Strategies in Sleep Disorders I Auditorium 1
- Industry Symposium: Advances in PAP Therapy I Multipurpose Room 1
### Program at a Glance

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>3:10pm - 3:30pm</td>
<td>Coffee Break and Exhibition</td>
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<tr>
<td>3:30pm - 4:30pm</td>
<td>Keynote: Emerging Treatments for Insomnia  Göran Hajak</td>
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<td>4:30pm - 5:30pm</td>
<td>O-03: Chronobiology &amp; Circadian Disorders</td>
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<td>O-04: Insomnia Mechanisms</td>
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<td>O-05: Cognition and RBD</td>
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<td>5:30pm - 7:00pm</td>
<td>S8: Obstructive Sleep Apnea, Motor Vehicles Accidents and Driving License Regulations</td>
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<td>S9: Neurocognition and Behavior, Sleep Disturbance and Sleep Disordered Breathing</td>
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<td>S10: Identification of the Neuronal Network Regulating the Sleep-waking Cycle: A Never Ending Story</td>
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<td>S11: Innovations in Sleep Disruption Management</td>
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<td>S12: Sleep and Circadian Rhythm Abnormalities in Mood Disorders</td>
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<td></td>
<td>Technologist Program: W2 PAED PSG Masterclass: Hook-up; Sleep Staging and Event Scoring; Top Tips for Compliance</td>
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<td>7:00pm - 8:00pm</td>
<td>DS-M-01: Sleep Apnea and the Risk of Stroke</td>
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<td>DS-M-02: Sleep in Traumatic Brain Injury: Current Knowledge and Future Directions</td>
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<tr>
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<td>DS-M-03: Pharmacology-Sleep: the Assessment of Drug Effects on Human Sleep</td>
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<tr>
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<td>DS-M-04: Work, School, Sleep, and Occupational Health and Safety in Adolescents and Young Adults</td>
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<tr>
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<td>DS-M-05: Improving the Scoring of REM Sleep Without Atonia and of Muscle Activity During REM Sleep</td>
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<td>DS-M-06: Is There a Role for Surgery in the Management of Obstructive Sleep Apnea?</td>
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<td>DS-M-07: How to Assess and Treat Sleep Disorders in Pregnant Women</td>
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<td>DS-M-08: Periodic Limb Movements under CPAP in Obstructive Sleep Apnea Syndrome</td>
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<tr>
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<td>DS-M-09: Abordaje del SAHS desde la perspectiva del ORL/Clinical management of OSA: The ENT viewpoint</td>
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<td>DS-M-10: Recent Updates in the Diagnosis of Insomnia – DSM5 and ICSD-3: Implications for Research and Clinical Practice</td>
</tr>
<tr>
<td></td>
<td>DS-M-11: Movement Disorders and Sleep - A Video Seminar</td>
</tr>
</tbody>
</table>

* Ticket required - purchase at registration desk

8:30pm to 11:00pm | Presidents’ Dinner and Reception  | Balneario Las Arenas Resort

**Tuesday, March 24, 2015**

- **7:00am - 9:00am**: On-Site Registration
- **8:30am - 9:00am**: Announcements
- **9:00am - 10:00am**: Keynote: Circadian Disorders and Associated Risks  Phyllis Zee  | Auditorium 1
- **10:00am - 11:30am**: S13: Sleep, Circadian Rhythms and Brain Health in Aging  | Auditorium 2
- **14: Explaining Differences in Epidemiology of Sleep Disorders Across the World: The Case of SDB and RLS  | Auditorium 3
- **15: Pregnancy and Sleep  | Committee Rooms 1 and 2
- **16: Interpreting and Evaluating Parasomnias: New Perspectives  | Multipurpose Room 1
- **11:30am - 12:00pm**: Coffee Break and Exhibition
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>9:00am - 10:00am</td>
<td>Keynote: Surgery of Obstructive Sleep Apnea</td>
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<tr>
<td>10:00am - 11:30am</td>
<td>S24: The Challenges for Defining Normative Data for Sleep Disordered Breathing Across Lifespan</td>
</tr>
<tr>
<td>10:00am - 11:30am</td>
<td>O-10: Sleep Breathing Disorders I Committee Rooms 1 and 2</td>
</tr>
<tr>
<td>11:30am - 1:00pm</td>
<td>Lunch and Exhibition</td>
</tr>
<tr>
<td>1:00pm - 2:30pm</td>
<td>Sessions and Workshops</td>
</tr>
<tr>
<td>2:30pm - 4:00pm</td>
<td>Break and Exhibition</td>
</tr>
<tr>
<td>4:00pm - 5:30pm</td>
<td>Sessions and Workshops</td>
</tr>
<tr>
<td>5:30pm - 7:00pm</td>
<td>Dinner and Guest Speaker</td>
</tr>
<tr>
<td>7:00pm - 8:00pm</td>
<td>Keynote: Neurobiology of Sleep Pierre-Hervé Luppi I Auditorium 1</td>
</tr>
<tr>
<td>8:00pm - 9:00pm</td>
<td>Poster Session</td>
</tr>
<tr>
<td>9:00pm - 10:00am</td>
<td>Closing Remarks</td>
</tr>
</tbody>
</table>

*Ticket required - purchase at registration desk  **Free symposia - pick up your ticket at registration desk
# Program at a Glance

## Wednesday, March 25, 2015 continued

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>11:30am - 12:00pm</td>
<td>Coffee Break and Exhibition</td>
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<tr>
<td>12:00pm - 1:30pm</td>
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<tr>
<td>S25: Hypocretin/orexin as a Therapeutic Target for Sleep Disorders</td>
<td>Auditorium 3</td>
</tr>
<tr>
<td>S26: Spinal Mechanisms in RLS</td>
<td>Committee Rooms 1 and 2</td>
</tr>
<tr>
<td>S27: Idiopathic Hypersomnia: Past, Present and Future</td>
<td>Multipurpose Room 1</td>
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<tr>
<td>1:40pm - 3:10pm</td>
<td>S34: Joint Symposia with WASM and IFCN</td>
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<tr>
<td>1:40pm - 2:40pm</td>
<td>Hening Memorial Lecture: Neurodegeneration and Sleep</td>
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<tr>
<td>3:10pm - 3:30pm</td>
<td>Coffee Break and Exhibition</td>
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<tr>
<td>3:30pm - 4:30pm</td>
<td>Keynote: Genetics and Epigenetics of Sleep Disorders</td>
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<tr>
<td>4:30pm - 5:30pm</td>
<td>O-13: Parasomnia and Psychiatric Disorders</td>
</tr>
<tr>
<td>O-14: RLS/PLMS: Natural Course, Risk Factors and Health</td>
<td>Auditorium 3</td>
</tr>
<tr>
<td>O-15: Sleep and Health</td>
<td>Multipurpose Room 1</td>
</tr>
<tr>
<td>5:30pm - 7:00pm</td>
<td>O-16: Drugs, Technology, and Insufficient Sleep</td>
</tr>
<tr>
<td>O-17: Sleep and Health</td>
<td>Multipurpose Room 1</td>
</tr>
<tr>
<td>7:00pm - 7:45pm</td>
<td>Closing Ceremony</td>
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Advancing Noninvasive Patient Monitoring™

tcPCO₂ | tcPO₂ | SPO₂ | PR

Stand: 345

VISIT OUR SYMPOSIUM at WASM 2015

TRANSCUTANEOUS CO₂ MONITORING IN SLEEP MEDICINE: BEST PRACTICE

DATE: Monday March 23, 2015
TIME: 12:45 pm - 2:15 pm
ROOM: 101

MADE IN SWITZERLAND
### Saturday

**Schedule at a Glance • Saturday, March 21, 2015**

<table>
<thead>
<tr>
<th>Event</th>
<th>Time</th>
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<tbody>
<tr>
<td>Registration</td>
<td>7:00am - 9:00pm</td>
</tr>
<tr>
<td>International RLS Study Group Annual Meeting 2015</td>
<td>8:00am - 5:00pm</td>
</tr>
<tr>
<td>Course 1: Pediatric Sleep Medicine</td>
<td>9:00am - 6:00pm</td>
</tr>
<tr>
<td>Dental and Surgery Track</td>
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<tr>
<td>Course 2: Modifying Anatomy of the Upper Airway for Sleep Apnea Management</td>
<td>9:00am - 6:00pm</td>
</tr>
<tr>
<td>Course 5: Somnopharmacology: The Pharmacology of Sleep and Wakefulness</td>
<td>9:00am - 1:00pm</td>
</tr>
<tr>
<td>Course 6: Circadian Rhythm Sleep-Wake Disorders</td>
<td>1:30pm - 6:00pm</td>
</tr>
</tbody>
</table>
Course 1: Pediatric Sleep Medicine
9:00am to 6:00pm

Co-Chairs:
Judith Owens, Daniel Ng

Speakers:
Jodi A Mindell, Daniel Ng, Albert Li, Han Fang, Christian Guilleminault, Yu-shu Huang, Jodi A Mindell, Judith Owens, Raffaele Ferri

Learning Objectives:
• Describe the mechanisms of childhood OSA
• Recognize different management options for children diagnosed to have obstructive sleep apnea
• Identify a basic approach to the diagnosis of excessive daytime sleepiness in childhood
• Describe the impact of sleep and sleep breathing disorders on the brain
• Interpret the neurocognitive and neurobehaviour assessment reports
• Describe the characteristic clinical features of sleep terrors, sleepwalking and confusional arousals in children

Summary:
A comprehensive overview and update of pediatric sleep medicine issues. The focus will be conditions of specific relevance to pediatrics, and speaker should identify specific clinical challenges and offer possible solutions pending data.

9:00am – 9:05am
Introduction
Judith Owens, Daniel Ng

9:05am – 9:45am
Normal sleep in children and adolescents
Jodi A Mindell

9:45am - 10:30pm
Pediatric obstructive sleep apnea; pathophysiology and diagnosis
Daniel Ng

10:30am - 11:15am
Pediatric obstructive sleep apnea; management
Albert Li

11:15am - 12:00pm
Narcolepsy and disorders of daytime sleepiness
Han Fang

12:00pm - 1:00pm
Lunch

1:00pm - 1:45pm
Parasomnias in children and adolescents
Christian Guilleminault

1:45pm - 2:15pm
Sleep, breathing and the brain
Yu-shu Huang

2:15pm - 3:00pm
Insomnia in children
Jodi A Mindell

3:00pm - 3:15pm
Break

3:15pm - 4:00pm
Insomnia in adolescents
Judith Owens

4:00pm - 4:45pm
Sleep in special pediatric populations (AD/HD, ASD)
Judith Owens

4:45pm - 5:30pm
Restless legs syndrome and periodic limb movement disorder
Judith Owens

5:30pm - 6:00pm
Questions and answers
Course 2: Upper Airway Cranio-Facial and Dental Problems in Sleep-Disordered Breathing (Dental and Surgery Track)
9:00am to 6:00pm

Speakers:
Raphael Heinzer (Switzerland), Marc Blumen (France), Myung-Rip Kim (Korea), Peter Eastwood (Australia), Ning-Hung Chen (Taiwan), Gilles Lavigne (Canada), Clement CH Lin, Marie Marklund (Sweden), Wonhee Seo (Korea), Hiroko Tsuda (Japan), Audrey Yoon (USA), Christian Guilleminault (USA)

Learning Objectives:
• Review the fundamentals behind the upper way development and the inherent risk factors associated with such development
• Report on some of the new technologies available to study the upper airway during sleep; to remind the physical laws that govern the collapsibility of the UA, and to present how application of such laws can be of interest in clinical investigation
• Recognize association and complication seen with OSA in a dental office
• Review the short term and long term impact of dental devices on the support of the UA
• Describe the problem associated with the most common treatment: N-CPAP- on facial growth and development
• Identify orthodontic technologies recently introduce for the prevention and treatment of SDB
• Recognize the important impact of UA muscle reeducation, and tongue proprioception reeducation

Summary:
The upper airway is a collapsible tube submitted to many different conditions. The degree of collapsibility of the upper airway has been studied by calculating the “critical pressure” when modeling the upper airway. Position of the individual (supine), sleep/wake status, sleep states and stages, size of the upper airway will be major components in the diagnostic and treatment of OSA. Computational physics dynamic laws are important in the determination of the risks of having OSA. Efforts have been made to investigate the size of the upper airway and new technologies have been investigated and used on children and adults. The new findings have been integrated in the diagnosis and treatment of sleep disordered breathing in children and adults. These findings have been used not only by sleep-medicine specialists but also by surgeons investigating how to approach the upper airway and select where do suggest surgery but also by dentists and orthodontists. Dental devices and new orthodontic approaches have been used to modify the abnormal collapsibility of the upper airway during sleep. Such approaches have had beneficial and negative side-effects. The course will touch upon all the above questions and findings. It is aimed not only at sleep-medicine specialists but also surgeons particularly oto-laryngologists-stomatologists, dentists and orthodontists interested in sleep-disordered breathing and its treatment approaches.
Course 5: Somnopharmacology: The Pharmacology of Sleep and Wakefulness
9:00am to 1:00pm
Chair:
Max Hirshkowitz

Learning Objectives:
• Have a working knowledge of the pharmacology of sleep and wakefulness
• Be able to describe neurotransmitter and receptor pharmacology related to sleep
• Be able to explain how medications alter sleep architecture
• Be aware of drug treatments used to treat sleep-wake disorders

Summary:
This program will include general explanations concerning relevant sleep neurobiology (including physiology, neurophysiology, and circadian rhythms. The role of Pons in the generation of REM Sleep characteristics will be described. We will review the structural anatomy of wakefulness versus sleep and rhythms affecting the sleeping brain and associated body systems. This review is important for understanding drug actions on sleep and wakefulness.

The synthesis, action, and catabolism of the major human neurotransmitter systems will be described. Their relationship to sleep and wakefulness will be the organizing thread of the overall program. Role of adenosine and GABA in sleep and the role of acetylcholine, dopamine, histamine, orexin (hypocretin) in wakefulness will be explained. The actions of serotonin, norepinephrine, and acetylcholine in REM sleep regulation will also be discussed. Additionally, we will clarify melatonin’s part in regulating the circadian rhythm.

The program will also include descriptions of how medicinal and recreational drugs alter sleep. Sleep stage macro- and micro-architecture changes associated with pharmacologic substances will be illustrated. Finally, we will review the current clinical pharmacology used to treat sleep disorders.

Subjective and Objective Data Logging for Sleep Research

MotionWatch 8
• Light-weight waterproof wrist-worn actigraph from CamNtech, inventors of the Actiwatch
• Ideal for sleep and circadian rhythm analysis
• Light sensor and event marker with visual feedback
• Direct USB transfer – eliminates the need for a reader
• Records up to 120 days with a 1 minute epoch

PRO-Diary
• Compact wrist-worn electronic diary with integrated tri-axial accelerometer for motion logging
• Idea sleep diagnostic tool
• User-configurable questionnaire software
• Set up activity questionnaires in any language
• With motion logging enabled, the PRO-Diary can record with a range of epochs for up to 14 days*

*Assuming 10 minutes of questionnaire interface time per day

CamNtech
Upper Pendrill Court, Ermine Street North Papworth Everard, Cambridge CB23 3UY, UK
Tel: +44 (0)1480 831223
Email: admin@camntech.co.uk
www.camntech.com

Visit us on Stand 325
Course 6: Circadian Rhythm Sleep-Wake Disorders
1:30pm to 6:00pm

Chair:
Phyllis C. Zee (USA)

Speakers:
Sonia Ancoli (Israel), Diane Boivin, Till Roenneberg, Robert Thomas, Phyllis C. Zee (USA)

Learning Objectives:
• Recall new insights into the pathophysiology of CRSWDs (with a focus on delayed sleep-wake phase disorder, irregular sleep-wake disorder, non-24 hour sleep-wake disorder)
• Recognize contribution of developmental changes in circadian rhythms, social, behavioral and environmental influences on the expression of the clinical phenotype
• Review the diagnostic criteria for CRSWDs based on the new International Classification of Sleep Disorders version 3
• Apply state of the science in multimodal treatment approaches for specific CRSWDs

Summary:
Circadian Rhythm Sleep-Wake Disorders (CRSWDs) are characterized by a chronic sleep and wake disturbance due to alterations of the circadian timekeeping system or misalignment between the endogenous circadian rhythm and exogenous factors that affect the timing or duration of sleep. Multiple factors, including genetics, behavior, environment and specific sleep disorders can contribute to the clinical manifestation of CRSWD (Delayed sleep wake phase, advanced sleep-wake phase, irregular sleep-wake rhythm, non-24 hour sleep-wake, shift work disorder). Disturbance in circadian timing can have profound effects on the quality and quantity of sleep, performance, and both mental and physical health. This course will focus on the state of the art approach to the diagnosis and management of circadian rhythm sleep-wake disorders (CRSWD).

1:30pm – 1:35pm
Introduction

1:35pm – 2:15pm
Circadian rhythms: regulation of sleep and beyond
Phyllis Zee

2:15pm – 3:00pm
Circadian Chronotype and health risk
Till Roenneberg

3:00pm – 3:15pm
Evaluation and ICSD-3 diagnostic criteria of circadian rhythm sleep-wake disorders
Phyllis Zee

3:15pm – 3:30pm
Break

3:30pm – 4:15pm
Circadian rhythm sleep-wake disorders in psychiatry
Diane Boivin

4:15pm – 5:00pm
Circadian rhythm sleep-wake disorders in aging and dementia
Sonia Ancoli (Israel)

5:00pm – 5:40pm
Challenging circadian rhythm sleep-wake disorders
Robert Thomas

5:45pm – 6:00pm
Questions and answers
Saturday, March 21, 2015

International RLS Study Group Annual Meeting 2015
8:00am to 5:00pm

8:00am
Awards Chair Art Walters

9:00am
RLS clinical and Scientific Topics
Chairs Hochang Lee, Yong Won Cho

RLS Diagnosis: Advances and Problems
  New diagnostic criteria: Which criteria should we use?
  IRLSSG, American Academy of Medicine, American Psychiatric Assoc.
  Similarities, differences and significance of multiple criteria
  Hochang Lee, Art Walters, Ruth O’Hara, Ki Young Jung, MD, PHd discussant

10:30am
Coffee Break

11:00am
Elderly and Pediatric diagnoses: New methods including home video
  Osman S Ipsiroglu, Rosalia Silvestri, Gerhard Klösch

12:30am
Lunch

1:30pm – 2:30pm
PLM Relation to Health
  Iron status Richard Allen
  ADHD and PLMS Raffaele Ferri
  Cardiovascular disease Cardiovascular disease Raffaele Ferri

2:30pm
Co-morbid Conditions Relation to RLS: Shared Symptoms and Biology
  Growing Pains/GI & inflammatory Art Walters
  Multiple Sclerosis

3:15pm
Coffee break

3:30pm
Depression & Severe Mental Illness

3:50pm
Pain and RLS Yong Won Cho

4:10pm
Discontinuing Intermediate/Short Acting Dopaminergic Medications
  Drug holiday: Consequences, benefits Christopher Earley
  Drugs to cover withdrawal: Choices, problems Birgit Högl

5:15pm
IRLSSG Business Meeting Diego Garcia-Borreguero
## Schedule at a Glance • Sunday, March 22, 2015

<table>
<thead>
<tr>
<th>Event</th>
<th>Time</th>
</tr>
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<tbody>
<tr>
<td>Joint Workshop by KSSM and WASM: Asian Sleep Forum</td>
<td>9:00am - 5:30pm</td>
</tr>
<tr>
<td>Technologist Program</td>
<td>9:00am - 5:00am</td>
</tr>
<tr>
<td>Course 3: Year in Review: Understanding Methods in Sleep Research and an Update of the Literature</td>
<td>9:00am - 6:00pm</td>
</tr>
<tr>
<td>Course 7: Dental Sleep Medicine</td>
<td>9:00am - 1:00pm</td>
</tr>
<tr>
<td>Course 8: RLS Update</td>
<td>9:00am - 1:00pm</td>
</tr>
<tr>
<td>Course 9: Insomnia Disorder – Epidemiology, Diagnosis, and Management</td>
<td>2:00pm - 6:00pm</td>
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<tr>
<td>Course 10: Cardiovascular Course – Sleep and the Heart</td>
<td>2:00pm - 6:00pm</td>
</tr>
<tr>
<td>Course 11: Sleep in Neurodegenerative Disease</td>
<td>2:00pm - 6:00pm</td>
</tr>
<tr>
<td>Opening Ceremony</td>
<td>7:00pm - 10:00pm</td>
</tr>
</tbody>
</table>
Sunday, March 22, 2015

Course 3: Year in Review
Understanding methods in sleep research and an update of the literature
9:00am to 1:00pm

Co-Chairs:

Speakers:
Allan I. Pack, Emmanuel Mignot, Winfried Randerath, Phyllis Zee, Michael Chee, Antoine Adamantidis, Matt T. Bianchi, Dirk-Jan Dijk

Learning Objectives:
• Be exposed to the basics of a range of technologies as applied to cutting edge sleep research
• Receive an update on some of the key research papers in topics covered
• Understand the limitations of research methods in translational science

Summary:
This course will combined elements of a year in review (more precisely, a field in review) and demystifying research methods in sleep science and medicine. Speakers will first describe a research method or area and then update the audience on the applications in sleep science using the most recent literature and classic studies. Topics include functional brain imaging, molecular methods, genetics, sleep homeostasis, circadian science, sleep-breathing, optogenetics, and epidemiology. The focus is not individual diseases but technique, applications, and implications.

9:00am – 9:45am
Molecular biology of sleep function
Allan I. Pack

9:45am – 10:30am
Genetic approaches to sleep disorders
Emmanuel Mignot

10:30am – 11:15am
The future of sleep apnea medicine
Winfried Randerath

11:15am – 11:30am
Break

11:30am – 12:15pm
Circadian biology and medicine
Phyllis Zee

12:15pm – 1:00pm
Functional imaging of sleep loss
Michael Chee

1:00pm – 2:15pm
Lunch

2:15pm – 3:00pm
Optogenetics
Antoine Adamantidis

3:00pm – 3:45pm
Sleep Epidemiology Methods and Progress
Matt T. Bianchi

3:45pm – 4:00pm
Break

4:00pm – 4:45pm
Sleep Homeostasis
Dirk-Jan Dijk
Sunday, March 22, 2015

Course 7: Dental Sleep Medicine
9:00am to 1:00pm

Co-Chairs:

Speakers:
B. Gail Demko, Gilles Lavigne, Jin Woo Chung, Tim Quinnell

Learning Objectives:
- Recognize that oral appliance therapy is only one of many treatment options available for practitioners to treat patients with obstructive sleep apnea.
- Recognize that oral appliance therapy has existed for more than century and level I data show this therapy to be equivalent to CPAP in the treatment of mild and moderate obstructive sleep apnea.
- Develop an understanding of which patients are more likely to benefit from oral appliance therapy based on how the patient presents and various comorbidities.
- Recognize that side effects are endemic with all treatments for obstructive sleep apnea and it is up to the individual practitioner to determine how to provide a therapy that maximizes patient adherence.
- Recall that heavily marketed oral appliances may not be the most effective in the specific appliance chosen for a patient is dependent upon the patient's lifestyle, anatomy and the economics that surround provision of quality medical care.

Summary:
This course on dental sleep medicine is expected to give all participants, both physicians and dentists, an understanding of the history, reality and future of oral appliance therapy. While literature on oral appliance therapy for the treatment of obstructive sleep apnea and snoring appeared first in 1986, oral appliances have been used in the treatment of patients with breathing disorders as far back as 1902. Over the past century, numerous publications have investigated the use of mandibular advancement, alterations in airway function and improvement in medical outcomes. Many patients diagnosed with sleep-disordered breathing have other head and neck concerns that may impact the ability of that patient to use conventional therapy. Dr. Lavigne will discuss the interplay of sleep bruxism, sleep apnea and temporomandibular joint symptoms and how these bear on oral appliance therapy. Dr. Chung will provide the audience with an explanation of the indications for oral appliance therapy both as a standalone therapy and for use in conjunction with positive airway pressure. He will also explain the more common side effects that impact adherence to treatment. Dr. Quinnell will offer a comparison of the various types of oral appliances available today, the ability for objective compliance monitoring and hint at the future role that these appliances can play in the medical arena.

9:00am – 9:50am
History of oral appliance therapy
B. Gail Demko

9:50am – 10:40am
Differential diagnosis for oral appliance use: sleep disordered breathing, sleep bruxism and TMJ pain
Gilles Lavigne

10:40am – 10:50am
Break

10:50am – 11:40am
Oral appliance therapy, indication and risk
Jin Woo Chung

11:40am – 12:30pm
Comparison of between prefabricated and custom fitted oral appliances; what is new today what might the future hold
Tim Quinnell

12:30pm – 1:00pm
Questions and answers
Course 8: RLS Update
9:00am to 1:00pm

Speakers:
Diego Garcia Borreguero, Richard Allen, Yuichi Inoue, Sudhansu Chokroverty, Christopher Earley, Yong-Won Cho

Learning Objectives:
• Identify and manage RLS Augmentation
• Recognize 1st line treatment options and combination treatment of Alpha-2-delta agents
• Identify when and how to use longer-vs. shorter-acting alternatives for dopamine agonists.
• Identify which opioids to choose and how to use as a single combination treatment
• Recognize when and how to use IV iron.

Summary:
Augmentation: How to identify and manage
Alpha-2-delta agents: The new 1st line treatment option
Dopamine agonists: Longer vs shorter acting alternatives
Opioids: Options for use
IV iron: When and How to use

9:00am – 9:35am
Augmentation: How to identify and manage
The new IRLSSG guidelines for augmentation
Diego Garcia Borreguero

9:35am – 10:10am
Alpha-2-delta agents: the new 1st line treatment option
Richard Allen

10:10am
Dopamine Agonists: longer vs shorter acting alternatives
Yuichi Inoue

10:10am – 10:30am
Coffee/tea

10:30am – 11:05am
Opioids: Options for use
Low/medium low potency
Which ones, when, how to combine with other treatments
Sudhansu Chokroverty

11:05am – 11:40am
High potency opioids, e.g. methadone
Christopher Earley

11:40am – 12:15pm
IV iron: when and how to use
Yong-Won Cho

12:15pm – 12:30pm
Questions and answers
Sunday, March 22, 2015

Course 9: Insomnia Disorder: Epidemiology, Diagnosis, and Management
2:00pm to 6:00pm

Co-Chairs:

Speakers:
YK Wing (China), Chien-Ming Yang (Taiwan), Y Inoue (Japan), CM Morin (Canada), B Bjorvatn (Norway), SC Hong (Korea)

Learning Objectives:
• Identify key etiological factors and long-term consequences of insomnia
• Recognize clinical features of insomnia and key assessment strategies
• Recognize evidence-based treatment options for insomnia disorder

Summary:
Insomnia is a common complaint in clinical practice and can present a significant challenge both at the diagnostic and therapeutic levels. This course is intended for clinicians and provides an overview of the epidemiology, diagnostic updates, and clinical guidelines for the assessment and treatment of insomnia disorder. It will present the most up-to-date evidence on current therapeutic approaches including cognitive-behavioral, pharmacological, and bright light therapies. Clinical guidelines for selecting the most appropriate treatment for insomnia with and without comorbid disorders will be discussed and practical treatment implementation issues will be addressed.

2:00pm – 6:00pm
Epidemiology and public health burden of insomnia
YK Wing (China)

Diagnostic updates and clinical assessment of insomnia
Chien-Ming Yang (Taiwan)

Neurobiology and pharmacological management of insomnia
Y Inoue (Japan)

Cognitive behavioral therapies for insomnia
CM Morin (Canada)

Circadian factors and bright light therapy
B Bjorvatn (Norway)

Management of Insomnia Comorbid with Psychiatric Disorders
SC Hong (Korea)
Sunday, March 22, 2015

Course 10: Sleep and The Heart
2:00pm to 6:00pm

Co-Chairs:
Patrick Strollo, Jr., Erik St. Louis

Speakers:
Patrick J Strollo, Jr., Eve Van Cauter, Garima Shukla, Winfried Randerath, Suresh Kotagal, Virend K. Somers, Erik K. St Louis

Learning Objectives:
• To review the mechanisms (both mechanical and molecular) that link obstructive apnea to cardiac and vascular dysfunction
• To explore the interactions of non-apneic sleep issues such as sleep deficiency and disturbed circadian regulation on cardiovascular risk
• To identify the potential role of sleep apnea in the prevention and treatment of TIA and stroke
• To discuss the complexities of the management of sleep apnea in heart failure
• To summarize the contributions of hypoxemia and apnea to nocturnal cardiac ischemia, myocardial infarction and sudden death
• To examine mechanisms and management of sudden infant death syndrome

Summary:
The course will provide a comprehensive update on the mechanistic interactions of sleep, sleep deprivation, and sleep apnea with cardiovascular health and disease, including myocardial ischemia, stroke, heart failure, and sudden death in infants (SIDS).

2:00pm – 6:00pm
Mechanisms mediating cardiac and vascular dysfunction in OSA
In this presentation, we will review the mechanical and molecular mechanisms contributing to cardiac and vascular dysfunction in OSA. The pitfalls related to animal (particularly murine) models will be briefly discussed. Findings from translational research will be emphasized. Patrick J Strollo, Jr.

Insufficient sleep and circadian dysfunction: Impact on cardiovascular risk
This talk will explore the interactions of non-apneic sleep issues such as sleep deficiency and disturbed circadian regulation on risk for adverse cardiovascular outcomes. Eve Van Cauter

Cerebrovascular disease to TIA to stroke – implications of sleep apnea
The focus in the field of cerebrovascular disease, including transient ischemic attacks and acute strokes, has been on modifying major risk factors so as to ensure secondary prevention of vascular events in this population. While sleep disordered breathing (SDB) has now been established as a common independent risk factor for stroke, there is still a huge hesitation as well as avoidance on the part of physicians involved in stroke care, to identify and treat pre-existing SDB. There is a paucity of data on the effects of treatment of SDB on secondary prevention of stroke or vascular events in a stroke population. This relationship provides exciting areas for clinical research. SDB treatment can reduce stroke risk in a multi-pronged approach by not just independently reducing recurrence risk, but also by potentially modifying multiple other stroke risk factors like hypertension and glycemic control. Garima Shukla

Sleep apnea and heart failure – present state and future promise
This discussion will identify the complexities of management of sleep apnea in congestive heart failure and a logical management approach based on phenotyping. Winfried Randerath

An update on infant apnea and SIDS
The "Back to Sleep" campaign has led to a significant decline in incidence of sudden infant death syndrome (SIDS), but the disorder still persists. The talk will update the role of potassium channels, metabolic dysfunction, hypocretin system and the medullary serotonergic network in pathogenesis of SIDS. Management approaches for apnea of infancy and apparent life threatening events (ALTE) will also be discussed. Suresh Kotagal

From obstructed pharyngeal airway to obstructed coronary artery – mechanisms and clinical consequences
This talk will examine the role of obstructive sleep apnea in coronary artery dysfunction and disease. The contribution of hypoxemia and apnea to nocturnal chest pain and objective evidence of cardiac ischemia will be discussed as will the implications of OSA for the risk of nocturnal MI and sudden death. Virend K. Somers, Erik K. St Louis
Sunday, March 22, 2015

Course 11: Sleep in Neurodegenerative Disease
2:00pm to 6:00pm

Co-Chairs:
Claudia Trenkwalder, Birgit Högl

Speakers:
Carlos Schenck (USA), Isabel Arnulf (France), Birgit Högl (Austria), Claudia Trenkwalder (Germany), Kassel/Goettingen (Germany), Federica Provini (Italy)

Learning Objectives:
• Describe the clinical symptomatology of RBD and Parasomnia overlap disorder in neurodegenerative disease
• Recognize RBD as a preclinical marker of synucleinopathies
• Recognize characteristic movement patterns of RBD in PD
• Describe pathological circuits in neurodegenerative RBD
• Recognize RWA in the sleep Lab, distinguish RWA and RBD,
• Evaluate abnormal muscle activity during REM sleep in RWA
• Describe various scales for assessment of sleep in PD, LBD and Alzheimer dementia
• List treatment options for sleep disturbance in PD and neurodegenerative dementia
• Demonstrate the typical features of sleep of patients with multiple system atrophy compared to PD by cases
• Recognize mechanisms of sleep problems in fatal familial insomnia by cases

Summary:
A comprehensive review of the symptoms and pathological sleep circuits of REM Sleep Behavior Disorder (RBD) in relation to neurodegenerative disorders, assessment and scoring of RBD. Description and assessment of sleep problems in patients with Parkinson Syndromes and neurodegenerative dementia, including illustrative cases.

2:00pm – 2:40pm
RBD/Parasomnia Overlap Disorder and synucleinopathies
Carlos Schenck (USA)

2:40pm – 3:20pm
REM Sleep Behavior Disorder in PD patients – clinic and pathological circuits
Isabel Arnulf (France)

3:20pm – 4:00pm
Scoring of RBD and RWA
Birgit Högl (Austria)

4:00pm – 4:30pm
Break

4:30pm – 5:10pm
Assessment of subjective sleep complaints of PD and neurodegenerative dementia including treatment options
Claudia Trenkwalder (Germany), Kassel/Goettingen (Germany)

5:10pm – 5:50pm
Sleep in patients with PD, Multiple System Atrophy and Fatal familial Insomnia: cases
Federica Provini (Italy)

5:50pm -6:00pm
Questions and Answers
Sunday, March 22, 2015

Joint Workshop by KSSM and WASM: Asian Sleep Forum
9:00am to 5:30pm

**Special Lecture 8:00am - 8:30am**
Christian Guilleminault
Successful treatment of sleep disordered breathing is continuous nasal breathing during sleep

**Asian Sleep Forum 1 8:30am to 10:00am**
**Co-Chairs:**
Ninghung Chen (Taiwan), JC Suri (India)

**Speakers:**
Soichiro Miyazaki (Japan)
Sleep promotion and public sleep education in Japan

Naiphinich Kotchabhakdi (Thailand)
Sleep, health and happiness: The executive brain functions

Ahmed BaHammam (Saudi Arabia)
The effect of diurnal intermittent fasting on sleep and circadian rhythm

Hiroshi Nakamura (Japan)
Overview of obesity hypoventilation syndrome

**Asian Sleep Forum 2 10:20am to 12:00pm**
**Co-Chairs:**
Seung Bong Hong (South Korea), Yoshihiro Urade (Japan)

**Speakers:**
Ki Young Jung (South Korea)
Measuring impact of RLS on cognitive performance among patients with RLS/WED

Hochang Benjamin Lee (USA)
Epidemiologic and pathophysiological overlap between RLS and mood disorder symptoms

Kyoung Bin Im (USA)
Pathophysiological mechanisms linking sleep apnea and stroke

Albert Rafanan (Philippines)
Cheyne-Stokes Respiration

Antje Buettner-Teleaga (Germany)
Sleep apnea syndromes (SAS) and cancer

**Asian Sleep Forum 3 1:00pm to 2:30pm**
**Co-Chairs:**
WK Wing (Hong Kong), Manjari Tripathi (India)

**Speakers:**
Kazuo Chin (Japan)
A different pathophysiology of OSA between men and women

Mary Ip (Hong Kong)
OSA and type 2 diabetes mellitus – partners in crime?

Jamie Lam (Hong Kong)
OSA and metabolic dysfunction

JC Suri, India
The ill impact of SDB on the cardiovascular system

Xi Long Zhang (China)
Principle and efficacy of transvenous phrenic nerve stimulation for Cheyne-Stokes Respiration in patients with congestive heart failure
Asian Sleep Forum 4 2:45pm to 4:25pm

Co-Chairs:
Fang Han, Chair (China), Tayard Desudchit (Thailand)

Speakers:
Daniel K. Ng (Hong Kong)
Assessment of the dynamic function of the upper airway: How, why and so what?
Aroonwan Preutthipan (Thailand)
CPAP / BPAP in young children with OSA
Seong Taek Kim (South Korea)
Effect of botulinum toxin on sleep bruxism: A polysomnographic evaluation
Hyo Yeol Kim (South Korea)
Role of imaging techniques to choose treatment modality for OSAS
Albert Li (Hong Kong)
Baseline SDB severity predicts blood pressure levels at 4-year follow-up – pediatric perspective

Asian Sleep Forum 5 4:25pm to 5:50pm

Chair:
Chia-Mo Lin Chair (Taiwan)

Speakers:
Seockhoon Chung (South Korea)
Improved behavior after adenotonsillectomy in SDB children with higher level of intelligence
Jingying Ye (China)
Predicting the outcomes of velopharyngeal surgery using surface electromyograph of genioglossus
Kyu Seop Cho (South Korea)
Limited palatal muscle resection

Hyung Joon Ahn (South Korea)
The relationship between sleep and orofacial pain
# Sunday, March 22, 2015

## Technologist Program

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<td>9:05am - 9:50am</td>
<td><strong>Keynote Presentation 1: Sleep Technologies &amp; Trends</strong>&lt;br&gt;Thomas Penzel</td>
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<td>9:50am - 10:20am</td>
<td><strong>Presentation 1: Clinical Usage of Actigraphy</strong>&lt;br&gt;Sonia Ancoli</td>
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<td><strong>Coffee Break</strong></td>
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<td>10:40am - 11:10am</td>
<td><strong>Presentation 2: RBD: Associations and diagnostics</strong>&lt;br&gt;Claudia Trenkwalder</td>
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<td>11:10am - 11:40am</td>
<td><strong>Presentation 3: Home sleep Studies: Rules and Practice</strong>&lt;br&gt;Max Hirshkowitz</td>
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<td>11:40am - 12:10pm</td>
<td><strong>Presentation 4: Medical Emergencies in the Sleep Lab</strong>&lt;br&gt;Christine Won</td>
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<td>12:10pm - 12:15pm</td>
<td><strong>General Q &amp; A from Morning Session</strong></td>
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<td><strong>Lunch Break</strong></td>
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<td>1:15pm - 2:00pm</td>
<td><strong>Keynote Presentation 2: ICSD-3: Overview and Changes from ICSD-2</strong>&lt;br&gt;Colin Sullivan</td>
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<td>2:00pm - 2:30pm</td>
<td><strong>Presentation 5: ICSD-3 Case Studies and Scoring Implications</strong>&lt;br&gt;Phyllis Zee</td>
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<td>2:30pm - 3:00pm</td>
<td><strong>Presentation 6: Review of Pediatric Sleep Disorders and Consequences of Untreated Sleep Disorders</strong>&lt;br&gt;Christian Guilleminault</td>
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<td>3:00pm - 3:20pm</td>
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<td>3:20pm - 3:50pm</td>
<td><strong>Presentation 7: NREM Parasomnias</strong>&lt;br&gt;Jee Hyun Kim</td>
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<td>3:50pm - 4:20pm</td>
<td><strong>Presentation 8: Nocturnal Seizures: Video and PSG Findings</strong>&lt;br&gt;Pamela Song</td>
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<td>4:20pm - 5:00pm</td>
<td><strong>Open Presentations: Experiences in Sleep Medicine Around the World</strong>&lt;br&gt;Sharon Keenan (moderator), Nana Tachibana (Japan), Anstella Robinson (US), Daniel Ng (China), Aroonwan Preutthipan (Thailand), Mark Norman (Australia), Hong Bum Shin (South Korea)</td>
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CEC Credits: Estimated 15 hours. More information to follow on [www.wasmcongress.com](http://www.wasmcongress.com). No additional cost: All technologist sessions are included with a congress registration.
Philips Sleeposium

Monday 23rd March
12.45pm, room 203

Chairman: Dr Sang Ahm Lee | Seoul, Korea

12.50 – 1.05pm  PSG versus HST
Dr Teofilo Lee Chiong | USA

1.05 – 1.20pm  SDB & treatments in ASEAN
Dr Toh Song Tar | Singapore

1.20 – 1.40pm  OSA treatment: CPAP vs. surgery
Dr Sung Wan Kim | Korea

1.40 – 2.00pm  Cardiovascular disease & SDB
Prof. Dr. med. Winfried J. Randerath | Germany

Visit our website to learn more about Philips solutions
www.philips.com
**Monday**

**Schedule at a Glance • Monday, March 23, 2015**

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<td>Keynote</td>
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<td>Symposium S1-6</td>
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<td>Exhibition</td>
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<td>Symposium S7-12 I Oral Presentation O-1</td>
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<td>Break</td>
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<tr>
<td>Phillips Respironics I Sentac I Apex Industry Symposia</td>
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<tr>
<td>Keynote</td>
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<tr>
<td>Symposium S13-17 I Technologist Program I Oral Presentation O-2</td>
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<tr>
<td>Discussion Symposium</td>
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<tr>
<td>Gala Dinner</td>
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Keynote: Dr. Allan Pack

Many aspects of sleep are heritable. This includes timing of sleep (chronotype), sleep duration, response to sleep loss and spectral characteristics of the EEG during sleep. Both common variants and rare variants affecting these phenotypes have been described. Common sleep disorders also show family aggregation. Significant progress has been made in elucidating the genetics of two sleep disorders—restless legs syndrome and narcolepsy. The current status of genetics of these disorders will be described. While there has been success in these areas, little progress has been made in others, e.g., obstructive sleep apnea. This likely reflects the multiple pathways to disease combined with underpowered studies. New approaches to this are being developed. While sleep medicine, as a field, has been quite successful in identifying gene variants, the information obtained has not yet been translated into clinical practice. Genetic studies have provided new clues as to pathogenesis and new molecular pathways have been identified.

Learning Objectives:
• Review evidence that sleep and its disorders are heritable
• Recognize the current state of knowledge on genetic determinants of sleep and its disorders
• Describe what value genetic information is in practice of sleep medicine

Notes:
Monday, March 23, 2015
9:00am to 10:30am
S1: Does Insufficient Sleep Make Us Fatter?

Chair:
Eve Van Cauter (USA)

Speakers:
Eve Van Cauter (USA), Jean-Philippe Chaput (Canada), Marie-Pierre St-Onge (USA), Anders Sjödin (Denmark), Rachel Leproult (Belgium)

Learning Objectives:
• Recognize the mechanisms by which a lack of sleep can lead to weight gain and obesity
• Recognize why a lack of sufficient sleep can compromise the efficacy of common weight loss interventions
• Determine the effects of sleep extension on appetite control and body weight regulation

Target Audience:
Scientists, clinicians, health care professionals

Summary:
Chronic sleep restriction has become pervasive in modern societies with 24/7 availability of commodities. Recent evidence suggests that insufficient sleep is a contributor to weight gain and obesity. Many factors can explain why a lack of sleep can cause weight gain and increased food intake appears to be an important explanation. In a context of weight loss, individuals attempting to lose weight should also consider getting adequate amounts of sleep in addition to limiting calorie intake and increasing physical activity level to improve the success of their weight loss intervention. Finally, preliminary results lend support to the effect that increasing sleep duration in short-duration sleepers might help to prevent future weight gain, a finding of high clinical relevance.

This symposium will be composed of 4 speakers (15 minutes per presentation, followed by 25 minutes of questions). Each speaker will address a different angle to the overall topic aimed at discussing the role of reduced sleep as contributing to the current obesity epidemic. We believe that this topic will be of high relevance and interest to the attendees of the meeting.

9:00am - 9:05am
Introduction
Eve Van Cauter (USA)

9:05am - 9:25am
Lack of sleep causing weight gain: Observational evidence
Jean-Philippe Chaput (Canada)

9:25am –9:45am
Lack of sleep causing weight gain: Experimental evidence
Marie-Pierre St-Onge (USA)

9:45am –10:05am
Does sleeping habits influence the success of weight loss interventions?
Anders Sjödin (Denmark)

10:05am –10:25am
Can we improve metabolism by sleeping more?
Rachel Leproult (Belgium)

10:25am –10:30am
Questions and answers
Eve Van Cauter (USA)

Technologist Program
9:00am – 10:30am
W1: Paediatric PSG Masterclass: Scoring on-line using the AASM Rules
Christian Guilleminault, Sharon Keenan, Mark Norman

No additional cost: All technologist sessions are included with a congress registration.
Monday, March 23, 2015
9:00am to 10:30am

S2: Advances in Brain Imaging and CNS Stimulation Studies and Treatments of Sensory-motor Functioning in RLS

Chair:
Richard P. Allen (USA)

Speakers:
Richard P. Allen (USA), Giovanni Rizzo (Italy), Yong Won Cho (Korea), Yuping Wang (China), Rachel Salas (USA), Cornelius Bachmann (Germany)

Learning Objectives:
• Cite the studies showing cortical excitability and its relation to neurochemical systems
• Describe the relation between imaging studies and role of the thalamus in RLS
• Review studies of default mode network, resting state and connectivity in RLS
• Review potential targets for the evaluation of stimulation treatment of RLS

Target Audience:
Sleep and RLS clinicians, RLS researchers

Summary:
Increased cortical excitability, one of the better-documented abnormalities in RLS, indicates there exist abnormalities in brain sensory-motor processing in RLS that may underlie the sensory and motor symptoms of RLS. Reflex studies similarly suggest increased spinal excitability possibly related to clinical features of RLS. The spinal excitability may result from abnormal brain functioning altering spinal inhibition. This symposium focuses on evaluating the abnormal CNS functioning in RLS and possible CNS stimulation treatment to reduce these abnormalities. Newer advanced imaging and stimulation studies are presented. These explore, for the first time, the nature and basis for the documented abnormalities in CNS function, the extent of brain systems involved, the clinical significance and the potential focus for new treatment developments. The new advanced technologies involving MR spectroscopy, connectivity analyses, resting brain state and CNS stimulation provide a new and revealing picture of brain functioning in RLS.

This symposium presents a wide range of related studies: functional assessment of cortical excitability using transcranial magnetic stimulation is matched with spectroscopy measures of neurochemical concentrations of GABA, glutamine and glutamate in the same patient at about the same time. Imaging and spectroscopy studies examine the role of the thalamus in RLS. Functional MRI studies evaluate the default mode network, resting state and connectivity in RLS. These studies when considered together rather than separately better define CNS functional abnormalities in RLS indicating potential areas to be considered for CNS stimulation treatment. Treatment development can now be guided by these CNS studies. The treatments can also be evaluated by the degree to which they alter the abnormal functioning or state. This provides scientific bases for developing and evaluating new approaches to RLS treatments and also a focus for further scientific studies of abnormal CNS functioning in RLS. Some initial treatment data will be reviewed.

9:00am – 9:02am
Introduction
Richard P. Allen (USA)

9:02 am – 9:19am
Thalamus and RLS: insights from MR studies
Giovanni Rizzo (Italy)

9:19am – 9:36am
fMRI and default mode network in RLS
Yong Won Cho (Korea)

9:36am – 9:53am
Resting state functional MRI assessments in RLS
Yuping Wang (China)

9:53am – 10:10am
Motor cortex: MR spectroscopy, transcranial magnetic stimulation and treatment
Rachel Salas (USA)

10:10am – 10:27am
Spinal excitability and response to CNS stimulation
Cornelius Bachmann (Germany)

10:27am – 10:30am
Questions and answers
Richard P. Allen (USA)
Monday, March 23, 2015
9:00am to 10:30am

S3: Upper Airway Stimulation for Obstructive Sleep Apnea

Chair:
Patrick J. Strollo Jr, (USA)

Speakers:
Winfried Randerath (Germany), Joachim Maurer (Germany), Kingman P. Strohl (USA)

Learning Objectives:
• Review the patho-physiological basis for upper airway stimulation (UAS)
• Discuss the feasibility trials related to UAS
• Understand the surgical selection and technique related to device implantation
• Discuss the STAR trial 18 month outcomes data

Target Audience:
Physicians, Physician Scientists, PHD Investigators, Nurses, and Technicians

Summary:
Upper Airway Stimulation (UAS) represents a new option for the treatment of moderate to severe obstructive sleep apnea. The results of the Phase III (STAR) trial have recently been published in the New England Journal of Medicine (Strollo et al N Engl J Med 2014; 370:139-149) and have been informed by over 20 years of basic and clinical research. This therapy is now approved for commercial use in Europe and the USA. In this symposium we will review the physiologic basis and feasibility studies relating to UAS, discuss the surgical evaluation and technique involved with device implantation, review the STAR trial 18 month outcomes data, and discuss the long term management and economic feasibility of UAS.

9:00am - 9:05am
Introduction
Patrick J. Strollo Jr, (USA)

9:05am - 9:25am
Physiologic basis upper airway stimulation
Winfried Randerath (Germany), M.D.Rizzo (Germany)

9:25am –9:45am
Surgical selection and implantation of UAS devices
Joachim Maurer (Germany)

9:45am –10:05am
STAR trial 18 month outcomes data
Kingman P Strohl (USA)

10:05am –10:25am
Economic feasibility and long term management of UAS
Patrick J. Strollo Jr, (USA)

10:25am –10:30am
Questions and answers
Patrick J. Strollo Jr, (USA)
Monday, March 23, 2015
9:00am to 10:30am
S4: New Insights into the Neural Correlates of Insomnia

Chair:
Seung Bong Hong (South Korea)

Speakers:
Seung Bong Hong (South Korea), Thien Thanh Dang-Vu (Canada), Eus VanSomeren (Netherlands), Eunyeon Joo (South Korea), Sooyeon Suh (South Korea), Kai Spiegelhalder (Germany)

Learning Objectives:
• Cite recent neuroimaging findings in insomnia research
• Recognize potential neurophysiological mechanisms underlying insomnia disorder
• Identify the changes in brain connectivity in insomnia, especially within the default-mode network
• Recognize the existence of different subtypes of insomnia based on data-driven models derived from neuroimaging and EEG
• Examine clinical implications for the assessment and treatment of insomnia

Target Audience:
Researchers and clinicians, including psychologists and other health care providers

Summary:
Insomnia is a highly prevalent disorder that confers to multiple psychiatric and physical illnesses. Despite wide research about the pathophysiology and treatment of insomnia, the neurobiological mechanisms of insomnia remain poorly understood. Recent findings, using EEG, functional and structural neuroimaging have brought novel insights into the neural correlates of insomnia. In particular, these new findings emphasize that brain mechanisms underlying insomnia disorder are not restricted to the dysfunction of discrete brain structures, but rather involve abnormalities in specific neural networks. In this symposium, we will focus on (1) the changes in sleep microarchitecture and brain oscillations observed in insomnia; (2) the functional and structural alterations of brain areas in insomnia; (3) the disruption of functional (fMRI) and structural neural connectivity (structural covariance, diffusion tensor imaging) characterizing insomnia; (4) the heterogeneity of insomnia and the identification of subtypes based on EEG and neuroimaging findings. Finally, we will aim at discussing the clinical relevance and implications of these findings for the therapeutic management of insomnia.

9:00am – 9:02am
Introduction
Seung Bong Hong (South Korea)

9:02 am – 9:19am
Brain oscillations during sleep in insomnia
Thien Thanh Dang-Vu (Canada)

9:19am – 9:36am
Large-scale psychometrics and brain imaging reveal different subtypes of insomnia
Eus VanSomeren (Netherlands)

9:36am – 9:53am
Structural brain changes accompanying insomnia disorder
Eunyeon Joo (South Korea)

9:53am – 10:10am
Reduced Structural brain connectivity of the Default Mode Network in insomnia patients
Sooyeon Suh (South Korea)

10:10am – 10:27am
Functional connectivity in insomnia during waking resting state
Kai Spiegelhalder (Germany)

10:27am – 10:30am
Questions and answers
Seung Bong Hong (South Korea)
Monday, March 23, 2015
9:00am to 10:30am
S5: Cross-Cultural Differences in Sleep in Young Children

Co-Chairs:
Young-Min Ahn (South Korea), Albert Martin Li (China)

Speakers:
Winfried Randerath (Germany), Joachim Maurer (Germany), Kingman P. Strohl (USA)

Learning Objectives:
• Recognize the importance of good sleep in childhood
• Recognize the differences in sleep habits and practices across the region and beyond
• Identify the relationship between breastfeeding and infant sleep
• Assess the interaction between child and mother’s sleep

Target Audience:
All doctors, nurses, mothers, pediatricians, sleep practitioners, psychologists, respiratory physicians

Summary:
Early childhood is an important and rapidly changing period in life. Young children spend a large proportion of time asleep. Abnormalities in sleep, be it quantity or quality, can have significant impact on the health and development of the child. Understanding sleep in childhood is important in appreciating and development of strategies in managing and optimizing sleep practices. This symposium presents some of the recent works and findings from original research by the Asia Pacific Paediatric Sleep Alliance (APPSA) covering several important areas in sleep in young children. The symposium will cover the significance of sleep in the young and the impact of sleep problems in childhood. This will highlight the existing body of knowledge on the consequences and complications of inadequate or abnormal sleep. The data from our cross-cultural studies across the Asia-Pacific region and comparing it with those of the USA, UK and Canada data will shed light on the variance in sleep habits and practices across the world including details of sleep within different regions of Asia. Breastfeeding influences the sleep in infants and it is important to appreciate the relationship between the two important activities in early infancy. Infant and child sleep certainly influences on mothers’ sleep and this emphasizes the wide-ranging impact of infant sleep on moms.

9:00am - 9:05am
Introduction
Young-Min Ahn (South Korea), Albert Martin Li (China)

9:05am - 9:25am
The impact of sleep problems in childhood
Arthur Teng (Australia)

9:25am –9:45am
Sleep habits and practices in young children in the Asia Pacific region
Daniel Goh (Singapore)

9:45am –10:05am
Relationship between breastfeeding and sleep in young infants
Alex Bartle (New Zealand)

10:05am –10:25am
Interaction between child and mother’s sleep
Jodi Mindell (USA)

10:25am –10:30am
Questions and answers
Young-Min Ahn (South Korea), Albert Martin Li (China)
Monday, March 23, 2015
9:00am to 10:30am
S6: Development of Obstruction Site Evaluation
(Dental and Surgery Track)

Co-Chairs:
Song Tar Toh (Singapore), Hirotaka Hara (Japan)

Speakers:
Song Tar Toh (Singapore), Hirotaka Hara (Japan), Sookweon Koo (South Korea), Jeong-Whun Kim (South Korea), Hsueh-Yu Li (Taiwan), Li-Ang Lee (Taiwan)

Learning Objectives:
• Evaluate the airway in OSA patients
• Cite newly developed method to evaluate the airway
• Demonstrate the various evaluation methods for obstruction site

Target Audience:
Sleep Surgeon, sleep specialist, Residents of ENT

Summary:
The purpose of development of surgical technique and instrument in sleep surgery is proceeded to resolve the sleep problem by less aggressive surgical procedure and to enhance the success rate and reduce the complications. Many kinds of development in sleep surgery have been reported recently. They have their own advantages and limitations. In this symposium, newly developed surgical methods and instruments will be discussed.

9:00am – 9:02am
Introduction
Song Tar Toh (Singapore), Hirotaka Hara (Japan)

9:02 am – 9:19am
Drug-Induced Sleep Endoscopy (DISE)
Sookweon Koo (South Korea)

9:19am – 9:36am
Drug-Induced Sleep Fluoroscopy
Jeong-Whun Kim (South Korea)

9:36am – 9:53am
Drug-Induced Sleep CT
Hsueh-Yu Li (Taiwan)

9:53am – 10:10am
Can snoring sound detection help to determine the sites of obstruction in patients with obstructive sleep apnea?
Li-Ang Lee (Taiwan)

10:10am – 10:27am
Computational fluid dynamics combined with acoustic analysis of snoring sounds for obstruction site evaluation of OSA patients
Hirotaka Hara (Japan)

10:27am – 10:30am
Questions and answers
Song Tar Toh (Singapore), Hirotaka Hara (Japan)
Monday, March 23, 2015
11:00am to 12:30pm
S7: Sleep and the Human Transcriptome: From Circadian Disruption to Depression and OSA

Chair:
Simon N Archer (United Kingdom)

Speakers:
Simon N. Archer, (United Kingdom), Derk-Jan Dijk (United Kingdom), Allan Pack (USA), Jun Li (USA), Sina Gharib (USA), Diego Mazzotti (Brazil)

Learning Objectives:
• Increase awareness of the interaction between sleep and circadian systems in the regulation of the human transcriptome, both levels of expression and rhythmicity
• Increase awareness of the methodologies available for the measurement and analysis of the human transcriptome
• Increase awareness of how time series analyses of the human transcriptome can be used to interpret circadian and sleep related disorders
• Discuss future needs and technological refinements/developments for human transcriptomics and the need to link with other omic data

Target Audience:
Clinical and basic researchers in the fields of sleep and circadian rhythms

Summary:
Sleep and circadian systems interact to determine behaviour and physiology. Disrupted sleep (sleep loss or mistimed sleep) can affect circadian rhythmicity, both amplitude and phase. Disruption to sleep and circadian organization are associated with many diseases including circadian rhythm disorders, metabolic disorders, breathing disorders and mood disorders.

It is not straightforward to sample a time series of human samples for transcriptomic measurement and analyses but several groups around the world have developed protocols to do this. The aim of this symposium is to bring together recognised experts in this area to present and discuss recent and current developments. The use of time series human transcriptomic data can inform on the underlying molecular pathways and processes that are associated with disrupted sleep and circadian rhythms and how these relate to or can be used as biological markers for disease states.

11:00am - 11:02am
Introduction
Simon N. Archer (United Kingdom)

11:02am - 11:19am
The effects of insufficient and mistimed sleep on the human circadian transcriptome
Derk-Jan Dijk (United Kingdom)

11:19am – 11:36am
The circadian transcriptome and individual differences to sleep loss
Allan Pack (USA)

11:36am – 11:53am
Disruption to the human brain circadian gene expression in major depressive disorder
Jun Li (USA)

11:53am – 12:10pm
Transcriptomic identification of genetic markers of obstructive sleep apnea
Sina Gharib (USA)

12:10pm – 12:27pm
Transcriptomic responses to sleep loss and recovery sleep
Diego Mazzotti (Brazil)

12:27pm – 12:30pm
Questions and answers
Simon N. Archer (United Kingdom)
Monday, March 23, 2015
11:00am to 12:30pm
S8: Are There Precursors for RBD?

Chair:
Birgit Högl (Austria)

Speakers:
Birgit Högl (Austria), Bradley Boeve (USA), Claudia Trenkwalder (Germany), Ambra Stefani (Austria), Yuichi Inoue (Japan)

Learning Objectives:
• Identify potential early precursors of REM sleep behavior disorder
• Recognize precursors of RBD and clinical RBD
• Critically evaluate the role and appreciate the specific strengths and weaknesses of sleep history taking, video analysis, polysomnography and psychiatric evaluation to distinguish between potential precursors of RBD and clinical RBD

Target Audience:
Sleep clinicians, sleep researchers, psychologists

Summary:
Recent RBD research has focused much on the role of RBD as harbinger for neurodegenerative disease. However, new and upcoming evidence suggests, that RBD itself may be preceded by precursors, which can be clearly distinguished from clinical RBD. This is intriguing as it may help in the future to identify risk groups for neurodegeneration, even before full blown clinical RBD has evolved. In this symposium recent evidence from sleep history taking, polysomnography with EMG quantification, video studies, and psychiatric examinations will be discussed.

11:00am - 11:05am
Introduction
Birgit Högl (Austria)

11:05am - 11:25am
The role of sleep history to distinguish between early RBD, precursors of other differential diagnosis.
Bradley Boeve (USA)

11:25am – 11:45am
REM behavioral events (RBE) as precursors of RBD
Claudia Trenkwalder (Germany)

11:45am – 12:05pm
REM sleep without atonia evolving to RBD? A longitudinal study
Ambra Stefani (Austria)

12:05pm – 12:25pm
Depression – a potential precursor of RBD
Yuichi Inoue (Japan)

12:25pm – 12:30pm
Questions and answers
Birgit Högl (Austria)
Monday, March 23, 2015
11:00am to 12:30pm
S9: Optogenetic Probing of Sleep and Wakefulness

Chair:
Luis de Lecea (USA)

Speakers:
Luis de Lecea (USA), Hee-Sup Shin (South Korea), Sebastian Royer (South Korea), Antoine Adamantidis (Switzerland), John Peever (Canada)

Learning Objectives:
• Describe optogenetics and other state-of-the-art methods of functional circuit mapping.
• Review the neuronal mechanisms underlying Theta oscillations and sleep spindles, and the functional consequences of manipulating these features of cortical activity.
• Describe hypothalamic circuit causally involved in REM sleep generation and maintenance.
• Review neuronal circuits associated with REM sleep atonia.

Target Audience:
Sleep specialists with an interest in the basic neuronal circuits and mechanisms underlying sleep oscillations, state transitions and regulation of muscle tone during sleep

Summary:
New technologies in the Neuroscience such as optogenetics allow us to interrogate the causal roles and dynamics of genetically identified neuronal circuits with unprecedented precision. The sleep research field has particularly benefited from these approaches, as new experiments have identified the role of different neuronal systems in the transitions from sleep to wakefulness, wake and sleep maintenance, REM onset as well as homeostatic mechanisms. In this symposium we will present and discuss some of these new advances, including the effect of spindles and theta oscillations on sleep architecture, the role of neuropeptide-related systems in REM onset and maintenance, as well as the mechanisms of REM atonia. These basic developments dramatically increase our understanding of the mechanisms of sleep regulation and may lead to improved and selective treatments for several sleep disorders.

11:00am - 11:02am
Introduction
Luis de Lecea (USA)

11:02am - 11:19am
Optogenetic induced spindle alters sleep architecture in mice
Hee-Sup Shin (South Korea)

11:19am – 11:36am
Theta oscillations and REM sleep
Sebastian Royer (South Korea)

11:36am – 11:53am
Optogenetic manipulation of MCH and REM sleep
Antoine Adamantidis (Switzerland)

11:53am – 12:10pm
Optogenetic dissection of REM sleep atonia
John Peever (Canada)

12:10pm – 12:27pm
Monoamines in sleep transitions and maintenance
Luis de Lecea (USA)

12:27pm – 12:30pm
Questions and answers
Luis de Lecea (USA)
Monday, March 23, 2015
11:00am to 12:30pm

S10: The Natural History of Insomnia: Course, Long-Term Consequences, and Public Health Significance

Chair:
Charles M. Morin (Canada)

Speakers:
Charles M. Morin (Canada), Jason Ellis (United Kingdom), Yung Kwok Wing (China), Maurice Ohayon (USA), Bjorn Bjorvatn (Norway)

Learning Objectives:
• To learn about the natural history of insomnia and its most common trajectories over time
• To explore key factors moderating/predicting the acute and long-term course of insomnia
• To identify the most common mental and physical health outcomes associated with persistent insomnia
• To explore potential public health education/prevention programs

Target Audience:
Sleep clinicians and researchers; epidemiologists; public health officials

Summary:
Insomnia is a prevalent public health problem which carries significant burden for both the individual and for society at large. There is increasing evidence that persistent insomnia may be associated with several negative long-term consequences including work disability, depression, hypertension, and even reduced life expectancy. There is, however, much less information about the natural history of insomnia and about factors that may alter the trajectory of insomnia over time. This symposium will review the most recent evidence derived from longitudinal studies examining the course of insomnia over time, predictors and moderators of its course, as well as its long-term medical and psychological consequences. Investigators from different parts of the world will present their most recent findings documenting the trajectories of acute and chronic insomnia, its impact on psychological and psychiatric domains, and potential determinants and moderators of its long-term course. Summarizing this evidence derived from longitudinal investigations has important public health implications both for improving identification of at-risk individuals for chronic insomnia and for planning primary and secondary prevention programs.

11:00am - 11:02am
Introduction
Charles M. Morin (Canada)

11:02am - 11:19am
Transition from acute to chronic insomnia
Jason Ellis (United Kingdom)

11:19am – 11:36am
Natural history and moderating factors of the long-term course of insomnia
Charles M. Morin (Canada)

11:36am – 11:53am
Long-term outcomes and predictors of chronic insomnia
Yung Kwok Wing (China)

11:53am – 12:10pm
Development of medical conditions and psychiatric disorders in insomnia: A longitudinal study
Maurice Ohayon (USA)

12:10pm – 12:27pm
Chronic insomnia and its long-term consequences on health
Bjorn Bjorvatn (Norway)

12:27pm – 12:30pm
Questions and answers
Luis de Lecea (USA)
Monday, March 23, 2015
11:00am to 12:30pm
S11: Familial Fatal Insomnia : World Wide Experience

Chair:
Tayard Desudchit (Thailand)

Speakers:
Tayard Desudchit (Thailand), Inga Zerr (Germany), Xiao-Ping Dong (China CDC), Zhan SQ (China)

Learning Objectives:
• Identify the clinical presentation and genetic of familial fatal insomnia
• Recognize the role of sleep physician in early diagnosis and management of FFI
• Determine appropriate candidate for further investigation with FDG-PET for prognosis
• Practice genetic counseling or recommend proper referral

Target Audience:
Sleep physicians, Sleep fellows and technicians

Summary:
Prion diseases are well know to cause sleep disruption. The most common form of prion diseases varied in each ethnic group. With FFI being more common in Caucasian. Double point mutations of PRNP gene at codon 178 and 129M is specific in FFI. In Asia, cases were reported from China, Korea, Japan & Thailand. Lack of typical EEG/ MRI findings make the diagnosis more difficult. The conference will raise the awareness to this condition in Asia. A new proposed diagnosis pathway will also be presented.

11:00am - 11:05am
Introduction
Tayard Desudchit (Thailand)

11:05am - 11:25am
German experience with a proposal of new diagnostic pathway for fatal familial insomnia
Inga Zerr (Germany)

11:25am – 11:45am
Survival Time and the Influencing factors of Chinese patients with FFI
Xiao-Ping Dong (China CDC)

11:45am – 12:05pm
Chinese experience with clinical & PSG study of familial fatal insomnia
Zhan SQ (China)

12:05pm – 12:25pm
Staging FFI progress with FDG-PET/Video-EEG
Tayard Desudchit (Thailand)

12:25pm – 12:30pm
Questions and answers
Tayard Desudchit (Thailand)
Monday, March 23, 2015
11:00am to 12:30pm
S12: Computational Fluid Dynamics (CFD) in Obstructive Sleep Apneics
(Dental and Surgery Track)

Chair:
Ning-Hung Chen (Taiwan)

Speakers:
Ning-Hung Chen (Taiwan), Peter Cistulli (Australia), Honda Hsiao (Taiwan), Maurice Ohayon (USA),
Cheng-Hui Lin (Taiwan)

Learning Objectives:
• Recognize the correlation between head and neck anatomy, structure and CFD of upper airway
• Summarize the applications of CFD in versatile management of OSA
• Apply CFD of upper airway as a pre-treatment evaluation for OSA

Target Audience:
Sleep Surgeons, ENT, Orthodontists

Summary:
It has been well known that the head and neck anatomy, skeletal or soft-tissue, has important impact on the upper airway
morphology. Also, the severity of obstructive sleep apnea was found to be correlated with the airway morphology. Using
computational fluid dynamic study of upper airway, sleep specialist may understand the correlation between structure deformation
and airflow resistance in upper airway. Further application in pre-treatment evaluation or post-treatment documentation of the
upper airway structure morphology has been reported worldwide. In this symposium, Dr. Ning-Hung Chen will demonstrate the
relationship between the severity of OSA and the airway resistance calculated from CFD of pharyngeal airway reconstructed by
head and neck 3DCT of 40 patients with OSA. Dr. Cistulli will talk about the CFD outcome of OSA patients receiving oral
appliance treatment and compare the CFD results between responder and non-responder, with and without oral appliance in the
position. The third speaker Mr. Honda Hsiao will compare the CFD outcome of OSA patients underwent MMA, before and after
surgery. A possible prediction model for surgical outcome of maxillomandibular advancement will be illustrated. Finally, the fourth
topic will be delivered in a team-approach manner by Sam SP Hsu (orthodontics) and Clement CH Lin (Craniofacial Surgeon),
explaining the application of 3DCT images in Computer Assisted Surgical Simulation (CASS) of MMA for OSA. The overall goal
is to demonstrate a 3D picture of pharyngeal airway of OSA patients and to show how versatile treatment modality modified the
pharyngeal airway and its effect on airway resistance by CFD.

11:00am - 11:02am
Introduction
Ning-Hung Chen (Taiwan)

11:02am - 11:19am
CFD study of the inspiratory upper airway and clinical severity of OSA
Ning-Hung Chen (Taiwan)

11:19am – 11:36am
CFD for the assessment of upper airway response to oral appliance treatment in OSA
Peter Cistulli (Australia)

11:36am – 11:53am
CFD and maxillomandibular advancement for OSA
Honda Hsiao (Taiwan)

11:53am – 12:10pm
Computer assisted surgical simulation for maxillomandibular advancement for OSA
Maurice Ohayon (USA)

12:10pm – 12:27pm
Computer Assisted Surgical Simulation for Maxillomandibular Advancement for OSA
Cheng-Hui Lin (Taiwan)

12:27pm – 12:30pm
Questions and answers
Ning-Hung Chen (Taiwan)
Monday, March 23, 2015
11:00am to 12:30pm • Room 208 B
O-01: Sleep Breathing Disorders

Chair:

Validation Of A New Therapeutic Device For Treatment Of Central And Mixed Sleep Apnea With Anticyclic Servoventilation (ACSV)
Winfried Randerath (Germany)

Is An Intermediate Chronotype A Protective Factor To Obstructive Sleep Apnea?
Lenise Jihe Kim (Brazil)

Non-St-Elevation Myocardial Infarction (NSTEMI) Patients With Moderate To Severe Sleep Apnea (SA) Have Worse Long Term Prognosis Than Those With St-elevation Myocardial Infarction (STEMI)
Ondrej Ludka (Czech Republic)

Elimination Of Central Sleep Apnea By Cardiac Valve Replacement: A Continuous Follow-up Study In Patients With Rheumatic Valvular Heart Disease
Ning Ding (China)

Effect Of A Biomimetic Oral Appliance In Adults With Obstructive Sleep Apnea
G. Dave Singh (USA)

Role Of Salpingopharyngeal Fold In Lateral Pharyngeal Wall Collapse Causing Obstructive Sleep Apnea
Vikas Agrawal (India)

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Box Lunch:
Box lunch is provided to satellite symposia attendees. Delegates can purchase a lunch ticket for Wednesday prior to noon Tuesday for a cost of 10 € at the registration desk.
Genetic and Pathophysiology of Narcolepsy

Keynote: Dr. Emmanuel Mignot

Mayo Clinic

Narcolepsy is caused by the loss of hypocretin (orexin)-producing neurons in the lateral hypothalamus. Evidence, such as a strong association with HLA DQB1*06:02, strongly suggests an autoimmune basis targeting hypocretin neurons. Genome-wide association studies have strengthened the association between narcolepsy and immune system gene polymorphisms, including the identification of additional polymorphisms in the HLA (notably DP), polymorphisms in the T cell receptor alpha and beta loci, TNFSF4 (also called OX40L), Cathepsin H (CTSH) the purinergic receptor P2RY11, and the DNA methyltransferase DNMT1. Recently, attention has been raised regarding a spike in cases of childhood narcolepsy in 2010 following the 2009 H1N1 pandemic (pH1N1) in China and vaccination with Pandemrix, an adjuvanted H1N1 vaccine that was used in Europe. Interestingly, the association with other vaccines, including Arepandrix, a similar vaccine produced in Quebec instead of Germany using a slightly different protein extraction procedure, has not been associated with large increased risks. Differences in protein composition and effects on molecular mimicry are being explored.

How the immune system may be involved in disease initiation and/or progression remains a challenge to researchers. Potential immunological pathways that could lead to the specific elimination of hypocretin producing neurons include molecular mimicry or bystander activation, and are likely a combination of genetic and environmental factors, such as upper airway infections.

Learning Objectives:
• Identify diagnosis methods for narcolepsy
• Recognize genetic predisposition of narcolepsy
• Recognize immunology and relation to upper airway infections

Funding: NIH NS23724 and grants from GSK and Jazz Pharmaceuticals

Notes:
Monday, March 23, 2015
2:30pm to 3:30pm
The Evidence for Uvulopalatopharyngoplasty, How Effective and Safe is it to Treat OSA Patients?

Keynote: Dr. Danielle Friberg

Obstructive sleep apnea (OSA) is common among all ages and gender, and may be life-dangerous if untreated. Before the 80:ies the only treatment was tracheostomy, and thereafter uvulo-palato-pharyngo-plasty (UPPP), performed with different surgical techniques. The results varied a lot and there were serious side-effects, per-operative complications and also mortalities, and the popularity for UPPP has declined the last 10-15 years. The Golden standard treatment for adults is CPAP, and thereafter dental device (MRD). However, the tolerance and compliance for these life-long devices is only approximately 50%, leaving a lot of patients untreated, if “salvage surgery” is not offered. In addition, the learning curve for surgeons and anesthesiologists has been improved. A recently published RCT of a conservative UPPP (SKUP3) in adult OSA will be presented. The study has shown significant improvements of obstructive breathing, daytime sleepiness and quality of life in the operated group, with significant differences compared to the controls (delayed surgery). Also 2-years results will be presented.

Learning Objectives:
• Recognize the evidence grade for the efficacy of soft palatal surgery and especially UPPP, by meta-analysis and RCT:s, as well as long-term results (15 years) in adult OSA
• Demonstrate a conservative UPPP with few side-effects (SKUP3), and
• Review a safety program to avoid serious per-operative complications
• Recognize which patients could be offered UPPP, and which are not appropriate

Notes:
Monday, March 23, 2015
4:00pm to 5:30pm
S13: Neuroimaging Update in Sleep and Sleep Disorders

Co-Chairs:
Luigi Ferini-Strambi (Italy), Seung Bong Hong (South Korea)

Speakers:
Luigi Ferini-Strambi (Italy), Seung Bong Hong (South Korea), Philippe Peigneux (Belgium), Masayuki Miyamoto (Japan)

Learning Objectives:
• Identify the functional neuroanatomy of sleep and sleep stages.
• Recognize how sleep contributes to the long-term consolidation of recently acquired memories.
• Evaluate the opportunity to use neuroimaging, in addition to the clinical and electrophysiological assessments, as a helpful tool in the diagnosis, classification, treatment and monitoring of sleep disorders.

Target Audience:
Neurologists, psychiatrists, psychologists, sleep specialists

Summary:
Brain activity dynamically changes even during sleep. Human brain dynamics are nowadays routinely explored using a wide variety of non-invasive neuroimaging techniques, including single photon emission computed tomography (SPECT) and positron emission tomography (PET), near infrared spectroscopy (NIRS) and functional magnetic resonance imaging (fMRI). In the past decades, the application of brain imaging methods to the study of sleep raised a renewed interest for the field, especially in the domain of neuroscience. Indeed, these studies enabled researchers to characterize the functional neuroanatomy of sleep stages and identify the neural correlates of phasic and tonic sleep mechanisms. Furthermore, they provided scientific community with tools to address the crucial question of brain plasticity for memory consolidation. Neuroimaging studies may also contribute significantly to the understanding of the neural basis of sleep pathologies. This may finally offer the opportunity to use neuroimaging, in addition to the clinical and electrophysiological assessments, as a helpful tool in the diagnosis, classification, treatment, and monitoring of sleep disorders. After a first talk on the contributions of neuroimaging to our understanding of the functional neuroanatomy of sleep and sleep stages and memory consolidation during sleep, the symposium will focus on obstructive sleep apnea, narcolepsy and REM sleep behavior disorder (RBD). Brain structural volume changes have been demonstrated in brain regions of OSA patients including areas that regulate memory and executive function (e.g., frontal cortex, anterior cingulate, and hippocampus). Growing evidence suggests that the OSA-related changes in brain morphology may improve with CPAP clinical research, for evaluating therapeutic strategies to prevent conversion in neurodegenerative diseases.

4:00pm - 4:05pm
Introduction
Luigi Ferini-Strambi (Italy), Seung Bong Hong (South Korea)

4:05pm - 4:25pm
Understanding sleep and memory processes
Philippe Peigneux (Belgium)

4:25am –4:45pm
Neuroimaging findings in OSA
Luigi Ferini-Strambi (Italy)

4:45pm – 5:05pm
Neuroimaging findings in Narcolepsy
Seung Bong Hong (South Korea)

5:05pm – 5:25pm
Neuroimaging findings in REM parasomnias
Masayuki Miyamoto (Japan)

5:25pm – 5:30pm
Questions and answers
Luigi Ferini-Strambi (Italy), Seung Bong Hong (South Korea)

Technologist Program

4:00pm – 5:30pm
W2: Adult PSG Masterclass: Scoring on-line using the AASM Rules
Robert Thomas

No additional cost: All technologist sessions are included with a congress registration.
Monday, March 23, 2015
4:00pm to 5:30pm
S14: Sleep, Dream Consciousness and Psychosis

Chair:
Armando D’Agostino (Italy)

Speakers:
Armando D’Agostino (Italy), Simone Sarasso (Italy), Dieter Wolke (United Kingdom), Simone Cavallotti (Italy), Robert Stickgold (?)

Learning Objectives:
• Describe how sleep research should be widely employed to study the neurobiology of schizophrenia.
• Explain how specific deficits of Slow Wave Activity (SWA) inform novel hypotheses on dysfunctional thalamocortical connectivity in schizophrenia.
• Describe how dreaming and psychosis share several core mechanisms on the phenomenological and neurobiological levels.
• Explain how advances in EEG and fMRI technology associated with transcranial stimulation yield novel insights on dream consciousness and schizophrenia, converging on the critical role of frontal/prefrontal cortical networks.
• Describe how sleep disturbances could be considered endophenotypes or biological markers of psychosis in the near future.

Target Audience:
Sleep researchers, Clinicians in Sleep Medicine and Psychiatry and Ph.D students

Summary:
Schizophrenia is a complex, multifaceted neuropsychiatric disorder. Progress in several fields of neuroscience continuously shortens the distance between its clinical phenomenology and underlying biology, although several key aspects remain unclear. In this framework, sleep is emerging as a highly favorable condition for the study of core abnormalities, given the absence of relevant confounders that have hampered research in waking patients. The mixed findings that have historically emerged from sleep studies in this population could at least in part be attributed to the complex nosographical boundaries of the disorder, chronicity and long-term, neurotoxic treatments. In recent years, dense-array EEG approaches have begun to unveil specific deficits in patients’ Slow Wave Sleep that inform novel and stimulating hypotheses on dysfunctional thalamocortical circuits. Sleep spindle density is clearly reduced in schizophrenic subjects, even controlling for medication bias (Ferrarelli et al., 2010). The finding is quite consistent and correlates with memory consolidation deficits in these patients (Manoach et al., 2010). In terms of subjectivity, several authors have argued that the neurobiology of dreams is a valuable model for psychosis, the clinical hallmark of schizophrenia (Hobson, 2004; Gottesmann, 2006; Feinberg, 2011; D’Agostino et al., 2012). The key similarity between dreams and psychosis evolves around the subject’s inability to discern external reality from internally generated stimuli that arise to consciousness. Impaired self-reflective awareness, abstract thinking and metacognition justify defective reality testing in both mental states, converging on the crucial role of frontal regions. Future directions should include emerging knowledge on the neurobiological substrates of lucid dreaming. Within this peculiar state of the brain/mind, the dreamer gains awareness into the internally generated origin of the experience and can at times control it. Increases of frontal lower gamma-band activity of the brain that are usually disengaged during REM sleep and schizophrenia underlie this phenomenon (Voss et al., 2014).

4:00pm - 4:05pm
Introduction
Armando D’Agostino (Italy)

4:05pm - 4:25pm
Thalamocortical connectivity, sleep and schizophrenia
Simone Sarasso (Italy)

4:25pm - 4:45pm
Parasomnias in childhood and risk of psychotic experiences at 18 in a large UK birth cohort
Dieter Wolke (United Kingdom)

4:45pm - 5:05pm
The neurobiology of dreams and psychosis
Simone Cavallotti (Italy)

5:05pm - 5:25pm
Sleep, Dream and Psychiatric Disorders: Cause or Effect?
Robert Stickgold (?)

5:25pm - 5:30pm
Questions and answers
Armando D’Agostino (Italy)
Monday, March 23, 2015
4:00pm to 5:30pm
S15: Age-related Sleep Disturbance: Change in Circadian Rhythm and Clinical Implications

Co-Chairs:
Phillis Zee (USA), Jung Hie Lee (South Korea)

Speakers:
Phillis Zee (USA), Jeanne F. Duffy (USA), Jung Hie Lee (South Korea), Karine Scheuermaier (South Africa)

Learning Objectives:
• Identify the change in circadian physiology underlying sleep disruption of the elderly.
• Describe how to use the melatonin rhythm in assessing sleep disorders of later life.
• Recognize urological symptoms of the elderly in relation with sleep disruption.
• Identify the sleep and circadian rhythm abnormalities in cancer patients.

Target Audience:
Scientists and Clinicians who are interested in the circadian rhythm abnormality underlying sleep disruption of the elderly, and its association with urinary symptoms and clinical feature of cancer patients

Summary:
Sleep and wakefulness are co-regulated by both a homeostatic process and the circadian timing system. There is evidence for changes in both of these sleep regulatory systems with age, including decreased sleep consolidation in older individuals as well as a shift in the timing and amplitude of some circadian rhythms with aging. It has also been found that there are age-related changes in the interaction between sleep-wake homeostasis and the output of the circadian timing system in healthy aging. Recently, melatonin rhythm measurement in older subjects has become more important for proper diagnosis of insomnia disorder comorbid with circadian rhythm sleep disorder (CRSD) or depressive disorder, and for determining the timing of light therapy. For the management of sleep disruption and clinical symptoms of the elderly patients, it seems to be crucial to understand the relationship of circadian rhythm abnormality and various clinical pictures including fatigue, depression and urological symptoms. Speakers will talk about the backgrounds of circadian rhythm changes underlying sleep disruption in the elderly, and the application of melatonin rhythm measurement in assessing sleep disorders comorbid with CRSD or other medical/psychiatric illnesses. They will also discuss about the relationship of sleep and circadian disruption with changes in urological symptoms of the elderly, and with fatigue and depression in cancer patients.

4:00pm - 4:05pm
Introduction
Phillis Zee (USA), Jung Hie Lee (South Korea)

4:05pm - 4:25pm
Change in circadian rhythm in normal aging
Phillis Zee, MD (USA)

4:25pm - 4:45pm
Melatonin rhythm and light exposure in assessing sleep disorders of later life
Jeanne F. Duffy (USA)

4:45pm - 5:05pm
Subjective sleep complaints and circadian rhythm abnormality in older subjects
Jung Hie Lee (South Korea)

5:05pm - 5:25pm
Relationship of sleep disruption with urological symptoms in the elderly
Karine Scheuermaier (South Africa)

5:25pm - 5:30pm
Questions and answers
Phillis Zee (USA), Jung Hie Lee (South Korea)
Monday, March 23, 2015
4:00pm to 5:30pm
S16: J-shaped or U-shaped Association? New Perspectives About the Effect of Sleep in the Risk of Stroke

Co-Chairs:
Monica Levy Andersen (Brazil)

Speakers:
Monica Levy Andersen (Brazil), Jong Sung Kim (South Korea), Claudio L. Bassetti (Switzerland), Lenise Jihe Kim (Brazil), Fernando Morgadinho Coelho (Brazil), Sergio Tufik (Brazil)

Learning Objectives:
• Review the main clinical findings about the association between sleep duration and risk of stroke
• Discuss the new findings about the ischemic preconditioning effect of sleep deprivation in animal models
• Understand the possible mechanisms and the main limitations of these studies
• Educate clinicians and researchers about the importance of sleep evaluation as a preventive treatment for stroke

Target Audience:
Neurologists, sleep researchers, and other health care professionals

Summary:
Stroke and sleep have a bidirectional relationship. Post-stroke patients generally show sleep complaints, while sleep disorders increase the risk of stroke. Although the association of sleep duration and stroke has been increasingly investigated, the reports are still contradictory. The studies demonstrated a J-shaped or U-shaped association between the sleep amount (<6 hours or >8 hours) and the risk of stroke. In preclinical studies with animal models of ischemic stroke, new perspectives have been proposed about the effect of sleep loss as a precondition factor to brain ischemia. This symposium will review clinical and basic researches of the relationship between sleep and the risk of stroke. Moreover, we will discuss the possible pathophysiological mechanisms of this association and the main limitations in these approaches.

4:00pm - 4:02pm
Introduction
Monica Levy Andersen (Brazil)

4:02pm - 4:19pm
Introduction: What do we know about sleep and stroke?
Jong Sung Kim (South Korea)

4:19pm - 4:36pm
Stroke and sleep duration: clinical findings
Claudio L. Bassetti (Switzerland)

4:36pm - 4:53pm
Sleep deprivation and stroke preconditioning
Lenise Jihe Kim (Brazil)

4:53pm - 5:10pm
Pathophysiological mechanisms of the association between sleep and stroke
Fernando Morgadinho Coelho (Brazil)

5:10pm - 5:27pm
Sleep and stroke: what obstacles we have to transpose?
Sergio Tufik (Brazil)

5:27pm - 5:30pm
Questions and answers
Monica Levy Andersen (Brazil)
S17: Oral Facial Growth, Children, Sleep Disordered Breathing—And Role of Dental Specialists in SDB Prevention (Dental and Surgery Track)

**Chair:**
Michele Hervy (France)

**Speakers:**
Michele Hervy (France), Cheng-Hui Lin (Taiwan), Christian Guilleminault (USA), Hiroko Tsuda (Japan)

**Learning Objectives:**
- Describe how oral facial evaluation is critical to recognize and treat pediatric SDB early.
- Recognize the genetic and functional factors that are involved in the impairment of the upper airway, and that functional impairment may occur during fetal life.
- Recognize that impairment is critical and systematic follow-up and factors to look for when using nasal CPAP in children.
- Describe how oral facial impairment in children call upon new treatment approaches through improvement of functions.

**Target Audience:**
This symposium will be directed toward pediatricians, pediatric dentists and orthodontists, oral facial specialists, re-educators in oral facial functioning and sleep medicine specialists dealing with OSA.

**Summary:**
Normal oral facial growth is critical for development of the upper airway and avoidance of appearance of OSA in children. Such oral facial growth may be impacted by genetic and environmental factors. A cohort of 24 homozygotic twins discordant for SDB has been investigated using clinical presentation, polysomnograms and 3D-CT, the anatomic findings will be presented by Dr C. Lin. Teeth agenesis occurs during fetal life, most commonly related to genetic mutations and impact on oral facial growth, but early extraction of permanent teeth in children leads to similar lack of stimulation of the alveolo-dental syndrochondrosis involved in oral facial growth: genetic and functional involvements lead to similar results. A cohort of both groups of children have been investigated, comparison between the evolution of both groups overtime during childhood and how to deal with the problems will be presented by Dr Guilleminault. Early recognition of small oral facial growth should lead to functional treatment to stimulate growth, a novel approach dealing with the oral facial development and small upper airway in SDB children, based on both proprioceptive and functional stimulation has been developed and the initial results on a cohort of children with SDB will be presented by Dr Hervy. When T&A is unsuccessful nasal CPAP is commonly prescribed in children and different masks (nasal and full face) are used, however such treatment has an impact on oral facial development. Evaluation, impairment and results of nasal CPAP treatment with mask as interface on oral facial growth in children will be presented by Dr Tsuda.

4:00pm - 4:05pm
**Introduction**
Michele Hervy (France)

4:05pm - 4:25pm
**Homozygotic twin discordant for SDB: imaging results**
Cheng-Hui Lin (Taiwan)

4:25pm - 4:45pm
**Alveolo dental growth, genetic and functional impairment and SDB**
Christian Guilleminault (USA)

4:45pm - 5:05pm
**Nasal CPAP, oralfacial growth in children**
Hiroko Tsuda (Japan)

5:05pm - 5:25pm
**Functional treatment approach in pediatric SDB**
Michele Hervy (France)

5:25pm - 5:30pm
**Questions and answers**
Michele Hervy (France)
MONDAY
Monday, March 23, 2015
4:00pm to 5:30pm • Room 208 A
O-02: Insomnia

Chair:

Insomnia With Physiological Hyperarousal Is Associated With Hypertension
Yun Li (China)

Data From The Internet: New Methods For Automated Insomnia Interventions
Holly Lord (USA)

SMR Neurofeedback For Improving Sleep And Memory – Two Studies In Primary Insomnia
Manuel Schabus (Austria)

The Exploratory Power Of Sleep Effort, Dysfunctional Beliefs, And Arousal For Insomnia Severity
And PSG Determined Sleep
Elisabeth Hertenstein (Germany)

Do Health Behaviors Differ Across Insomnia Patients As A Function Of Objective
Sleep Duration?
Denise Christina Jarrin (Canada)

High Frequency Heart Rate Variability As Predictor Of Treatment Response To
Cognitive-Behavioral Therapy For Insomnia
Jean-Philippe Gouin (Canada)

CBT For Insomnia In Veterans With PTSD
Philip Gehrman (USA)

WORLD’S MOST ACCURATE CONSUMER
SLEEP MONITOR GOT JUST EVEN BETTER.

STAND #755
Monday, March 23, 2015  
5:30pm to 7:00pm  
S18: Psychiatry and Sleep  

Chair:  
Seung Chul Hong (South Korea)  

Speakers:  
Seung Chul Hong (South Korea), Maurice M. Ohayon (USA), Charles Morin (Canada), Jeong-Ho Chae (South Korea), Hyun Kook Lim (South Korea)  

Learning Objectives:  
• To review for findings of sleep problems in PTSD and experiences in clinical situation.  
• To understand the putative the underlying neurobiological mechanisms between the cognitive impairment and sleep disturbances.  
• To evaluate the impact of psychiatric comorbidity on treatment response to cognitive behavior therapy (CBT) for insomnia, behavior therapy (BT), or cognitive therapy (CT).  

Target Audience:  
Psychiatrist, Neurologist, Sleep researcher, and other health care professionals  

Summary:  
Psychiatric comorbidities are deeply associated with sleep problems. Affective disorders, anxiety disorders, cognitive impairment, and other psychiatric diseases would cause sleep problems and associated with chronic sleep disorders. Many patients with posttraumatic stress disorders (PTSD) have difficulty falling or staying asleep. They usually exhibit nightmare and hyperarousal during the night. Sleep problems have an impact on the development and symptom severity of PTSD and on the quality of life and functioning of patients. Prospective researches have provided more robust evidence for the relationship between sleep disturbances and outcomes and symptoms of PTSD. Sleep is frequently impaired in individuals with Alzheimer's disease. Furthermore, recent studies have demonstrated numerous age-related sleep disturbances such as poor sleep efficiency and sleep apnea, might be associated with future risk of cognitive impairment. The presence of a comorbid depressive or anxiety disorder did not reduce the efficacy of CBT for insomnia, but it did for its single behavior therapy and cognitive therapy components when used alone.  

5:30pm - 5:35pm  
Introduction  
Seung Chul Hong (South Korea)  

5:35pm - 5:55pm  
Overview of general psychiatric disorders and sleep  
Maurice M. Ohayon (USA)  

5:55pm - 6:15pm  
Treatment of insomnia comorbid with psychiatric disorders: anxiety and depression  
Charles Morin (Canada)  

6:15pm - 6:35pm  
PTSD and sleep  
Jeong-Ho Chae (South Korea)  

6:35pm - 6:55pm  
Dementia and sleep  
Hyun Kook Lim (South Korea)  

6:55pm - 7:00pm  
Questions and answers  
Seung Chul Hong (South Korea)
Monday, March 23, 2015
5:30pm to 7:00pm
S19: New Technologies for Sleep Apnea Monitoring

Chair:
Thomas Penzel (Germany)

Speakers:
Thomas Penzel (Germany), Toshiaki Shiomi (Japan), Ludger Grote (Sweden), Robert Poirrier (Belgium), Brigitte Fauroux (France)

Learning Objectives:
• Describe how suprasternal pressure for the differentiation of obstructive, mixed and central apnea can be used.
• Describe how magnetic methods are used to assess snoring, sleep apnea and sleepiness as well.
• Describe how pulse wave analysis can give indications for cardiovascular risk and comorbidities in sleep disordered breathing.
• Recognize tracheal sounds in the pediatric populations – characterization of apnea and compare with thermistance, mandibular movement, pulse transit time and photoplethysmography.

Target Audience:
Clinicians who work with sleep apnea patients. Researchers who investigate the pathophysiology of sleep apnea.

Summary:
Sleep apnea monitoring is becoming the regular assessment method for sleep disordered breathing. According to common diagnostic recommendation in most countries, at least four complementing parameters are required. These are airflow, respiratory effort, oxygen saturation and heart or pulse rate. In addition body position is a very useful addition. The means to derive airflow and respiratory effort are not finally specified. Some new assessment methods enable us to achieve more details on the type of the sleep disordered breathing and may be superior to others. This symposium will present different methodologies with new and innovative approaches for this emerging field of sleep apnea diagnosis. Studies with the new technologies are presented so that the audience might decide which technique gives most information about the type of sleep disordered breathing and comorbidities.

5:30pm - 5:32pm
Introduction
Thomas Penzel (Germany)

5:32pm - 5:49pm
Methods to assess respiratory effort in sleep apnea based on new sensors and new analysis methods
Thomas Penzel (Germany)

5:49pm - 6:06pm
Noninvasive device of the intrathoracic pressure measurement using the green LED sensor
Toshiaki Shiomi (Japan)

6:06pm - 6:23pm
Autonomic state indicator to identify cardiovascular risk in sleep apnea
Ludger Grote (Sweden)

6:23pm - 6:40pm
Magnetic sensors on the forehead to derive respiratory effort
Robert Poirrier (Belgium)

6:40pm - 6:57pm
Tracheal sounds in pediatrics
Brigitte Fauroux (France)

6:57pm - 7:00pm
Questions and answers
Thomas Penzel (Germany)
Monday, March 23, 2015
5:30pm to 7:00pm
S20: Sleep and Cancer: Implications for Evaluations and Interventions

Chair:
Sonia Ancoli-Israel (USA)

Speakers:
Sonia Ancoli-Israel (USA), Josee Savard, (Canada), Seockhoon Chung (South Korea), Maria-Antonia Quera-Salva (Spain),

Learning Objectives:
• Recognize the relationships between sleep, fatigue and circadian rhythms in cancer patients
• Identify the effect of light treatment on sleep, fatigue and circadian rhythms in cancer patients
• Recognize the effect of video-based cognitive-behavioral therapy, as a way to provide a more accessible alternative to the standard face-to-face treatment format for insomnia in cancer patients
• Recognize the effects of a sleep hygiene and hypnotics reduction program for cancer inpatients
• Recognize the role of melatonin treatment on sleep in patients with brain tumors

Target Audience:
Scientists and Clinicians who are interested in sleep, fatigue and circadian rhythm abnormalities and their associations in cancer patients

Summary:
Patients with cancer often complain of difficulties in sleep and with fatigue. In addition, these patients often have disrupted circadian rhythms. Studies have now been conducted in different types of cancer and in patients during chemotherapy and in survivors. These studies have begun to show an association between sleep and fatigue and rhythms. Understanding more about these associations can lead to prophylactic treatment as well as post-therapy treatment in cancer patients, leading to better quality of life, and perhaps even longer survival. Sonia Ancoli-Israel will give some background on sleep, fatigue and rhythms during cancer treatment and will review some successful behavioral treatments. Joséé Savard's presentation will focus on the psychological treatment of cancer-related insomnia. More precisely, she will present findings of a randomized controlled trial on the efficacy of a video-based cognitive-behavioral therapy, as a way to provide a more accessible alternative to the standard face-to-face treatment format. Results of moderating and mediating analyses will also be presented in order to identify who benefit the most/the less from such a minimal intervention. Seockhoon Chung will present results of a sleep hygiene and hypnotics reduction program for cancer inpatients in a general hospital, which resulted in a decrease in hypnotic prescription rate. He will also describe a smartphone application, developed at the Asan Medical Center breast cancer center, for documenting sleep disturbances in breast cancer patients. Maria-Antonia Quera-Salva will present data on sleep and wake disturbances in pinealectomised patients with brain tumors and the effect of treating these sleep problems with melatonin.

5:30pm - 5:35pm
Introduction
Sonia Ancoli-Israel (USA)

5:35pm - 5:55pm
Sleep, fatigue and circadian rhythms in cancer: effect of light treatment
Sonia Ancoli-Israel (USA)

5:55pm - 6:15pm
Is a minimal intervention an efficacious alternative to a standard CBT for cancer-related insomnia?
Josee Savard, (Canada)

6:15pm - 6:35pm
Methods for improving sleep in in-patients with cancer
Seockhoon Chung (South Korea)

6:35pm - 6:55pm
Sleep-wake disturbance in pinealectomised patients
Maria-Antonia Quera-Salva (Spain)

6:55pm - 7:00pm
Questions and answers
Sonia Ancoli-Israel (USA)
Monday, March 23, 2015
5:30pm to 7:00pm
S21: Optimal Diagnosis and Management for Pediatric OSA as ENT Clinician
(Dental and Surgery Track)

Chair:
Young Mi Ahn (Korea)

Speakers:
Young Mi Ahn (Korea), Chan-Soon Park (Korea), Yoo-Sam Chung (Korea), Seung Hoon Lee (Korea), Hyun Jun Kim (Korea), Yu-shu Huang (Taiwan)

Learning Objectives:
• Introduce the important role of nose in pediatric OSA
• Explain the proper indication of PSG to diagnosis the pediatric OSA in real field
• Investigate the change of various objective data beyond AHI regarding pediatric OSA after adenotonsillectomy
• Elucidate the proper follow-up and management after surgery in pediatric OSA

Target Audience:
ENT physician, Pediatrics, Residents

Summary:
As like adults, there are many controversial issue regarding diagnosis and management in childhood OSA. In this session, we will introduce the role of nose in pediatric OSA, because nasal breathing is more important in children than in adult. To diagnosis objectively pediatric OSA, there are many limitations to recommend the PSG in children at the ENT clinic. Thus, we discuss the proper indication of PSG to define objectively the respiratory disturbance in children. To explain the surgical effectiveness on childhood OSA, the various objective data regarding OSA can be used. We will show how objective data beyond the AHI can change. And we will elucidate the proper follow-up and management protocol after adenotonsillectomy in pediatric OSA.

5:30pm - 5:32pm
Introduction
Young Mi Ahn (Korea)

5:32pm - 5:49pm
Impact of nasal obstruction on pediatric OSA
Chan-Soon Park (Korea)

5:49pm - 6:06pm
Is PSG always necessary for diagnosis of pediatric OSA?
Yoo-Sam Chung (Korea)

6:06pm - 6:23pm
Objective results after adenotonsillectomy in pediatric OSA : beyond AHI
Seung Hoon Lee (Korea)

6:23pm - 6:40pm
How to follow-up and manage the postoperative OSA in children
Hyun Jun Kim (Korea)

6:40pm - 6:57pm
Longitudinal follow-up post T and A
Yu-shu Huang (Taiwan)

6:57pm - 7:00pm
Questions and answers
Young Mi Ahn (Korea)
Monday, March 23, 2015
5:30pm to 7:00pm • Room 208 B
O-03: REM Behavior Disorders

Chair:

Examining The Association Between Self-reported Sleep Somnolence And Cognitive Decline
Angeliki Tsapanou (USA)

Widespread Functional, But Not Structural, Changes In Patients With Idiopathic REM Sleep Behaviour Disorder
Michal Rolinski (United Kingdom)

Rem Sleep Behavior And Motor Findings In Parkinson’s Disease: A Cross Sectional Analysis
Abhimanyu Mahajan (USA)

Quantitative Analyses Of REM Sleep Without Atonia In Patients With Voltage Gated Potassium Channel Antibody Syndrome
Erik St. Louis (USA)

TCM Psychological Pathomechanism Of RBD
Chu-yuan Wang (China)

Negative Functional Connectivity Between Substantia Nigra And Hippocampus In REM Sleep Behavior Disorder
Timothy Ellmore (USA)

Monday, March 23, 2015
5:30pm to 7:00pm • Room 208 A
O-04: Sleep Deprivation

Chair:

Association Between Sleep Deprivation And Hypertension In The Adult Population Of Makati City
Catherine Joy Escuadra (Philippines)

Beneficial Effect Of Morning Light After One Night Of Sleep Deprivation
Antoine Viola (France)

Automated Slow Wave Sleep Disruption In Middle-aged Adults.
Sharon Ooms (Netherlands)

Sleep Duration, Sleep Quality, And Arterial Stiffness
Chan-won Kim (Korea)

Nicotine Addiction And Sleep Deprivation: Impact On Pain Sensitivity Through Immune Modulation In Rats
Camila Hirotsu (Brazil)

Mutual Relations Between Sleep Deprivation, Sleep Stealers And Risk Behaviours In Adolescents: A Cross Cultural Comparison
Teresa Paiva (Portugal)
## Schedule at a Glance • Tuesday, March 24, 2015

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<td>Symposium S39-42 &amp; 58 I Oral Presentations O-6 and O-7</td>
<td>5:30pm - 7:00pm</td>
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Keynote: Dr. Robert Stickgold

The benefits that sleep confers on memory are surprisingly widespread. For simple procedural skills – how to ride a bicycle or distinguish different coins in one’s pocket – a night of sleep or an afternoon nap following learning leads to an absolute and dramatic improvement in performance. Sleep also stabilizes verbal memories, reducing their susceptibility to interference and decay, processes that all too easily lead to forgetting. But the action of sleep can be more sophisticated than simply strengthening and stabilizing memories. It can lead to the selective retention of emotional memories, or even of emotional components of a scene, while allowing other memories and parts of a scene to be forgotten. It can extract the gist from a list of words, or the rules governing a complex probabilistic game. It can lead to insights ranging from finding the single word that logically connects three apparently unrelated words, to discovering an unexpected rule that allows for the more efficient solving of mathematical problems. It can facilitate the integration of new information into existing networks of related information and help infants learn artificial grammars. Importantly, disruption of sleep can lead to a failure of these processes.

Learning Objectives:
• Recognize that sleep leads to the absolute enhancement of recently learned procedural skills
• Recognize that sleep can selectively retain specific aspects of recently learned material
• Recognize that sleep can extract the gist of recently learned material and the rules governing that material
• Recognize that spindle deficits in schizophrenia lead to impaired sleep-dependent memory processing.

Notes:
Tuesday, March 24, 2015
9:00am to 10:30am

S22: Non Pharmacological Approaches in the Management of Insomnia/Trends in Insomnia

Chair:

Speakers:
Jung Hie Lee (Korea), Iris Haimov (Israel), Manjari Tripathi (India), DK Cheuk (Hong Kong)

Learning Objectives:
• Name new Imaging techniques in Insomnia and their role in management
• Recognize the role of non-pharmacological methods in the management of Insomnia
• Describe traditional or complimentary techniques and evidence thus far

Target Audience:
Psychiatrists, psychologists, neurologists, sleep specialists, traditional practitioners

Summary:
Sleep difficulty or insomnia is a major challenge, which adversely affects quality of life. Insomnia is not only restricted to the elderly but also is also widespread among young. Approximately 30% or more of the population worldwide has different symptoms of insomnia such as difficulty initiating sleep, difficulty-maintaining sleep, waking up too early and poor quality of sleep. Insomnia is not an independent disorder but may be associated with various other psycho-physiological problems. Studies indicate that stress is an important factor contributing to insomnia. Several studies both published and currently recruiting are looking into novel non-pharmacological management paradigms in Insomnia. These need to be promoted as the preferred management strategy over pharmacological management. Non pharmacological methods are safer, inexpensive, sustainable and better as a long-term management strategy. New insights have also been gained into neuroimaging findings in insomnia these may also play a role in future therapies and will be discussed. This symposium and its speakers will discuss role of CBT, acupressure, acupuncture, music and sleep yoga (yoga nidra) in the management of insomnia.

9:02 am – 9:22am
Light therapy for Insomnia
Jung Hie Lee (Korea)

9:22am – 9:44am
Music and insomnia
Iris Haimov (Israel)

9:44am – 10:04am
Yoga Nidra (sleep yoga) effective inexpensive
Manjari Tripathi (India)

10:04am – 10:24am
Acupressure and acupuncture for Insomnia
DK Cheuk (Hong Kong)

10:24am – 10:30am
Questions and answers

Technologist Program
9:00am – 10:30am
W3: Tests of daytime alertness and sleepiness: MSLT & MWT: Scoring Workshop
Sharon Keenan

No additional cost: All technologist sessions are included with a congress registration.
Tuesday, March 24, 2015
9:00am to 10:30am

S23: Sleep Duration and Sleeping Habits

Chair:
Maurice M. Ohayon (USA)

Speakers:
Maurice M. Ohayon (USA), Seung Chul Hong (South Korea), Yun Kwok Wing (China), Dalva Poyares (Brazil), Max Hirshkowitz (USA)

Learning Objectives:
• To present attendees with normative data in terms of sleep duration and sleeping habits
• To present attendees with cultural and ethnic aspects of sleep quantity and sleeping habits
• To discuss future directions in research to fill the gaps in the existing knowledge about normal sleep and sleeping habits

Target Audience:
Sleep researchers and health care professionals

Summary:
Epidemiologic studies have been parsimonious in giving information about the sleep and sleeping habits of healthy individuals, as if sleeping well was mundane. Considering the large number of individuals who have a variety of sleep complaints, however, sleeping well appears to be an art. Therefore, understanding sleep disturbances does not consist only in studying what is considered abnormal, but also what can be qualified as normal and under what circumstances. It is well established that the quantity of sleep needed to be rested varies with age. There are also several medical conditions such as chronic pain or cardio-vascular diseases and psychiatric disorders, such as mood or anxiety disorders that are known to affect the sleep duration regardless of the age of the individuals. Cultural and racial variations on sleep duration and sleeping habits have been seldom explored. Sleep normative data and a better understanding of cultural and ethnic variations of sleeping habits are of paramount importance to help delineating normal sleep from pathology. What might seem oddities in some cultures might be the norms in other cultures. This symposium will explore the sleep duration and sleeping habits of the general population of different Asian, European and American countries. Similarities and divergences will be outlined and discussed in terms of cultural aspects.

9:00am – 9:02am
Introduction
Maurice M. Ohayon (USA)

9:02 am – 9:19am
Sleep duration and sleeping habits in the US and Europe
Maurice M. Ohayon (USA)

9:19am – 9:36am
Sleep duration and sleeping habits in Korea
Seung Chul Hong (South Korea)

9:36am – 9:53am
Sleep duration and sleeping habits in Hong Kong
Yun Kwok Wing (China)

9:53am – 10:10am
Sleep duration and sleeping habits in Sào Paulo, Brazil
Dalva Poyares (Brazil)

10:10am – 10:27am
The NSF Sleep Time Recommendation panel: The quest for normative data
Max Hirshkowitz (USA)

10:27am – 10:30am
Questions and answers
Maurice M. Ohayon (USA)
Tuesday, March 24, 2015
9:00am to 10:30am
S24: Cognition, Sleep and Sleep-disordered Breathing in Children

Co-Chairs:
Christian Guilleminault (USA), Yu-Chu Huang (Taiwan)

Speakers:
Christian Guilleminault (USA), Yu-Chu Huang (Taiwan), Sarah Biggs (Australia), Barbara Galland (New Zealand), Damien Leger (France)

Learning Objectives:
• Describe the sleep and behavioral long term outcome (3 years) noted in premature infants with and without presence of sleep of sleep-disordered-breathing (SDB): The development delays induced by SDB.
• Describe the cognitive cost of delayed diagnosis and treatment of SDB based on longitudinal data:
  A) Compare the effect of SDB on cognition prior to school entry to 2 years within the school system.
  B) Determine the impact of early versus later treatment of SDB on cognition in children attending middle school.
• Identify how to improve cognition recovery.
• Describe the enhancement of learning and memory in children using chronobiological protocol and different light intensity based on task at hand.

Target Audience:
Sleep specialists (MD, Psychologists, nurses, educators) dealing with cognition in children; specialists dealing with sleep-disordered breathing; specialists dealing with daytime somnolence and its impact on cognition

Summary:
Normal sleep is critical for normal mental and psycho-motor development in children. Cognitive impairment in children impacts academic achievement. Sleep disordered breathing (SDB) has been associated with impairment of cognition, and delays in development however long term follow-up studies and treatment options are meagre. Premature infants are known to present SDB and prematurity is often associated with obstructive SDB. A large prospective cohort of over 300 premature infants was followed clinically, polysomnographically (PSG) and psychometrically for over 3 years, and evolution overtime was compared to a smaller full term control group evaluating the relation between delays and SDB and the outcome at 3 years of age (Huang). The effect of SDB on cognition was investigated during early to mid childhood, looking specifically at the long term effects of treatment, to determine whether treating sleep disordered breathing during the pre-school years, as compared to later in childhood, improves the potential for cognitive recovery over the long term (Biggs). Longitudinal data tracking numeracy and literacy skills in children with and without SDB over 2 consecutive years prior to school entry, and 2 consecutive years post-school entry were collected and results are placed in relation to data in the literature with performance of a meta-analysis (Galland). Treatment options to improve neurocognition and learning are not many; a new approach using light and chronobiological principles has been experimentally applied to a primary school class of 26 children with cognition, memory and sleepiness evaluated by standardized tests. Light spectrum in the class was modified during the day using a specific schedule following teaching activity and time where attention and concentration were highly requested and period where demands were much less, without any change in the natural environmental light. Results indicate that a new therapeutic approach may be available to many (Leger)

9:00am – 9:05am
Introduction
Christian Guilleminault (USA), Yu-Chu Huang (Taiwan)

9:05am – 9:25am
Long term outcome on development and behavior of premature with and without SDB
Yu-Chu Huang (Taiwan)

9:25am – 9:45am
The impact of age on long-term cognitive recovery following treatment of sleep disordered breathing in children
Sarah Biggs (Australia)

9:45am – 10:05am
Sleep-disordered-breathing and academic performances
Barbara Galland (New Zealand)

10:05am – 10:25am
Variability of light intensity during the day and impact on cognition, memory and behavior in school children
Damien Leger (France)

10:25am – 10:30am
Questions and answers
Christian Guilleminault (USA), Yu-Chu Huang (Taiwan)
**Tuesday, March 24, 2015**  
**9:00am to 10:30am**  
**S25: Genetics of Sleep Disorders**

**Chair:**  
Philip Gehrman (USA)

**Speakers:**  
Philip Gehrman (USA), Juliane Winkelmann (USA), Chang-Ho Yun (South Korea), Lyle Palmer (Australia)

**Learning Objectives:**  
- Review the current understanding of the genetics of sleep and sleep disorders  
- Cite the results of several GWAS related to sleep and sleep disorders  
- Review the results of family-based studies of insomnia

**Target Audience:**  
Researchers and clinicians interested in the genetic basis for sleep/wake traits and sleep disorders

**Summary:**  
Sleep disorders and sleep/wake traits have been shown to be partly determined by genetic influences, but the specific genes are largely unknown. The goal of this symposium is to present some of the latest findings from genetics studies of sleep and sleep disorders. Dr. Winkelmann will discuss the latest findings on the genetics of RLS and kidney disease. Dr. Yun will review the results of an ongoing study of chronotype, including the results of a GWAS from the Insomnia, Chronotype and sleep EEG (ICE) consortium. Dr. Palmer will discuss methods for combining data across populations to increase statistical power for genetic studies. Dr. Gehrman, who will chair the symposium, will present the results of GWAS analyses from the ICE consortium related to insomnia, sleep quality and sleep duration. Lastly, Dr. Gehrman will present data on the genetics of insomnia from the HypnoLAUS cohort. Together, these presentations will review the latest research on the role of specific genes in determining sleep/wake characteristics and sleep disorders.

9:00am – 9:05am  
**Introduction**  
Philip Gehrman (USA)

9:05am – 9:25am  
**RLS genetics and kidney disease**  
Juliane Winkelmann (USA)

9:25am – 9:45am  
**Genetics of chronotype**  
Chang-Ho Yun (South Korea)

9:45am – 10:05am  
**Cutting edge methods for combining data across populations and improving power**  
Lyle Palmer (Australia)

10:05am – 10:25am  
**Uncovering the Genetics of insomnia and related traits**  
Philip Gehrman (USA)

10:25am – 10:30am  
**Questions and answers**  
Philip Gehrman (USA)
Tuesday, March 24, 2015
9:00am to 10:30am
S26: Fitness to Drive Changes

Chair:
Pierre Philip (France)

Speakers:
Pierre Philip (France), Markku Partinen (Finland), Andrew Vakulin (Australia), M.A. Quera Salva (France)

Learning Objectives:
• Identify at risk populations in healthy subjects for sleepiness at the wheel
• Identify at risk populations in patients for sleepiness at the wheel
• Evaluate the impact of treatment of sleepiness on fitness to drive
• Define objective measures to evaluate fitness to drive (driving, sleep latencies, cognitive tests)
• Propose legal revisions to define fitness to drive

Target Audience:
Sleep researchers, sleep physicians, psychologists

Summary:
Sleepiness at the wheel is a major issue for traffic accidents and concerns healthy sleep deprived drivers and patients suffering from sleep disorders. Recent findings have shown that new populations might be concerned by sleepiness at the wheel (i.e. chronic sleep deprived drivers). Patients are also strongly exposed to sleepiness at the wheel and new findings have shown that alerting drugs can represent a solution for fitness to drive in sleepy patients. It is important to evaluate which measures best predict optimal driving in these populations. Finally, legal issues are important for professional and non professional drivers and objective measures of sleepiness could represent a way of deciding for optimal fitness to drive for patients before and after treatment.

9:00am – 9:05am
Introduction
Pierre Philip (France)

9:05am – 9:25am
Evaluation of fitness to drive in professional drivers
Markku Partinen (Finland)

9:25am – 9:45am
How to evaluate fitness to drive in patients before and after treatment
Pierre Philip (France)

9:45am – 10:05am
Driving and neurobehavioral dysfunction in OSA
Andrew Vakulin (Australia)

10:05am – 10:25am
Acute versus chronic sleep deprivation and fitness to drive: impact of societal changes
Maria-Antonia Quera Salva (France)

10:25am – 10:30am
Questions and answers
Pierre Philip (France)
Tuesday, March 24, 2015
9:00am to 10:30am
S27: Modification and Limitation of Tongue Base Surgery

Co-Chairs:
Yoo-Sam Chung (South Korea), Joachim Maurer (Germany)

Speakers:
Yoo-Sam Chung (South Korea), Joachim Maurer (Germany), Sung Wan Kim (South Korea), Hsin-Ching Lin (Taiwan), Evert Hamans (Belgium)

Learning Objectives:
• Describe the concept to perform tongue base surgery
• Review new instrumental surgery for tongue base
• Recognize the limitations and modifications to reduce the complication in tongue base surgery

Target Audience:
Sleep Surgeon, Residents of ENT

Summary:
Tongue base surgery in the treatment of obstructive sleep apnea is a very important option because many patients show tongue base obstruction. The reported success rates of tongue base surgery are very variable and complications are problematic for tongue base surgery to be prevalent. This session will discuss about the modification of various kind of tongue base surgery and newly developed techniques to enhance the success rate and reduce the complications.

9:00am – 9:05am
Introduction
Yoo-Sam Chung (South Korea), Joachim Maurer (Germany)

9:05am – 9:25am
Modified Concept of Genial Tubercle Advancement Surgery
Sung Wan Kim (South Korea)

9:25am – 9:45am
Safety and Complications of Tongue Base Resection for OSA
Hsin-Ching Lin (Taiwan)

9:45am – 10:05am
Titrable tongue base loop surgery
Evert Hamans (Belgium)

10:05am – 10:25am
Modification and Limitation of Hyoid Suspension
Joachim Maurer (Germany)

10:25am – 10:30am
Questions and answers
Yoo-Sam Chung (South Korea), Joachim Maurer (Germany)
Tuesday, March 24, 2015
11:00am to 12:30pm
S28: Bridges Between Basic Neuroscience and Clinical Sleep Medicine

Co-Chairs:
Hyang Woon Lee (South Korea), Ritchie Brown (USA)

Speakers:
Hyang Woon Lee (South Korea), Ritchie Brown (USA), Jee Hyun Choi (South Korea), Simone Sarasso (Italy), Jee Hoon Roh (South Korea)

Learning Objectives:
• Identify fundamental electrophysiological and biological function involving sleep regulation
• Define local and global regulation of the brain in rodents and humans
• Recognize the pathophysiologic mechanisms of sleep-wake cycle in neurological disorders

Target Audience:
Sleep specialists, Physicians in Neurology, Psychiatry, Neurosurgery, Internal Medicine, Otolaryngology, Neuroscientists, Students, Nurses, Technicians who want to understand fundamentals in sleep related basic and clinical researches

Summary:
Sleep is a fundamental biological function, involving complex physical and mental processing. This symposium will address an overview of the recent sleep related basic researches in neuroscience on the basic electrophysiologic nature of the sleep from rodents and human EEG recordings and its roles in pathophysiologic mechanisms related to neurological disorders, especially in neurodegenerative diseases. The topics will be: understanding sleep function in pathophysiology of neurological disorders; role of basal forebrain and central thalamus to control sleep and wakefulness; the bimodal theta rhythms during REM sleep in chronically sleep deprived mice; cortical and subcortical mechanisms during sleep: intracranial ECoG recordings; potential role of sleep-wake cycle in the pathogenesis in neurodegenerative diseases.

11:00am – 11:02am
Introduction
Hyang Woon Lee (South Korea)

11:02 am – 11:19am
Understanding sleep control mechanism in normal and abnormal human brain
Hyang Woon Lee (South Korea)

11:19am – 11:36am
Control of cortical activation and sleep by the basal forebrain and thalamus
Ritchie Brown (USA)

11:36am – 11:53am
The bimodal theta rhythms during REM sleep in chronically sleep deprived mice
Jee Hyun Choi (South Korea)

11:53am – 12:10pm
Cortical and subcortical sleep activity regulation: insights from Stereo-EEG recordings
Simone Sarasso (Italy)

12:10pm – 12:27pm
Potential role of sleep-wake cycle in the pathogenesis in neurodegenerative diseases
Jee Hoon Roh (South Korea)

12:27pm – 12:30pm
Questions and answers
Hyang Woon Lee (South Korea)
Tuesday, March 24, 2015  
11:00am to 12:30pm  
S29: H1N1 and Narcolepsy

Chair:
Emmanuel Mignot (USA)

Speakers:
Emmanuel Mignot (USA), Fang Han (China), Markku Partinen (Finland), Hanna Ollila (USA)

Learning Objectives:
• Review the autoimmune pathophysiology of narcolepsy
• Review the role of H1N1 infections and vaccinations in the pathophysiology of narcolepsy
• Name the most recent biological and DNA findings

Target Audience:
Sleep Specialists, clinicians and researchers

Summary:
Recent studies have found an association between H1N1 infections or vaccination and narcolepsy. The symposium intends to focus on recent epidemiological and biological findings linking narcolepsy with H1N1 immunology and autoimmunity.

11:00am – 11:05am  
Introduction  
Emmanuel Mignot (USA)

11:05am – 11:25am  
H1N1 and autoimmunity  
Emmanuel Mignot (USA)

11:25am – 11:45am  
H1N1, seasonality and Childhood narcolepsy  
Fang Han (China)

11:45am – 12:05pm  
H1N1 and Pandemrix in Finland  
Markku Partinen (Finland)

12:05pm – 12:25pm  
HLA, H1N1 and narcolepsy  
Hanna Ollila (USA)

12:25pm – 12:30pm  
Questions and answers  
Emmanuel Mignot (USA)
Tuesday, March 24, 2015  
11:00am to 12:30pm  
S30: Iron, Hypoxia, Dopamine: A New Model of Interconnecting Pathways to Restless Legs Syndrome (Willis Ekbom Disease)

Chair:  
Richard P. Allan (USA)

Speakers:  
Richard P. Allan (USA), Christopher J. Earley (USA), James Connor (USA), Olli Polo (Finland)

Learning Objectives:  
• Define and explain RLS/WED as hyper-dopaminergic, not hypo-dopaminergic  
• Describe the relation between iron and hypoxic pathways and dopamine.  
• Demonstrate the CNS and peripheral hypoxia in RLS/WED  
• Review an integrated model for iron-hypoxia-dopamine in RLS/WED including consideration of relation to the genetics of RLS  
• Review iron-hypoxia accounting for RLS occurrence in many medical conditions

Target Audience:  
RLS/WED and sleep clinicians; researchers interesting in RLS/WED. Clinicians caring for patients with increased risk of RLS

Summary:  
The dramatic reduction in RLS/WED symptoms by L-dopa or dopamine agonists had led to a general view that RLS/WED involved reduced CNS dopamine. But imaging, CSF, autopsy studies of RLS/WED indicated exactly the opposite, increased synaptic dopamine with increased tyrosine hydroxylase (TH) and CNS levodopa. Animal studies also indicated brain iron deficiency increases CNS dopamine. But what mechanisms relate decreased iron to increased dopamine? Animal and cell studies indicate low iron stimulates hypoxic pathways leading to increased TH and dopamine. The reverse also occurs. This symposium explores this new iron, hypoxia, dopamine and RLS/WED model. It presents: First, evidence documenting RLS/WED low iron and high dopamine state, genetic involvements and putative mechanisms relating iron to hypoxic pathways; Second, data showing pervasive increase in hypoxic pathways in the CNS in RLS/WED; Third, evidence documenting hypoxia in peripheral tissue relates to major features of RLS. Finally, this iron-hypoxia-RLS/WED model predicts RLS occurrence with medical conditions producing hypoxia, e.g. COPD, sleep apnea. A review of medical conditions associated with RLS/WED will consider the extent that these are accounted for by the iron-hypoxia interactions. This symposium integrates 4 different areas of RLS/WED studies: CNS iron, CNS dopamine, CNS hypoxia and peripheral hypoxia. Combining these in one symposium enables exploring possible new understanding of this new major pathway leading to RLS/WED that is not obvious from anyone of these areas of study alone. The proposed interaction in this model also involves effects of the established genetic factors for RLS/WED. These will be reviewed in relation to the proposed interacting pathways to RLS/WED. It is hypothesized that this model provides a new basis for looking at the genetics and treatments of RLS and it suffices for explaining the high rate of occurrence of RLS with many different medical conditions.

11:00am – 11:05am  
Introduction  
Richard P. Allan (USA)

11:05am – 11:25am  
The iron-hypoxia-dopamine relation in RLS/WED  
Christopher J. Earley (USA)

11:25am – 11:45am  
Hypoxic pathway activation in RLS/WED brain and peripheral tissue  
James Connor (USA)

11:45am – 12:05pm  
Peripheral hypoxia in RLS  
Olli Polo (Finland)

12:05pm – 12:25pm  
iron-hypoxia: RLS in COPD, sleep apnea and other medical conditions  
Richard P. Allan (USA)

12:25pm – 12:30pm  
Questions and answers  
Richard P. Allan (USA)
Tuesday, March 24, 2015
11:00am to 12:30pm
S31: Sleep Disturbances in Traumatic Brain Injury (TBI) and Post-Traumatic Stress Disorder (PTSD)

Chair:
Christine Won (USA)

Speakers:
Christine Won (USA), Meir Kryger (USA), Rachel Rowe (USA), Jonathan Lifshitz (USA), Yo-El Ju (USA)

Learning Objectives:
• Describe common sleep disturbances and their risk factors in TBI and PTSD
• Describe the impact of co-morbid sleep disorders on mental and physical health of TBI and PTSD patients
• Review pathological and cytokine mediated mechanisms of sleep disturbances in TBI and PTSD

Target Audience:
This workshop is primarily intended to target sleep clinicians and researchers interested in understanding the impact of and the mechanisms for sleep disturbances in TBI and PTSD

Summary:
Sleep and wake disturbances are among the most persistent and disabling consequences of TBI and PTSD. Studies suggest that 30% to 70% of patients experience sleep problems following TBI and that these sleep disturbances often exacerbate other symptoms and impede the rehabilitation process and the ability to return to work. PTSD is a common outcome of TBI, and is also associated with significant sleep disturbances such as insomnia, fragmented sleep, night terrors, nightmares, and nighttime thrashing. PTSD and TBI patients also suffer from medical conditions that may affect sleep such as depression, anxiety, and chronic pain. They may be more prone to alcohol and drug use, which also impact sleep. As a result sleep disturbances in this population are particularly challenging for the sleep clinician. This symposium aims to summarize the current scope of knowledge regarding the nature of sleep and wake disturbances following TBI and PTSD, and to introduce cutting edge research in the area, as well as to discuss clinical sequel of sleep disturbances in TBI and PTSD. The proposed format has five experts presenting a focused discussion followed by a panel for discussion and questions. Dr. Meir Kryger will review the demographics, risk factors, and common clinical presentations of sleep disorders in PTSD and TBI patients. Dr. Christine Won will discuss co-morbidity of sleep-disordered breathing (SDB) in patients with PTSD and TBI and the impact of comorbid SDB on health outcomes in this population. Drs. Rachel Rowe and Jonathon Lifshitz will discuss the contribution of acute “posttraumatic sleep” on the recovery of neurological function after diffuse TBI. They will discuss their research of an animal model of TBI to explain cytokine mediated sleep changes following trauma. Dr. Yo-El Ju will discuss her research on REM related behavioral disorder in neurodegenerative processes, and discuss the role of autoimmunity and antidepressants in the pathology of RBD. TBI and PTSD are common causes of death and permanent disability in many countries. As a result, the sleep community can expect to be challenged with more TBI/PTSD-related sleep issues. The evidence for treating TBI/PTSD-related sleep disorders is sparse and therefore a thoughtful discussion integrating current data and identifying areas where more research is needed is important. The symposium will have practical applications for the sleep clinician, as well as stimulate research ideas for further growth in the area.

11:00am – 11:02am
Introduction
Christine Won (USA)

11:02 am – 11:19am
Killer Dreams
Meir Kryger (USA)

11:19am – 11:36am
The implications of co-morbid sleep-disordered breathing and PTSD
Christine Won (USA)

11:36am – 11:53am
Targeting post-traumatic sleep to improve neurological outcome after diffuse brain injury
Rachel Rowe (USA)

11:53am – 12:10pm
Post-traumatic sleep as a physiological bioindicator of diffuse brain injury – Is it diagnostic or prognostic?
Jonathan Lifshitz (USA)

12:10pm – 12:27pm
Parasomnias in Traumatic Brain Injury (TBI) and Post-Traumatic Stress Disorder (PTSD)
Yo-El Ju (USA)

12:27pm – 12:30pm
Questions and answers
Christine Won (USA)
Tuesday, March 24, 2015
11:00am to 12:30pm
S32: Asian and Indian Perspective of Surgery and OSA

Chair:
Mohan Kameswaran (India), Srinivas Kishore (India), Vikas Agrawal (India), Vijaya Krishnan P (India)

Speakers:
Mohan Kameswaran (India),

Learning Objectives:
• Recognize the significance of Physiognomy of the osas patients
• Identify the level of obstruction and type of obstruction
• Summarize the newer concepts of various surgical modalities available
• Formulate a rational approach in the management of Obstructive Sleep Apnea for Indian Scenario
• Identify the long-term management & follow-up and challenges in Indian scenario

Target Audience:
ENT Surgeon, Faciomaxillary Surgeon, Bariatric Surgeon, Chest Physician, Sleep Physician

Summary:
It is essential to have a systematic approach in the management of OSA, by meticulously analyzing both anatomical and physiological parameters causing the Sleep Apnea disorder. There is paucity of data on sleep disordered breathing in Asian population especially in Indians. Craniofacial form and anthropometric factors contribute in the management of obstructive sleep apnea (OSA) in different ethnic groups. The assessment of Craniofacial & anthropometric factors plays an important role in formulating the management protocol for obstructive sleep apnea. There are various modalities of investigations available such as Drug induced sleep endoscopy, dynamic sleep MRI, Apnoeagraph for assessment of level of obstruction which will help to decide appropriate surgery in properly selected cases for a successful outcome. Critical analysis of the anatomical & physiological factors inducing obstructive episodes & an appropriate treatment plan is vital, to produce successful outcomes in patients with Obstructive Sleep Apnoea Syndrome (OSAS). In this symposium we discuss about the role of physiognomy of the patients in this region and the influence of dietary habits. We will be discussing the role of surgery, which patients benefits out of surgery, what surgery and why it has been chosen. We will also be discussing the surgical techniques, outcomes and its complications. The formulation of protocol for workup of these patients will be discussed. The long-term management & follow-up and challenges in Indian scenario will be discussed. Symposium is mainly based on our experience out of India although wherever relevant it will be compared with experience from other Asian and South Asian countries will be highlighted.

11:00am – 11:05am
Introduction
Mohan Kameswaran (India)

11:05am – 11:25am
Palatal surgery in Indian population, types and techniques
Srinivas Kishore (India)

11:25am – 11:45am
Robotic & non robotic tongue base surgery in SRBD and its protocol
Vikas Agrawal (India)

11:45am – 12:05pm
Role of skeletal framework surgery in Indian scenario
Vijaya Krishnan P (India)

12:05pm – 12:25pm
Questions and answers
Mohan Kameswaran (India)
Tuesday, March 24, 2015
11:00am to 12:30pm
S40: Violence During Sleep

Chair:
Christian Guilleminault (USA), Cicolin Alessandro (Italy), Carlos Schenck (USA)

Speakers:
Emmanuel Mignot (USA), Fang Han (China), Markku Partinen (Finland), Hanna Ollila (USA), Kenneth Buttoo (Canada)

Learning Objectives:
- Recognize the medical legal issues related to parasomnias including risks to patients and bed-partners.
- Identify the responsibilities of practitioners after diagnosis of parasomnia.
- Review the legal system approach toward patients with parasomnia and toward practitioners dealing with parasomnia patients.

Target Audience:

Summary:
Violence during sleep is a reported violence that involved often only one witness or it is a defense selected for a crime by a defense legal team. There have been controversies on the role of the sleep medicine specialist involvement particularly in case of violent crimes. The symposium will address what is known on “violent activity” during the different sleep states based on laboratory recording, it will consider what the legal system approach has been in case of violence during sleep, and what are the area of controversies.

11:00am – 11:05am
Introduction
Christian Guilleminault (USA)

11:05am – 11:25am
Violence during NREM Sleep
Cicolin Alessandro (Italy)

11:25am – 11:45am
Violence during REM Sleep
Carlos Schenck (USA)

11:45am – 12:05pm
Violence during Sleep: Sexual Assault
Christian Guilleminault (USA)

12:05pm – 12:25pm
The Legal Aspect of Violence During Sleep
Kenneth Buttoo (Canada)

12:25pm – 12:30pm
Questions and answers
Christian Guilleminault (USA)
Box Lunch:
Box lunch is provided to satellite symposia attendees. Delegates can purchase a lunch ticket for Wednesday prior to noon Tuesday for a cost of 10 € at the registration desk.
Tuesday, March 24, 2015
11:00am to 12:30pm • Room 208 B
O-05: Sleep Breathing Disorders

Chair:

Dynamic Changes In Gene Expression During Sleep In Osa
Diane Lim (USA)

Radiographic And Histopathologic Findings Of The Tongue Base In Patients With Obstructive Sleep Apnea After Transoral Robotic Surgery: A Preliminary Study
Seung-No Hong (South Korea)

Changes Of Tongue Base Obstruction Degree After Palatal Surgery Including Tonsillectomy In Obstructive Sleep Apnea
Tae-Bin Won (Korea)

Airway Space And The Hyoid Position After Mandibular Set-back Orthognathic Surgery
Sun-Jong Kim (Korea)

Maxillomandibular Advancement – The Name Tells Half The Story
Grace Cho (USA)

Extensive Lateral Wall Enhancement In OSA Surgery
Ahmed Elsobky (Egypt)

Small in Size, Huge in Value
iCH series CPAP

TUESDAY
Maxillomandibular Advancement for Obstructive Sleep Apnea Syndrome – What I have Learned from 852 Cases

Keynote: Dr. Kasey Li

Maxillomandibular advancement is the most effective surgical procedure in improving OSA. This presentation will discuss a single surgeon’s experience in 852 cases. Over the years, minor changes in the surgical technique have been adapted, including counterclock rotation of the maxillomandibular complex for esthetic and airway consideration as well as minimizing additional autogenous bone harvesting. Variables affecting outcomes include age, height, gender, OSA severity and extent of advancement will be discussed. Finally, risk management and complications will be covered.

Learning Objectives:
• Review patient selection for MMA in OSA.
• Recognize variables affecting outcomes.
• Manage risks and complications.
• Examine the current state of Sleep Apnea Surgery—are we doing the right thing?

Notes:
Tuesday, March 24, 2015
4:00pm to 5:30pm
S33: Sex Differences in Circadian Timing Systems: Implications for Sleep and Psychological Health

Co-Chairs:
Diane B. Boivin (Canada), Jeanne F. Duffy (USA)

Speakers:
Diane B. Boivin (Canada), Jeanne F. Duffy (USA), Rae Silver (USA), JungHie Lee (Korea), Barbara L. Parry (USA)

Learning Objectives:
• Identify the physiological basis of sex differences in the circadian timing systems of mammals and humans
• Interpret the differences between men and women in the expression of circadian rhythms;
• Recognize how the circadian regulation of sleep and waking differs between men and women;
• Recognize the chronobiological basis of mood disorders specific to women such as premenstrual, pregnancy/postpartum and menopausal depression

Target Audience:
Scientists and physicians interested in the influence of sex on sleep-wake behavior and circadian rhythm regulation and disturbances

Summary:
Women are nearly twice as likely than men to report difficulties initiating and maintaining sleep as well as mood disturbances. Sleep initiation, duration, and quality are dependent on a complex interaction of circadian and sleep-wake dependent processes. Interestingly, sex differences have been observed in sleep-wake behavior in humans with earlier chronotype, advanced circadian rhythms of core body temperature and/or melatonin secretion, shorter circadian period, and advanced circadian variation of sleep and waking in women versus men. Sex differences in circadian rhythms are not surprising as oestrogen and androgen receptors have been observed in the suprachiasmatic nuclei of the hypothalamus, the master circadian pacemaker. These receptors are also expressed in almost every site that receives direct input from the SCN. Differences exist between males and females in the expression of gonadal steroid receptors, SCN electrical activity, and effects of gonadectomy on sleep-wake behavior. The present symposium gathers experts in the field of human and mammalian chronobiology. Dr. Rae Silver will present on the sex differences in the circadian timing systems of mammals. Dr. Jeanne F. Duffy will present on the sex differences in the human circadian rhythm phase and period between men and women. Dr. Diane B. Boivin will present on the sex differences in the circadian variation of sleep and waking in humans. Dr. Jung H. Lee will present on the sex differences in sleep timing and chronotype in humans. Finally, Dr. Barbara L. Parry will discuss the chronobiological basis of mood disorders specific to women such as premenstrual, pregnancy/postpartum and menopausal depression. The symposium will end on a general discussion on the potential clinical impacts of sex differences in circadian physiology and circadian regulation of sleep for human health and diseases.

4:00pm – 4:02pm
Introduction
Diane B. Boivin (Canada), Jeanne F. Duffy (USA)

4:02pm – 4:19pm
Sex differences in circadian timing systems of mammals
Rae Silver (USA)

4:19pm – 4:36pm
Effect of sex on human circadian rhythms
Jeanne F. Duffy (USA)

4:36pm – 4:53pm
Sex differences in the circadian variation of sleep and waking
Diane B. Boivin (Canada)

4:53pm – 5:10pm
Sex differences in sleep timing and chronotype
JungHie Lee (Korea)

5:10pm – 5:27pm
Chronobiological basis of mood disorders specific to women
Barbara L. Parry (USA)

5:27pm – 5:30pm
Questions and answers
Diane B. Boivin (Canada), Jeanne F. Duffy (USA)

Technologist Program
4:00pm – 5:30pm
W4: Technical Tips: PSG Artifact Recognition and Resolution Max Hirshkowitz
Technical tips: Differential Diagnosis of Parasomnias, Movement Disorders, and Seizures in Sleep
Aleksadar Videnovic, Helen Bastuji

No additional cost: All technologist sessions are included with a congress registration.
Tuesday, March 24, 2015
4:00pm to 5:30pm
S34: Sleep Disturbance and Sleep Disordered Breathing During Pregnancy

Co-Chairs:
Visasiri Tantrakul (Thailand), Christian Guilleminault (USA)

Speakers:
Visasiri Tantrakul (Thailand), Christian Guilleminault (USA), Michele L. Okun (USA), Annette Robertson (Australia),

Learning Objectives:
• Cite the consequences of sleep disturbance and SDB during pregnancy on maternal and fetal outcomes
• Recognize the association of sleep pattern and cytokines in pregnancy
• Summarize the treatment of SDB during pregnancy
• Identify CPAP as a potential treatment for preeclampsia
• Recognize screening strategy for SDB during pregnancy

Target Audience:
Sleep specialist, sleep researchers, pulmonologist, obstetricians

Summary:
Pregnancy and sleep have a complex interaction. Sleep quality and duration are commonly affected during pregnancy. Changes in sleep patterns are due to several hormonal, physiological and behavioral factors. Sleep disturbance during sleep is associated with adverse pregnancy outcomes. Recent study has shown associations of sleep disturbance and cytokine level in pregnancy. Increased inflammation is proposed as a key biological pathway that linked sleep disturbance and adverse pregnancy outcomes especially in the first 20 weeks of pregnancy. Accumulating data indicate that obstructive sleep apnea is an independent risk factor for gestational hypertension, preeclampsia, eclampsia, gestational diabetes and low birth weight. Women with OSA had increased in-hospital mortality, pulmonary embolism and cardiomyopathy. Screening pregnant women for symptoms of SDB will provide an opportunity to identify pregnant women at risk to receive appropriate treatment to improve maternal and fetal outcomes. Strategy of early screening and treatment intervention in high risk pregnant women should be implemented given the possible benefit of early CPAP application. Data suggested the possible relationship between sleep disordered breathing and preeclampsia, are caused by either increased upper airway resistance or inspiratory flow limitation during sleep, despite the unknown cutoff threshold for AHI in pregnancy. There is a question of whether SDB is a causative factor or consequence of preeclampsia due to generalized edema. Nasal continuous positive airway pressure (CPAP) has been suggested as therapy for preeclampsia despite limited data from few studies. This symposium will discuss the bidirectional relationships between sleep, sleep disordered breathing and pregnancy. Review of latest evidences in the area of sleep in pregnancy will be emphasized.

4:00pm – 4:05pm
Introduction
Visasiri Tantrakul (Thailand), Christian Guilleminault (USA)

4:05pm – 4:25pm
Cytokine profiles and sleep patterns in pregnancy
Michele L. Okun (USA)

4:25pm – 4:45pm
Snoring, hypertension and pregnancy outcome
Annette Robertson (Australia)

4:45pm – 5:05pm
Treatment of SDB during pregnancy and potential treatment of preeclampsia
Christian Guilleminault (USA)

5:05pm – 5:25pm
Screening strategy for SDB during pregnancy
Visasiri Tantrakul (Thailand), Christian Guilleminault (USA)

5:25pm – 5:30pm
Questions and answers
Visasiri Tantrakul (Thailand), Christian Guilleminault (USA)
Tuesday, March 24, 2015
4:00pm to 5:30pm
S35: Sleep Drug Development: Suvorexant, Pitolisant, JZP-110

Chair:
Jed Black (USA)

Speakers:
Jed Black (USA), Andrew Krystal (USA), Yves Dauvilliers (France)

Learning Objectives:
• Identify medications in development for insomnia and conditions of sleepiness.
• Describe the mechanisms of action of sleep-medicine drugs in late-stage development.
• Understand the efficacy and adverse events of new medications for insomnia, sleepiness and diminished ability to maintain wakefulness

Target Audience:

Summary:
Recently, medications with new mechanisms of actions have been developed to treat sleep disorders. Extensive clinical evaluation of some of these medications suggest that they provide meaningful treatment and may have utility in some patients who do not adequately respond to, or cannot tolerate traditional agents. This session will highlight the mechanism of action, therapeutic benefit and tolerability profile of 3 of these agents: suvorexant, pitolisant, and JZP-110. Dr. Krystal will review the mechanism of action of the dual orexin-receptor antagonists (DORA) and will summarize animal and human DORA treatment trials, across multiple DORAs, conducted to date. Dr. Krystal will focus his presentation on the results of multiple clinical trials of the DORA suvorexant in the treatment of chronic insomnia. Suvorexant is the first DORA to be approved by health authorities for the treatment of insomnia. Efficacy data from the trials that Dr. Krystal will review suggest that DORAs can ameliorate insomnia symptoms across a variety of patient types. Combined, these research results suggest the orexin system may play a role in mediating the CNS cortical hyperarousal hypothesized to be a factor in most forms of chronic insomnia. Dr. Dauvilliers will present the mechanism of action of the histamine 3 receptor (H3R) antagonists and inverse agonists and will summarize animal and human H3R antagonist/inverse agonists treatment trials, across multiple H3R agents in the treatment of pathological sleepiness. Dr. Dauvilliers will focus his presentation on the results of multiple clinical trials of the H3R inverse agonist pitolisant in the treatment of narcolepsy-related sleepiness. Pitolisant is the first H3R agent to be evaluated by health authorities for the treatment of sleepiness. Final regulatory approval for use in narcolepsy is pending in Europe. To date, human data from the pitolisant trials corroborate animal research identifying the histamine system as an important contributor to mechanisms of wakefulness with features somewhat distinct from other CNS monoaminergic alerting systems. Dr. Black will describe the mechanism of action of a new combined dopamine transporter (DAT)/norepinephrine transporter (NET) inhibitor, currently labeled JZP-110 (previously known as ADX-N05) and will summarize data from clinical trials of JZP-110 in the treatment of sleepiness in narcolepsy. Clinical trial data suggest that simultaneous antagonism of both DAT and NET may impart a more robust alerting effect than imparted by highly-selective DAT inhibitors with agents that do not serve as substrates for transporter uptake and do not induce significant monoamine release. The combined treatment data with these 3 drugs across multiple clinical trials demonstrate initial and sustained benefit for sleep disorders including conditions impacting ability to initiate and/or maintain sleep and conditions associated with excessive sleepiness and/or reduced alertness.

4:00pm – 4:05pm
Introduction
Jed Black (USA)

4:05pm – 4:30pm
Cytokine profiles and sleep patterns in pregnancy
Andrew Krystal (USA)

4:30pm – 4:55pm
Snoring, hypertension and pregnancy outcome
Yves Dauvilliers (France)

4:55pm – 5:20pm
Treatment of SDB during pregnancy and potential treatment of preeclampsia
Jed Black (USA)

5:20pm – 5:30pm
Questions and answers
Jed Black (USA)
Tuesday, March 24, 2015
4:00pm to 5:30pm • Room 203
O-S36: Young Investigator Sleep Research in Neurodegeneration

Co-Chairs:
Claudia Trenkwalder ( ), Carlos H. Schenck ( )

First Evidence For Neurodegeneration In Rem Sleep Without Atonia
Ambra Stefani (Austria)

Motor And Non-motor Features Of Parkinson’s Disease In Idiopathic Rem Sleep Behaviour Disorder
Michal Rolinski (United Kingdom)

Diagnosing Rem Sleep Behaviour Disorder In Patients With Parkinson’s Disease: The Role Of Screening Questionnaires And Of Measures Of Rem Sleep Without Atonia
Michela Figorilli (Italy)

Antidepressants Increase Rem Sleep Muscle Tone In Patients With And Without Rem Sleep Behavior Disorder
Stuart McCarter (USA)

Mortality And Its Correlated Clinical And Polysomnographic Characteristics In Rem Sleep Behavior Disorder
Jihui Zhang (China)

Altered Sleep Architecture In Autosomal Dominant Spinocerebellar Ataxias: A Polysomnographic Based Study
Seshagiri Donilpathi (India)

Questions and Answers
Claudia Trenkwalder ( ), Carlos H. Schenck ( )
**Tuesday, March 24, 2015**

**4:00pm to 5:30pm**

**S37: Sleep Disorders and Epilepsy**

**Chair:**
Kyoung Heo (South Korea)

**Speakers:**
Kyoung Heo (South Korea), Sang Ahm Lee (South Korea), Kwang Ik Yang (South Korea), Manjari Tripathi (India), Won-Joo Kim (South Korea)

**Learning Objectives:**
- Review the bidirectional effects of sleep and epilepsy and the usual presenting clinical features of common sleep-related epilepsies
- Recognize that obstructive sleep apnea (OSA) is common sleep disorder in patients with epilepsy. Appliance of PAP (positive airway pressure) therapy may have dual effect on both OSA and epilepsy
- Identify the differential diagnosis of sleep-related behaviors during night sleep
- Recognize that epileptic seizures and anti epileptic drug therapies can cause sleep disruption, and treatment of epilepsy may also improve sleep

**Target Audience:**
Sleep physicians, neurologists, pulmonary medicine specialists, internal medicine specialists, otolaryngologists, psychologists and psychiatrists

**Summary:**
Keeping adequate sleep is recommended in most patients with epilepsy. Recently the complex bidirectional influences of sleep and epilepsy have been recognized. Sleep deprivation is an important provocative factor for epileptic seizure. The condition of epilepsy and some of its treatments can cause sleep disruption and may exacerbate some sleep disorders. We can learn and discuss more things about the updated relationship between sleep disorders and epilepsy in this symposium.

**4:00pm – 4:05pm**
Introduction
Kyoung Heo (South Korea)

**4:05pm – 4:25pm**
Sleep and Epilepsy: Overview
Sang Ahm Lee (South Korea)

**4:25pm – 4:45pm**
Impact of PAP treatment on seizure control in patients with epilepsy and obstructive sleep apnea
Kwang Ik Yang (South Korea)

**4:45pm – 5:05pm**
Differential diagnosis of nocturnal events including epilepsies and other sleep-related paroxysmal events
Manjari Tripathi (India)

**5:05pm – 5:25pm**
Effect of Antiepileptic drugs on sleep quality and architecture
Won-Joo Kim (South Korea)

**5:25pm – 5:30pm**
Questions and answers
Kyoung Heo (South Korea)
Tuesday, March 24, 2015  
4:00pm to 5:30pm  
**S38: Sleep-Disordered Breathing in Dentistry**

**Chair:**  
Gilles Lavigne (Canada)  

**Speakers:**  
Gilles Lavigne (Canada), Peter Cistulli (Australia), Jin Woo Chung (South Korea), Jin Young Choi (South Korea)  

**Learning Objectives:**  
- Identify the mode of action, treatment efficacy of oral appliance for treating sleep-disordered breathing  
- Evaluate oropharyngeal airway imaging for dental treatment of patients with sleep-disordered breathing  
- Review patient selection and predictors for successful treatment of oral appliance therapy  
- Review patient selection and treatment plan for maxillo-mandibular advancement surgery for sleep-disordered breathing patients  

**Target Audience:**  
Dentist, sleep researchers, and other health care professionals  

**Summary:**  
This course deals with dental aspect of sleep-disordered breathing and significance of diagnostic information from cephalometry, tomography, and polysomnography. This course also provides clinicians to compare the data about the effectiveness and usefulness of intraoral snoring appliance with the traditional treatments including CPAP, and pharyngeal and craniofacial surgeries. Provided with the logical systemic data about sleep-disordered breathing, clinicians will get the knowledge for proper dental diagnosis and treatments for snoring and obstructive sleep apnea.

4:00pm – 4:05pm  
**Introduction**  
Gilles Lavigne (Canada)  

4:05pm – 4:25pm  
**Sleep Medicine in Dentistry: Overview and Differential Diagnosis with Sleep Bruxism, Orofacial Pain vs. Breathing Disorders**  
Gilles Lavigne (Canada)  

4:25pm – 4:45pm  
**Dental Sleep Medicine: Bridging Medicine and Dentistry**  
Peter Cistulli (Australia)  

4:45pm – 5:05pm  
**Clinical Evaluation and Oral Appliance Treatment of Patients with Sleep-Disordered Breathing**  
Jin Woo Chung (South Korea)  

5:05pm – 5:25pm  
**Maxillo-mandibular advancement for Asian SDB patients**  
Jin Young Choi (South Korea)  

5:25pm – 5:30pm  
**Questions and answers**  
Gilles Lavigne (Canada)
Tuesday, March 24, 2015
5:30pm to 7:00pm
S39: Night Eating Syndrome: Sleeping Disorder, Eating Disorder or Separate Diagnostic Entity?

Chair:
Orna Tzischinsky (Israel)

Speakers:
Orna Tzischinsky (Israel), Latzer Yael (Israel), Carlos Schenck (USA), Piergiuseppe Vinai (Italy)

Learning Objectives:
• Review the existing literature on NES
• Describe the relationship between Sleep Related Eating Disorders (SRED) and NES
• Review the existing literature on NES among patients with eating disorders (EDs) and to describe the relationship between NES and EDs
• Examine the controversy surrounding the question of whether NES lies along the continuous clinical spectrum for EDs, is a sleeping disorder or is a separate diagnostic entity
• Cite updated approaches for the treatment of NES and SRED

Target Audience:
The presentation is intended for practitioners and scientists interested in NES, SRED and the relationship between sleeping and eating behaviors

Summary:
Nocturnal Eating (NE) is an unusual behavior shared by patients affected by Night Eating Syndrome (NES), Sleep Related Eating Disorder (SRED), Restless Legs Syndrome (RLS) and Eating Disorders (EDs). Recently the borders between these pathologies have been more clearly defined. The following set of diagnostic criteria for NES was published in 2010 and recently included in the American Psychiatric Association’s (APA) DSM-V edition: significantly increased food intake in the evening and/or during the night (at least 25% of food intake) and/or at least two episodes of nocturnal eating per week that the patient is aware of and able to recall. Yet in light of the controversy surrounding the question of whether NES lies along the continuous clinical spectrum for eating disorders, is a separate sleep disorder is or a new diagnostic entity, its relationship to EDs and SREDs is still unclear. Additionally, as these disorders are associated with elevated psychiatric comorbidity, each disorder needs adequate assessment and treatment approaches. The first part of the workshop (after the Introduction) will outline the history of NES and describes its newly proposed diagnostic criteria (Allison et al. 2010). The second part will review the historical background of SREDs and show how NES is related to amnesia, RLS and sleepwalking. The third part will discuss the relationship between NES and other eating disorders and will describe updated therapeutic approaches for NES. The last part will discuss the similarities and the differences between EDs, SRED and NES and how they are related in light of the question, whether NES is sleeping disorder eating disorder or a new diagnostic entity

5:30pm - 5:35pm
Introduction
Orna Tzischinsky (Israel)

5:35pm - 5:55pm
Newly proposed diagnostic criteria and history of Night Eating Syndrome (NES)
Piergiuseppe Vinai (Italy)

5:55pm - 6:15pm
History and background of Sleep Related Eating Disorders (SRED) and their relationship to amnesia, Restless Legs Syndrome and sleepwalking
Carlos Schenck (USA)

6:15pm - 6:35pm
The relationship between Eating Disorders (EDs) and NES
Latzer Yael (Israel)

6:35pm - 6:55pm
Discussion: Is NES an eating disorder, a separate sleep disorder or a new diagnostic entity: The relationship between EDs, SRED and NES.
Orna Tzischinsky (Israel), Latzer Yael (Israel), Howell Michael (USA), Pier Vinai (Italy)

6:55pm - 7:00pm
Questions and answers
Orna Tzischinsky (Israel)
Tuesday, March 24, 2015
5:30pm to 7:00pm
S41: Sleep and Pain: Neurobiology, Placebo Effect, Traumatic Brain Injury and Management

Co-Chairs:
Gilles Lavigne (Canada), Helene Bastuji (France)

Speakers:
Gilles Lavigne (Canada), Helene Bastuji (France), Samar Khoury (Canada), Florian Chouchou (France), Marco Zucconi (Italy), Michael Smith (USA)

Learning Objectives:
• Instruct clinicians and researchers about the importance of Pain and Sleep Interaction
• Review the Neurobiology of Pain and Sleep Interaction, new findings in minor Traumatic Brain Injury population, persistence of Placebo Analgesia during Sleep and Management avenues
• Understand the possible role of concomitant mood and medical conditions on Pain and Sleep Interaction
• Appreciate the relevance of Pain and Sleep Interaction in sleep medicine

Target Audience:
Clinicians, sleep researchers and students in sleep medicine

Summary:
A sleeping brain poorly discriminates pains. An intense stimulus (nociceptive) during sleep can trigger full arousal to awakening, including a fight or flight reaction, this in all sleep stages. Nociception may activate specific brain area during sleep. Close to 20% of the adult population report chronic pain, of which 50-70% also complains about poor sleep quality. A circular relationship is suggested between a poor night’s sleep and more pain the following day, and between too much pain during the day and a poor night’s sleep. Recent findings suggest that presleep arousal is a more important risk factor of poor sleep in chronic pain patients. Poor sleep complaints may be exacerbated by mood alteration, stress-related changes in the HPA axis, genetic predisposition, circadian misalignment, history of Traumatic Brain Injury or other medical conditions. Furthermore, in some cases concomitant insomnia, sleep breathing disturbances such as RERA (respiratory events related arousals) and sleep apnea syndrome, periodic limb movement needs to be diagnosed. In managing pain and sleep complaints, clinicians needs to recognize that placebo analgesia conditioning before sleep remains an active process during sleep and that REM sleep seem to modulate perception of pain perception and pain relief expectation. Patients should be instructed in good sleep hygiene strategies. Sleep clinicians and psychologists have to correct certain beliefs and misunderstandings about pain and sleep. Medication can help normalize the propensity to stronger arousal. Finally, sleep breathing appliances can reduce poor sleep complaints in some sub-group of patients.

5:30pm – 5:32pm
Introduction
Gilles Lavigne (Canada), Helene Bastuji (France)

5:32pm – 5:49pm
Neurobiology of Pain and Sleep Interaction
Helen Bastuji (France)

5:49pm – 6:06pm
Biomarkers of pain and sleep interaction with a focus on minor traumatic brain Injury as a prospective study model
Samar Khoury (Canada)

6:06pm – 6:23pm
Placebo Effect in Understanding Pain Perception in Sleep
Florian Chouchou (France)

6:23pm – 6:40pm
Management Avenues for Pain and Sleep: Pharmacology
Marco Zucconi (Italy)

6:40pm – 6:57pm
Management Avenues for Pain and Sleep: Non Pharmacology
Michael Smith (USA)

6:57pm – 7:00pm
Questions and answers
Gilles Lavigne (Canada), Helene Bastuji (France)
Tuesday, March 24, 2015
5:30pm to 7:00pm
S42: Surgical Treatments in OSA

Chair:
Nestor Montes de Oca (Spain)

Speakers:
Nestor Montes de Oca (Spain), Julio Cifuentes (Chile), Pilar Santelices (Chile), Kenny Peter Pang (Singapore), Christopher Viozzi (USA),

Learning Objectives:
• Describe presurgical evaluation for OSA surgical patients
• Identify the intrapharyngeal treatments for OSA
• Identify the extrapharyngeal treatments (MMA)

Target Audience:
Sleep Medicine Doctors, ENT, OMFS

Summary:
The purpose of this symposium is to analyze the different surgical treatments in OSA patients. Presurgical evaluation of the upper airway will be reviewed, the importance of factors such as the face, the cephalometric analysis, indications of the different procedures, results, innovations and new techniques.

5:30pm – 5:35pm
Introduction
Nestor Montes de Oca (Spain)

5:35pm – 5:55pm
Importance of the face and cephalometrics characteristics in OSA surgical selection
Julio Cifuentes (Chile)

5:55pm – 6:15pm
The role of orthodontics in the prevention, diagnosis and treatment in OSA
Pilar Santelices (Chile)

6:15pm – 6:35pm
Selecting oro-pharyngeal surgery in OSA
Kenny Peter Pang (Singapore)

6:35pm – 6:55pm
Effectiveness and reliability of MMA in OSA patient with and without skeletal abnormalities
Christopher Viozzi (USA)

6:55pm – 7:00pm
Questions and Answers
Nestor Montes de Oca (Spain)
Tuesday, March 24, 2015
5:30pm to 7:00pm
S58: Current Status and Future Perspective of Insomnia

Co-Chairs:
Tetsuo Shimizu (South Korea), Seung Bong Hong (South Korea)

Speakers:
Tetsuo Shimizu (South Korea), Seung Bong Hong (South Korea), Yuichi Inoue, Phyllis Zee, YK Wing, Charles Morin

Learning Objectives:
Target Audience:

Summary:

5:30pm – 5:35pm
Introduction
Tetsuo Shimizu (South Korea), Seung Bong Hong (South Korea)

5:35pm – 5:55pm
Epidemiology and clinical course of insomnia
Yuichi Inoue

5:55pm – 6:15pm
Circadian rhythms: Implications for diagnosis and treatment of insomnia
Phyllis Zee

6:15pm – 6:35pm
Insomnia in children and adolescents
YK Wing

6:35pm – 6:55pm
Current Status and Future Trends of CBT-I
Charles Morin

6:55pm – 7:00pm
Questions and answers
Tetsuo Shimizu (South Korea), Seung Bong Hong (South Korea)


**O-06: Restless Legs Syndrome (RLS) And Movement Disorders**

**Tuesday, March 24, 2015**

5:30pm to 7:00pm • Room 208 B

**Effects Of The Modulation Of Sensory Or Motor Cortical Excitability By RTMS In Restless Legs Syndrome**
Giuseppe Lanza ( )

**The Prevalence Of Restless Legs Syndrome And Association With Neurodevelopmental Disorder In Korean Children**
Jee Hyun Kim (South Korea)

**Prepulse Inhibition And Auditory Startle Response In MEIS1 Knock-Out Mice**
Aaro Salminen (Germany)

**Cortical Excitability And Sleep In Restless Legs Syndrome**
Aadi Kalloo (USA)

**Clinical Features And Consequences Of RLS Among The Patients With CKD And Hemodialysis**
Shigefumi Koike (Japan)

**Periodic Limb Movements Of Sleep In Patients With History Of Stroke**
Wu Si (China)

**O-07: Aging, SBD, And Other Sleep Disorders**

**Tuesday, March 24, 2015**

5:30pm to 7:00pm • Room 208 A

**Association Between Habitual Activity And Knowledge Of Public Health Guidelines In Canada**
Allana LeBlanc (Canada)

**Premature Birth And Fetal Growth Restriction May Lead To Disturbed Sleep In Childhood**
Stephanie Yiallourou (Australia)

**Emotional, Behavior Problems And Sleep In Premature Infants**
U-Shu Huang (Taiwan)

**Association Between Sleep And Dietary Patterns In Preschool Children**
Yuanjin Song (China)

**Sleep Disorders In Children With Asthma**
Datian Che (China)
### Wednesday

**Schedule at a Glance • Wednesday, March 25, 2015**

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Maxillomandibular advancement is the most effective surgical procedure in improving OSA. This presentation will discuss a single surgeon's experience in 852 cases. Over the years, minor changes in the surgical technique have been adapted, including counterclock rotation of the maxillomandibular complex for esthetic and airway consideration as well as minimizing additional autogenous bone harvesting. Variables affecting outcomes include age, height, gender, OSA severity and extent of advancement will be discussed. Finally, risk management and complications will be covered.

Learning Objectives:
• Review patient selection for MMA in OSA.
• Recognize variables affecting outcomes.
• Manage risks and complications.
• Examine the current state of Sleep Apnea Surgery-are we doing the right thing?
**Wednesday, March 25, 2015**

**9:00am to 10:30am**

**S43: Role of Adenosine and Dopamine in the Basal Ganglia for Control of Sleep and Wakefulness**

**Chair:** Yoshihiro Urade (Japan)

**Speakers:** Yoshihiro Urade (Japan), Michael Lazarus (Japan), Zhi-Li Huang (China), Jun Lu (USA), Jiang-Fan Chen (USA)

**Learning Objectives:**
- Review of molecular, cellular and anatomical mechanisms of adenosine and dopamine in sleep-wake regulation
- Recognize that the basal ganglia play a major role in control of the sleep-wake cycle
- Summarize the development and application of cutting-edge molecular neuroscience tools, including gene ablation strategies and genetically engineered receptor-channel systems for in vivo modulation of neuronal activities
- Review up to date information on the mechanisms and the neuronal network generating the sleep-waking cycle

**Target Audience:**
Basic and clinical researchers who are working in the sleep field and interested to obtain latest hypotheses on the mechanisms controlling sleep. Clinicians, clinical personnel working with patients suffering from insomnia, excessive sleepiness, restless leg syndrome or neurodegenerative diseases, like Parkinson disease

**Summary:**
Sleep or sleep-like states seem to exist in all complex organisms that have a central nervous system. The sleeping habits of humans, however, are unique in the sense that we often defy sleep and stay awake for occupational or recreational reasons, although we are tired during that time. The motivation to stay awake and active in our modern society is ever growing and often accompanied by not only the use of psychoactive substances, most prominently caffeine, but also substances of abuse. The key area governing these behaviors is the basal ganglia (BG), which are sub-cortical nuclei involved in motor function, habit formation, and reward/addictive behaviors, all of which depend on wakefulness. Adenosine A2A receptors (A2ARs) are densely expressed on neurons in the indirect pathway of the basal ganglia where they co-express with dopamine D2 receptors (D2Rs). Recent findings revealed a so far unexpected function of the nucleus accumbens (NAc) of the BG in control of the sleep-wake cycle and provided direct evidence that adenosine and A2AR neurons in the NAc are not only involved in promoting behavioral inactivity (inhibition of movement), but also play a major role in the regulation of sleep. These findings further suggest the intriguing possibility that the BG may be a key site through which sleep and wakefulness are regulated by behavioral processes and, by extension, that emotional and motivational states may be important fundamental regulators of sleep and wake (Lazarus et al., Trends Neurosci 2012, doi: 10.1016/j.tins.2012.07.001); Lazarus et al., Curr Opin Neurobiology 2013, 10.1016/j.conb.2013.02.001). In this symposium, we describe forthcoming roles of adenosine and dopamine in the basal ganglia for sleep–wake regulation and discuss anatomical and molecular mechanistic models of sleep–wake regulation that establish the striatum, NAc, and globus pallidus as key structural elements for the control of sleep and wakefulness.

**9:00am – 9:05am**
**Introduction**
Yoshihiro Urade (Japan)

**9:05am – 9:25am**
**Why coffee wakes us up? – Role of adenosine A2A receptors in the nucleus accumbens for sleep-wake regulation**
Michael Lazarus (Japan)

**9:25am – 9:45am**
**Roles of dopamine D1/D2 receptors in sleep-wake regulation**
Zhi-Li Huang (China)

**9:45am – 10:05am**
**The role of the external globus pallidus in sleep-wake control**
Jun Lu (USA)

**10:05am – 10:25am**
**The striatopallidal pathway: a general brake mechanism of motor and cognition via its control of arousal**
Jiang-Fan Chen (USA)

**10:25am – 10:30am**
**Questions and answers**
Yoshihiro Urade (Japan)

**Technologist Program**

**9:00am – 10:30am**

**WS: Sleep and the Heart: ECG Arrhythmia Recognition** John Park

**Sleep and the Heart: Cheyne Strokes Respiration, Mechanisms and Treatment with ASV**
Tripat Deep Singh

No additional cost: All technologist sessions are included with a congress registration.
Wednesday, March 25, 2015
9:00am to 10:30am
S44: The Characteristics of Asian Narcolepsy Patients

Chair:
Fang Han (China)

Speakers:
Fang Han (China), Makoto Honda (Japan), Takashi Kanbayashi (Japan), Seung Chul Hong (South Korea), Yu Shu Huang (Taiwan)

Learning Objectives:
• Metabolic abnormality in narcolepsy was mediated by decreased carnitine palmitoyltransferase 1 activity
• Could symptomatic narcolepsy among inherited disorders reveal the detailed pathophysiology of narcolepsy?
• Do Asian narcolepsy patients suffer from impairment in quality of life?
• How does the functional imaging (PET) elucidate the brain function in children and adolescent narcolepsy patients?
• Is there another autoimmune process to destroy hypocretin cells other than DQB1:0602?

Target Audience:
Sleep physicians, professors, clinical and basic researchers, students

Summary:
The onset of narcolepsy is known to be related with autoimmune process. There would be genetic differences between Caucasian and Asian narcolepsy patients, which could lead to unique clinical presentation, functional impairment, or study findings. This symposium include the metabolic characteristics of Asian narcolepsy patients on the genetic basis, narcolepsy pathophysiology through the study of comorbid inherited diseases, health related quality of life in Asian narcolepsy patients, functional imaging studies in children and adolescent narcolepsy patients, and DQB1:0602 negative narcolepsy with hypocretin deficiency.

To clarify the details of altered fatty acid metabolism and its clinical relevance, individual acylcarnitines and CPT1 activity were evaluated in narcolepsy and related hypersomnia. Niemann-Pick type C is an autosomal recessive and congenital neurological disorder characterized by the accumulation of cholesterol and glycosphingolipids in the peripheral tissues and of the glycosphingolipids in the brain which show cataplexy as a symptom. This could be the clue of pathophysiology of cataplexy beside hypocretin deficiency. The quality of life of narcolepsy patients has been known to be as poor as epilepsy. The quality of life in Asian narcolepsy patients is to be explored. The quality of sleep, daytime sleepiness, and depressive symptoms correlated with quality of life. To evaluate the brain function and neurophysiological mechanism of sleepiness and cataplexy of children and adolescent narcolepsy, the results of PET are to be presented. HLA DQB1:0602 has been known to do a major role to provoke immunological process to make an onset of narcolepsy. Narcolepsy patients who are negative in DQB1:0602 but has hypocretin deficiency are reported. Another pathophysiological process beside HLA DQB1:0602 should be studied.

9:00am – 9:02am
Introduction
Fang Han (China)

9:02 am – 9:19am
CPT1 function in narcolepsy: possible contribution of dietary habit
Makoto Honda (Japan)

9:19am – 9:36am
Symptomatic narcolepsy among inherited disorders, such as Niemann-Pick type C, Prader-Willi syndrome and Myotonic dystrophy type 1
Takashi Kanbayashi (Japan)

9:36am – 9:53am
Health related Quality of Life in Korean Narcolepsy patients
Seung Chul Hong (South Korea)

9:53am – 10:10am
PET Study of Narcolepsy in Children and Adolescents
Yu Shu Huang (Taiwan)

10:10am – 10:27am
HLA DQB1:0602 negative narcolepsy with hypocretin/orexin deficiency
Fang Han (China)

10:27am – 10:30am
Questions and answers
Fang Han (China)
Wednesday, March 25, 2015
9:00am to 10:30am
S45: Adaptive Servoventilation and Central Sleep Apnea Syndromes

Chair:
Patrick Levy (France)

Speakers:
Peter Gay (USA), Michelle Cao (USA), Timothy Morgenthaler (USA), Patrick Levy (France)

Learning Objectives:
• Review the algorithm of ASV and how it works
• Recognize ASV uses in central sleep apnea associated with systolic heart failure
• Recognize ASV uses in central and obstructive sleep apnea associated with chronic opioid use
• Recognize ASV uses in complex sleep apnea
• Review the SERVE heart failure trial

Target Audience:
Sleep specialists including physicians, nurses, physician assistants, sleep technologists, primary care physicians, pulmonologists, cardiologists, internists

Summary:
Adapt servoventilation (ASV) is a relatively new positive airway pressure (PAP) device being used for central sleep apnea syndromes of various etiologies, including complex sleep apnea, central sleep apnea associated with systolic heart failure, and central sleep apnea induced by chronic use of opioids. ASV has gained the attention of sleep specialists worldwide for its unique functionality and success in treating central sleep apnea syndromes compared to other PAP modes including CPAP and bilevel-PAP. It is important to understand the mechanisms of the ASV in order to appropriately treat patients who would be ideal candidates for this device. The focus of this symposium is to familiarize medical providers and sleep specialists with its function, specifically the ASV’s algorithm and how it differs from other PAP modes. The symposium will also discuss the literature behind uses of the ASV in central sleep apnea associated with systolic heart failure, chronic opioid use, and treatment-emergent central sleep apnea induced by PAP (complex sleep apnea). Finally, the symposium will include an update on the SERVE trial, the largest trial to date evaluating long-term use of ASV in improving morbidity and mortality in the heart failure population.

9:00am – 9:02am
Introduction
Patrick Levy (France)

9:02 am – 9:19am
Advances in ASV devices: the algorithms
Peter Gay (USA)

9:19am – 9:36am
Use of ASV device in central sleep apnea associated with chronic opioid use
Michelle Cao (USA)

9:36am – 9:53am
ASV in complex sleep apnea
Timothy Morgenthaler (USA)

9:53am – 10:10am
ASV in heart failure
Peter Gay (USA)

10:10am – 10:27am
Update on Serve-Heart Failure Trial
Patrick Levy (France)

10:27am – 10:30am
Questions and answers
Patrick Levy (France)
June 25, 2015
9:00am to 10:30am
S46: Advances in Experimental Studies of RLS: Neurophysiological and Neuropharmological Aspects

Chair:
Raffaele Ferri (Italy)

Speakers:
Raffaele Ferri (Italy), Imad Ghorayeb (France), Giuseppe Lanza (Italy), Dirk Czesnik (Germany), Walter Paulus (Germany)

Learning Objectives:
• Review hyperexcitability of RLS caused by dopaminergic or serotonergic malfunction
• Recognize the capability of peripheral or central nervous system stimulation for diagnostics of RLS
• Recognize capabilities of electrical stimulation techniques to ameliorate RLS symptoms

Target Audience:
All sleep clinicians, sleep researchers and sleep technologists

Summary:
Symptoms of RLS might derive from a hyperexcitability of mainly central nervous system structures, but partially also of peripheral nerves. This hyperexcitability is essentially decreased by dopaminergic and increased by serotonergic stimulation. Accordingly, dopaminergic treatment ameliorates and serotonergic treatment deteriorates symptoms. Thus, we will first summarize the most recent pathophysiological aspects of both a primate model of RLS and patients. Hyperexcitability has to be quantified by EEG, transcranial magnetic or peripheral nerve stimulation. We will bring together these methods for evaluating RLS pathophysiology. Furthermore neurophysiological procedures allow manipulating neuronal excitability by techniques such as transcranial or spinal direct current stimulation (Heide et al. Brain stimulation 2014) or transcranial alternating current stimulation in another sleep disorder (Voss et al. Nature Neuroscience 2014). We will provide an overview on neurophysiological methods both for diagnostic and therapeutic purposes.

9:00am – 9:05am
Introduction
Raffaele Ferri (Italy)

9:05am – 9:25am
Dopamine in RLS: where and how much?
Imad Ghorayeb (France)

9:25am – 9:45am
Effects of the modulation of sensory or motor cortical excitability by rTMS in RLS
Giuseppe Lanza (Italy)

9:45am – 10:05am
Peripheral nerve function in RLS
Dirk Czesnik (Germany)

10:05am – 10:25am
Influencing sleep disorders by spinal or transcranial electrostimulation
Walter Paulus (Germany)

10:25am – 10:30am
Questions and answers
Raffaele Ferri (Italy)
O-08: Sleep Breathing Disorders

Respiratory Sleep Disturbances And Its Relationship With Liver Function In Obese Patients
Matilde Valencia-Flores (Mexico)

Liraglutide 3.0 Mg Reduces Severity Of Obstructive Sleep Apnea And Body Weight In Obese Individuals With Moderate Or Severe Disease: Scale Sleep Apnoea Tria
Adam Blackman (Canada)

All-cause Mortality From Obstructive Sleep Apnea In Male And Female Patients With And Without Continuous Positive Airway Pressure Treatment: A Registry Study With Ten Years Of Follow-Up
Poul Jennum (Denmark)

Snoring And Depression In Japanese Population Aged 65 And Over: Japan Gerontological Evaluation Study (JAGES)
Shogo Furuya (Japan)

Severe Obstructive Sleep Apnea Significantly Increases All-cause Mortality In A Chinese Population: An Observational Cohort Study
Hongliang Yi (China)

Increased Risk Of Pneumonia In Patients With Obstructive Sleep Apnea: A Nationwide Retrospective Cohort Study
Yi-Chun Chou (Taiwan)
Wednesday, March 25, 2015
11:00am to 12:30pm

S47: Racial and Cross Cultural Difference in Sleep Disorders - Focusing on Asian Ethnicity

**Co-Chairs:**
Yun Kwok Wing (Hong Kong), Yuichi Inoue (Japan)

**Speakers:**
Yun Kwok Wing (Hong Kong), Yuichi Inoue (Japan), Ning-Hung Chen (Taiwan), Joyce SP Lam (Hong Kong), Fang Han (China)

**Learning Objectives:**
- Identify the difference in the prevalence of OSAS, RLS, narcolepsy and parasomnias between Asian population and Western population
- Identify the impact of cultural difference on each sleep disorder
- Recognize the genetic basis for the difference in the clinical characteristics of each sleep disorder
- Name the issues relevant to treatment for Asian patients

**Target Audience:**
Physicians specialized in sleep disorders, Clinical researchers, Technologists

**Summary:**
It has been widely accepted that sleep disorders such as obstructive sleep apnea syndrome (OSAS), narcolepsy, restless legs syndrome (RLS) and parasomnias are relatively common worldwide. However, the prevalence and the impact of each disorder is not the same among countries, and some genetic basis, cultural as well as environmental factors and physical characteristics have been reported to contribute to these differences. Moreover, severity, symptomatic profile and disease course of each sleep disorder may differ among the races. Better understanding of the difference in clinical profile of each sleep disorder undoubtedly contributes to the establishment of not only supportive items for the diagnoses and the treatment strategies for the disorders specific to races and/or countries. In this symposium, we therefore try to clarify the differences and similarities in prevalence, symptomatic characteristics, clinical course and treatment relevance of OSAS, narcolepsy, RLS and parasomnias between Western population and Asian population.

**11:00am – 11:05am**
**Introduction**
Yun Kwok Wing (Hong Kong), Yuichi Inoue (Japan)

**11:05am – 11:25am**
**Morphological characteristics of OSAS patients in Asia**
Ning-Hung Chen (Taiwan)

**11:25am – 11:45am**
**Parasomnia – is there a cultural difference**
Joyce SP Lam (Hong Kong)

**11:45am – 12:05pm**
**Clinical characteristics of narcolepsy in Asia**
Fang Han (China)

**12:05pm – 12:25pm**
**Symptomatic profile of RLS in Japanese population**
Yuichi Inoue (Japan)

**12:25pm – 12:30pm**
**Questions and answers**
Yun Kwok Wing (Hong Kong), Yuichi Inoue (Japan)
Wednesday, March 25, 2015
11:00am to 12:30pm
S48: Sleep Extremes: Why Does the Average Population Not Explain All of Our Research Questions?

Chair:
Sergio Tufik (Brazil)

Speakers:
Sergio Tufik (Brazil), Chol Shin (South Korea), Lenise Jihe Kim (Brazil), Monica Levy Andersen (Brazil), Leila Kheirandish-Gozal (USA)

Learning Objectives:
• Examine the important role of investigating extreme features of sleep in general population;
• Review the main observational and basic findings in extreme morningness and eveningness individuals and short and long sleepers
• Review the main observational and basic findings about resistance to sleep deprivation and to sleep disorders outcomes.

Target Audience:
Sleep researchers and other health care professionals

Summary:
Sleep is a physiological process with great intra- and inter-individual variability. Extreme sleep need and circadian preferences are features that may be tolerated by a part of the population without health impairments. The response to sleep disturbances conditions, such as sleep deprivation and the presence of a sleep-disordered breathing, also varies among the patients. The sleep loss-induced cognitive impairments range from more susceptible to resistant individuals. However, in most of the scientific studies, the findings only reproduce phenomena observed in 95% of the population, excluding the remaining 5% of the patients who are often considered outliers in the analysis. The investigation of physiological aspects and the possible implications of extreme sleep phenotypes could elucidate the sleep function and the regulatory mechanisms of sleep-wake cycle. Thus, the present symposium will review the main findings and hypothesis of tolerance mechanisms to sleep deprivation and to the treatments of sleep disorders. Moreover, we will discuss the observational and basic studies about the extreme features of sleep, focusing on the clinical and social repercussions of short and long sleepers and extreme morningness and eveningness individuals.

11:00am – 11:05am
Introduction
Sergio Tufik (Brazil)

11:05am – 11:25am
Cardiovascular consequences of short and long sleep durations
Chol Shin (South Korea)

11:25am – 11:45am
Social and clinical implications of extreme circadian preferences
Lenise Jihe Kim (Brazil)

11:45am – 12:05pm
Inter-individual variability in response to sleep deprivation
Monica Levy Andersen (Brazil)

12:05pm – 12:25pm
Different profiles of patients with sleep disorders: clinical manifestations and response to the treatment
Leila Kheirandish-Gozal (USA)

12:25pm – 12:30pm
Questions and answers
Sergio Tufik (Brazil)
Wednesday, March 25, 2015
11:00am to 12:30pm

S49: Racial and Cross Cultural Difference in Sleep Disorders -
Sleep and Cognition: Mechanisms, Prediction and Intervention

Chair:
Michael Chee (Singapore)

Speakers:
Michael Chee (Singapore), Susanne Diekelmann (Germany), Julien Doyon (Canada),
Derk-Jan Dijk (United Kingdom)

Learning Objectives:
• Recognize how re-activating memories during sleep helps stabilize them
• Describe the importance of sleep spindles in the learning of motor sequences
• List physiologic markers that can be used to predict vulnerability to sleep deprivation
• Recognize how manipulating sleep duration and specific sleep stages affects daytime cognitive function

Target Audience:
Physicians and sleep scientists interested in knowing more about how normal persons benefit from sleep, who might be
more vulnerable to sleep loss and the effect of manipulating sleep architecture on cognition

Summary:
Sleep is important in order for optimal cognitive performance. Understanding the mechanisms through which this benefit is
realized provides potential routes to enhance cognition or to reduce the impact of sleep loss. The reactivation of memories during
sleep is important to stabilize them from interference. While reactivation can occur spontaneously, it can also be externally
triggered during the sleep stage appropriate for that type of memory. Sleep especially benefits memoranda that have been marked
as important. Different electrophysiological features of sleep may be relevant for specific memory types. For example, the
contribution of spindles and hippocampal-striatal interaction to motor sequence learning will be reviewed. If sleep is important to
cognition it might be useful to predict before sleep loss who will be susceptible to performance decline when sleep is deprived.
This can be achieved by studying behavior, heart rate variability and functional MRI in the rested state. Understanding the
relative merits of different markers helps in making an informed choice. Finally, we review how manipulating sleep duration and
sleep structure by pharmacologic and non pharmacologic means can affect daytime cognition across a broad number of cognitive
domains. The contribution of inter-individual differences and their interaction with circadian phase needs to be considered.

11:00am – 11:05am
Introduction
Michael Chee (Singapore)

11:05am – 11:25am
Stabilizing memories by sleep reactivation
Susanne Diekelmann (Germany)

11:25am – 11:45am
Sleep and motor sequence learning
Julien Doyon (Canada)

11:45am – 12:05pm
Predicting vulnerability to sleep deprivation in the rested state
Michael Chee (Singapore)

12:05pm – 12:25pm
Human Cognition and Sleep Stage Manipulations
Derk-Jan Dijk (United Kingdom)

12:25pm – 12:30pm
Questions and answers
Michael Chee (Singapore)
Wednesday, March 25, 2015
11:00am to 12:30pm
S50: Sleep, Sleep Disorders and Chronic Kidney Disease

Co-Chairs:
Hiroshi Nakamura (Japan), Ho Jun Chin (South Korea)

Speakers:
Hiroshi Nakamura (Japan), Ho Jun Chin (South Korea), Lin Yu-sheng (Taiwan), Yong Won Cho (South Korea), Kunitoshi Iseki (Japan), Shigefumi Koike, (Japan)

Learning Objectives:
• OSA related chronic kidney disease
• The effect of sleep apnea on the outcome in CKD patients
• Epidemiological study on the links between SRDB and CKD
• Clinical features and consequences of RLS among the patients with CKD and hemodialysis

Target Audience:
Physicians, clinicians who are involved and interested in sleep medicine
Allied medical technologists in the field of sleep medicine and hemodialysis nurses

Summary:
Since the establishment of the diagnosis of sleep related breathing disorders, especially obstructive sleep apnea (OSA) and the advent of CPAP therapy, the relations among sleep, sleep disorders and metabolic syndrome, diabetes, and hypertension has been extensively studied with a tremendous body of knowledge. Although these kind of correlated studies was fewer in kidney disorders compare to metabolic syndrome, in the background of an increasing prevalence of chronic kidney disease (CKD) associated with the growing prevalence of metabolic syndrome, the links between sleep problems and CKD have gradually been recognized, studied and finally gained due attention as an emerging public health concern. CKD from the lesser severity to end stage renal disease (ESRD), and its therapeutic modalities, hemodialysis, have significantly related to an increased risk of sleep disorders, such as excessive daytime sleepiness, insomnia, periodic limb movement disorder, restless legs and sleep apnea syndrome. Reverse relation regarding a risk and precipitating factor between sleep disorders and CKD has also been investigated in relevance to morbidities and mortality and remains to be done in a large population. We will review the recent advances in sleep and CKD and focus the topics on OSA, renal function and restless legs syndrome in light of clinical features and outcome.

11:00am – 11:02am
Introduction
Hiroshi Nakamura (Japan), Ho Jun Chin (South Korea)

11:02 am – 11:19am
OSA related chronic kidney disease: a case-control population based cohort study from Taiwan
Lin Yu-sheng (Taiwan)

11:19am – 11:36am
fMRI and default mode network in RLS
Yong Won Cho (South Korea)

11:36am – 11:53am
The effect of sleep apnea on the severity of renal dysfunction and on the outcome in CKD patients
Ho Jun Chin (South Korea)

11:53am – 12:10pm
CKD severity and sleep disorder
Kunitoshi Iseki (Japan)

12:10pm – 12:27pm
Clinical features and consequences of RLS among the patients with hemodialysis
Shigefumi Koike, (Japan)

12:27pm – 12:30pm
Questions and answers
Hiroshi Nakamura (Japan), Ho Jun Chin (South Korea)
Wednesday, March 25, 2015
11:00am to 12:30pm • Room 208 B
O-09: Sleep Breathing Disorders

Nocturnal Blood Pressure Fluctuations: Superposition Phenomena In Patients With Obstructive Sleep Apnea Syndrome – Risk Factor For Nocturnal Cardiovascular Events?
Andreas Patzak (Germany)

Prevention Of New Vascular Events In Patients With Obstructive Sleep Apnea And Stroke, Using CPAP: A Randomized Controlled Trial.
Anupama Gupta (India)

Association Between Objective Snoring Time And Carotid Atherosclerosis: Gender Difference
Jinyoung Kim (United States)

Provoked Periodic Breathing In Simulated Moderate And High Altitude In Healthy Young Adults.
Nikolaus Netzer (Germany)

Association Of SIC6A4 And 5-HRT2A Gene Polymorphisms With Different Phenotype Obstructive Sleep Apnea In Chinese Han Population Objective
Guoping Yin (China)

Leukocyte Telomere Length Predicts Oxidative Stress And The Severity Of Obstructive Sleep Apnea Syndrome
Hyun Jik Kim (Korea)

Wednesday, March 25, 2015
11:00am to 12:30pm • Room 208 A
O-10: Technology, Technical and Parasomnia Disorders

Smartphone-based Electromyography System (EMG) For Screening Willis-ekbom Disease (WED) During Suggested Clinical Immobilization Test (SCIT)
Graham Mcallister (Canada)

Validation Of Two Popular Commercial Devices For The Assessment Of Sleep In Children
Sarah Biggs (Australia)

An Ultrasonic Contactless Sensor For Breathing Monitoring
Roomila Naeck (France)

The Utility Of Cumulative Histogram Method With Chin EMG For Diagnosis Of REM Sleep Behavior Disorder
Hiroaki Yamamoto (Japan)

Extracting Movement, Sleep Stages, And Breathing Pauses From Respiration Patterns
Matt Bianchi (United States)

Expert Video Analysis (eva)-video-viewer-prototype For Annotating Sleep/Wake Behaviour Videos
Graham Mcallister (Canada)
Update on the Pathophysiology of REM Sleep Behavior Disorder and Relevance to Neurodegenerative Disease

Wayne Hening Memorial Speaker

Dr. Bradley F. Boeve

REM sleep behavior disorder (RBD) is a fascinating parasomnia manifested by vivid dreams associated with dream enactment behavior during REM (stage R) sleep. Animal and human studies have implicated lesions or dysfunction in REM sleep and motor control circuitry in the pontomedullary structures cause RBD phenomenology, and degeneration of these structures could explain the presence of RBD years or decades prior to the onset of parkinsonism and/or dementia in those who eventually exhibit features of a fully-expressed neurodegenerative syndrome. This review will include updates on 1) the presumed pathophysiologic substrates for RBD, 2) the strong link between RBD and neurodegenerative disease – particularly the synucleinopathy of Lewy body disease (LBD) and its most commonly manifested clinical syndromes of Parkinson’s disease (PD) and dementia with Lewy bodies (DLB), and 3) the applicability of the Braak staging scheme of evolving LBD to explain the temporal sequence of RBD preceding the development of PD and DLB. The value of this Braak-LBD framework will be emphasized as research continues in the longitudinal characterization of patients with “idiopathic” RBD, with the hope that such work will lead to the development of disease-modifying trials in which interventions will be tested to potentially delay the onset or prevent the development of PD and DLB.

Learning Objectives:
• Review the updated data on the presumed pathophysiologic substrates for RBD
• Review the strong link between RBD and neurodegenerative disease – particularly the synucleinopathy of Lewy body disease
• Review the applicability of the Braak staging scheme of evolving LBD to explain the temporal sequence of RBD preceding the development of Parkinson’s disease and dementia with Lewy bodies
• Identify the need for investigators to characterize patients with “idiopathic” RBD to facilitate the development of disease-modifying trials in which interventions will be tested to potentially delay the onset or prevent the development of Parkinson’s disease and dementia with Lewy bodies

Notes:
Wednesday, March 25, 2015  
12:45pm to 2:15pm • Room 203

O-11: Aging, Developmental Insomnia, and Other Sleep Disorders

Regional Neocortical Gray Matter Structure And Sleep Fragmentation In Older Adults  
Andrew Lim (Canada)

Obstructive Sleep Apnea And Its Influence On Intracranial Aneurysm  
Tae Young Jung (South Korea)

Associations Between Self-Reported Sleep Duration And Cognitive Performance In Older Adults: A Systematic Review And Meta-Analysis  
June Lo (Singapore)

Selective Activation Of LH-GABA->TRN Causes Rapid Arousal  
Carolina Gutierrez Herrera (Switzerland)

An Epidemiological Study Of Chinese Medicine-based Diagnostic Classification Of Insomnia With Comorbidity Of Depression And Anxiety  
Tsui Yin Jade Li (Hong Kong)

Sleep Patterns And Quality In Omani Adults  
Ibtisam Juma (Oman)

Wednesday, March 25, 2015  
12:45pm to 2:15pm • Room 208 A

O-12: Sleep Breathing Disorders

Nocturia Prediction And Polysomnographic (PSG) Features Of Patients With Sleep Breathing Disorders (SBD)  
Ulises Jimenez (Mexico)

Impaired Postural Stability In Sleep Disordered Breathing Patients  
Raphael Heinzer (Switzerland)

Obstructive Sleep Apnea Syndrome And Ocular Disorders  
Rybel Wix Ramos (Spain)

Predictors And Associated Factors Of Obstructive Sleep Apnea In Gestational Diabetes Patients  
Piyaporn Sirijanchune (Thailand)

Obstructive Sleep Apnea Induces Hearing Function Impairment  
Karel Sonka (Czech Republic)

Respiratory Disturbance Variable (RDV) And Its Relationship With Oximetry Instability  
Ennio A. Vivaldi (Chile)
O-15: Chronobiology and Circadian Disorders

Distribution And Heritability Of Diurnal Preference (Chronotype) In A Rural Brazilian Family-Based Cohort, The Baependi Study
Malcolm Von Schantz (United Kingdom), Taporoski T, Horimoto A, Esteban N, Vallada H, Krieger J, Pedrazzoli M, Negrão A, Pereira A

Chronobiology Of Melatonin In Climacteric Women: New Approaches Treatment Of Insomnia
Natalya Semenova (Russia), Madaeva I, Kolesnikova L, Solodova E, Berdina O, Sholokhov I

Changes In Circadian Rhythm, Sleep And Psychological State Of Chinese Antarctic Winter-Over Expeditioners
Nan Chen (China), Xu C, Wu Q, Xiong Y, Chen G, Song D

Circadian Phase, Vigilance State, And Posture Affect Blood Pressure In Humans
Diane B. Boivin (Canada), Wei Hsien Y, Boudreau P, Dumont G

Circadian Melatonin Profile In Opium And Amphetamine Dependent Patients
Mohammad Rasoul Ghadami (Iran), Khazaie H, Ahmadi H

New Technologies To Improve Fatigue Rest Management Systems (frms) -heart Rate Variability (hrv) And The Time Structure Of Man (BRAC)
Dieter Reisinger (Austria), Zeithofer J, Hauschild P
Wednesday, March 25, 2015
12:45pm to 2:15pm
S51: Kleine-Levin Syndrome: New Information from Large Series

Chair:
Isabelle Arnulf (France)

Speakers:
Isabelle Arnulf (France), Emmanuel Mignot (USA), Emmanuel Mignot (USA), Fang Han (China), Yu Shu Huang (Taiwan), Geert Mayer (Germany)

Learning Objectives:
• Summarize the new ICSD-3 criteria of KLS
• Describe the experience with centers following large series of KLS patients in Europe, Asia and America
• Identify the abnormal brain functional imaging in KLS, during symptomatic and asymptomatic periods in large series
• Cite the most recent biological findings in CSF and DNA findings
• Review data on treatment and best treatment practice in KLS

Target Audience:
Sleep Specialists, mostly clinicians

Summary:
The Kleine Levin Syndrome is a rare and underdiagnosed sleep disorder. Little is known about its pathophysiology and treatment. In the recent years major progress has been achieved by investigating CSF neuropeptides and proteins, performing imaging studies and cognitive studies during symptomatic and asymptomatic phases, and by following large (50-200 patients) series in reference centers. The symposium intends to focus on features and symptoms, as well as on recent biological and radiological findings. The new criteria of KLS have changed in the ICSD-3. Apathy and derealization are more frequent than it was believed before. Hypocretin and prostaglandin synthase findings in the CSF of KLS patients during symptomatic and asymptomatic phases will give insights in what might be the consequences or the causes for KLS. Finally the results of the genome wide analysis of the largest sample of patients and relatives with KLS worldwide will be presented. The pharmacological therapy has an essential role in this lifelong and disabling sleep disorder. Due to small patient numbers there are no double-blind, randomized, controlled studies. Literature review of current therapies and long term case studies will be reported. The speakers are experts in basic and clinical KLS research. They will address future needs for research in KLS. The symposium shall contribute to better understanding of the physiology and pathophysiology of KLS, improvement of diagnostic tools, therapy, and earlier diagnosis.

12:45 pm – 12:47pm
Introduction
Isabelle Arnulf (France)

12:47pm – 1:04pm
KLS: clinical aspects and functional brain imaging
Isabelle Arnulf (France)

1:04pm – 1:21pm
KLS: update on family cases and DNA research
Emmanuel Mignot (USA)

1:21pm – 1:38pm
Cerebrospinal fluid in KLS and Chinese experience of KLS
Fang Han (China)

1:38pm – 1:55pm
Long term outcome study of pediatric KLS: Taiwan experience
Yu Shu Huang (Taiwan)

1:55pm – 2:12pm
Treatments in KLS
Geert Mayer (Germany)

2:12pm – 2:15pm
Questions and answers
Isabelle Arnulf (France)
Dr. Yun-Kwok Wing

Insomnia is the most common sleep problem in general population, which is often associated with a chronic course and significant long-term health consequences. In the past decade, increasing number of prospective studies have delineated the longitudinal course of insomnia, and suggested that insomnia might co-exist, as an independent entity in the context of other mental and medical problems. Recent studies also showed that effective intervention of insomnia produced additional benefits in the outcomes of the coexisting medical and psychiatric morbidities. The findings of the female predominance and the puberty as a critical phase for the development of sex difference in insomnia might have important implications for etiology and treatment. Adolescence, a key developmental stage, might represent an important window of opportunity for early intervention and prevention of insomnia. This talk will update the significant progress in the research of epidemiology, clinical features, intervention, and prevention of insomnia.

Learning Objectives:
• Recognize the epidemiology of insomnia, with the focus moving from cross-sectional data to prospective evidence and from a developmental perspectives
• Explore the bidirectional association between insomnia and depression and the new insight into the potential shared pathway underpinning the pathophysiology of both disorders
• Recognize the recent progress in the management of insomnia within the context of medical and psychiatric illness;
• Review the emerging research agenda including the epidemiology, intervention and prevention of insomnia.

Notes:
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Wednesday, March 25, 2015
4:00pm to 5:30pm
S53: The Craniofacial Structure of Sleep Apnea Syndrome

Chair:
Ning-Hung Chen (Taiwan)

Speakers:
Ning-Hung Chen (Taiwan), Makoto Satoh (Japan), Shih-Wei Lin (Taiwan), Kate Sutherland (Australia), Tzu-I Tseng (Taiwan)

Learning Objectives:
• Review the craniofacial structure of sleep apnea syndrome
• Review the racial difference of craniofacial profile on sleep apnea syndrome
• Review the diagnosis and screening tool of craniofacial structure in patient of sleep apnea
• Recognize the anatomic and physiologic interaction of upper airway on obstructive sleep apnea syndrome

Target Audience:
General clinician, ENT, Pneumologist, Neurologist, Cardiologist, pediatrics, Internal medicine, Oral surgeon, Dentist

Summary:
The importance of craniofacial structure of sleep apnea syndrome had been discussed widely. However, the different facial structure between races was recognized but not well studied. Some evidence suggested craniofacial profile play different role on the development of sleep apnea syndrome in Asian population. In this symposium, the presenters will introduce the importance of craniofacial structure on sleep apnea syndrome. Comparing the racial difference on the patient of sleep apnea syndrome, introduce the new technique apply to the diagnosis of sleep apnea and finally discuss about the physiology and anatomical interaction on upper airway of sleep apnea syndrome. Audience of this symposium could rapidly learn the pathogenesis of sleep apnea syndrome especially on the anatomical and physiologic standpoint.

4:00pm – 4:05pm
Introduction
Ning-Hung Chen (Taiwan)

4:05pm – 4:25pm
The craniofacial structure of obstructive sleep apnea syndrome
Makoto Satoh (Japan)

4:25pm – 4:45pm
Comparison of the 2-dimensional with 3-dimensional image capture of facial profile in obstructive sleep apnea syndrome
Shih-Wei Lin (Taiwan)

4:45pm – 5:05pm
The racial difference on craniofacial profile on sleep apnea syndrome
Kate Sutherland (Australia)

5:05pm – 5:25pm
Application of Computational fluid dynamic study on sleep apnea syndrome
Tzu-I Tseng (Taiwan)

5:25pm – 5:30pm
Questions and answers
Ning-Hung Chen (Taiwan)

Technologist Program
4:00pm – 5:30pm
W6: New Technologies
Mark Norman, Colin Sullivan

No additional cost: All technologist sessions are included with a congress registration.
Wednesday, March 25, 2015
4:00pm to 5:30pm
S54: The Role of Sleep and Insomnia in Stress, Emotion Regulation and Psychiatric Symptoms

Chair:
Eus Van Someren (The Netherlands)

Speakers:
Eus Van Someren (The Netherlands), Gina Poe (USA), Daniel J. Buysse (USA), Jihui Zhang (Hong Kong)

Learning Objectives:
• Recognize the role of sleep in emotion regulation
• Identify what features of sleep are adaptive vs maladaptive in processing emotional memories.
• Recognize how sleep may support resilience to psychiatric disorders
• Examine mechanisms underlying hyperarousal in insomnia
• Identify the brain areas involved in the role of sleep in emotion regulation

Target Audience:
Sleep and RLS clinicians, RLS researchers

Summary:
Recent research has shown an important role of sleep in the regulation of emotion and the response to stress. Moreover, insomnia affects the risk, severity and course of psychiatric disorders. The present symposium is meant to provide clinicians and researchers with an update of the mechanisms involved, and opportunities for studies on prevention and treatment. Eus Van Someren will give a brief introduction on the role of sleep in emotion regulation and will provide an example of how this could be helpful understanding hyperarousal in insomnia. Gina Poe will demonstrate the use of an animal model of PTSD to study individual differences in sleep traits, quality, and quantity responses that best predict resilience to PTSD-like symptoms. Total amount of REM sleep before trauma, length of REM vs. waking bouts immediately after trauma, and long term changes in the power of REM theta (5-10 Hz) and number of transition to REM sleep spindles in the EEG differed between susceptible vs. resilient individuals. These data are presented together with a mechanistic model of the role of sleep in healthy emotional processing after trauma. Dan Buysse will discuss how sleep deprivation influences neural circuits involved in both positive and negative affect regulation. Techniques including FDG positron emission tomography and functional MRI have begun to explore how insomnia may also affect functioning in these circuits. Findings from these studies may help to explain how insomnia increases risk for common mood disorders. Jihui Zhang will give an update on the current findings regarding the association between HPA axis dysfunction and sleep disturbances 1) The association among insomnia, depression and diurnal cortisol profile; 2) the association between habitual sleep duration and diurnal cortisol profile. In addition, he will also present unpublished data on the longitudinal impacts of sleep disturbances on diurnal cortisol profile in a community-based study and discuss whether HPA axis dysfunction plays a critical role on the close relationship between sleep disturbances and depression. As a final presentation, the most exciting new findings will be selected from the submitted abstracts.

4:00pm – 4:05pm
Introduction
Eus Van Someren (The Netherlands)

4:05pm – 4:25pm
Brief introduction: why the role of sleep in emotion regulation could be pivotal for understanding disorders including insomnia and PTSD
Eus Van Someren (The Netherlands)

4:25pm – 4:45pm
The adaptive role of insomnia vs. hypersomnia in trauma processing: animal studies of PTSD
Gina Poe (USA)

4:45pm – 5:05pm
Insomnia in relation to positive and negative affect systems
Daniel J. Buysse (USA)

5:05pm – 5:25pm
HPA axis dysfunction in linking sleep disturbances and depression: any evidence?
Jihui Zhang (Hong Kong)

5:25pm – 5:30pm
Questions and answers
Eus Van Someren (The Netherlands)
Wednesday, March 25, 2015
4:00pm to 5:30pm • Room 203
O-S55: The Role of Sleep and Insomnia in Stress, Emotion Regulation and Psychiatric Symptoms

Co-Chairs:
Claudia Trenkwalder ( ), Carlos H. Schenck, MD
Speakers

Introduction
Claudia Trenkwalder ( ), Carlos H. Schenck, MD

4:00pm – 4:15pm
Craniofacial Photography For Prediction Of Obstructive Sleep Apnoea In A Hong Kong Sleep Clinic Population
Kate Sutherland (Australia)

4:15pm – 4:30pm
Genetic Variation In The Insulin Receptor Substrate-1 Gene In Asian Indians With Obstructive Sleep Apnea And Non Alcoholic Fatty Liver Disease
Surya Prakash Bhatt (India)

4:30pm – 4:45pm
Apnea Induced Rem Sleep Disruption Impairs Human Spatial Navigational Memory
Andrew Varga (USA)

4:45pm – 5:00pm
Symptoms Of Insomnia In Patients With Obstructive Sleep Apnea: Prevalence, Correlates And Association With Suicidality
Shirley Xin Li (United Kingdom)

5:00pm – 5:15pm
Prevalence And Predictors Of Sleep Related Accidents In Egyptian Commercial Drivers With Sleep Disordered Breathing
Nesreen Morsy (Egypt)

5:15pm – 5:30pm
Detection Of Sleep Apnea Events In Children Using The “Phone Oximeter”
Ainara Garde (Canada)

Questions and answers
Claudia Trenkwalder ( ), Carlos H. Schenck, MD
Wednesday, March 25, 2015
4:00pm to 5:30pm • Room 208 A
O-13: Narcolepsy and Neurological Sleep Disorders

Novel Allosteric Inhibitors Of TNF-R1 Modulate Post-traumatic Sleep And Restore Functional Outcome Following Experimental Diffuse Tbi In The Mouse
Rachel Rowe (USA)

Oral JZP-110 Phase 2B Study For The Treatment Of Excessive Sleepiness In Adults With Narcolepsy: Results Of A Randomized, Double-Blind, Placebo-Controlled Trial
Jed Black (USA)

Insomnia And Self-perceived Disability In Workers With Delayed Recovery After Mild Traumatic Brain Injury/concussion
Tatyana Mollayeva (Canada)

Immunohistochemical Screening For Auto-antibodies In Recent Onset Type 1 Narcolepsy And After H1N1 Vaccination
Rolf Fronczek (Netherlands)

Do Micrornas Target Hypocretin?
Anja Holm (Denmark)

Incidence Of Narcolepsy In Germany
Geert Mayer (Germany)
Wednesday, March 25, 2015
5:30pm to 7:00pm
S56: Pediatric Sleep: How Important are Sleep Disorders?

Chair:
Rosemary Horne (Australia)

Speakers:
Rosemary Horne (Australia), Harriet Hiscock (Australia), Stephanie Yiallourou (Australia), Lisa Walter (Australia), Barbara Galland (New Zealand)

Learning Objectives:
• Recognize the importance of sleep disorders in infancy and childhood
• Identify the effects of the age on sleep in childhood and on the severity of sleep disorders
• Recognize the effects of sleep disorders on the cardiovascular system, behavior and neurocognition
• Review the effectiveness of treatment on sleep disorders

Target Audience:
Pediatricians, sleep practitioners, psychologists, respiratory physicians, nurses and allied healthcare workers

Summary:
During childhood sleep is at a life time maximum. Sleep is essential for normal development and is particularly important in childhood when infants spend over 70% of each 24 hours asleep and children around 50%. In infants who are developing their sleep patterns sleep disruption is very common and not only affects the infant but also parents. During infancy infants are also most vulnerable to respiratory disruptions due to immature cardiorespiratory control. Infants born preterm are at particular risk and in the worst case infants can succumb to the Sudden Infant Death Syndrome (SIDS). In older children sleep disorders are common and it is estimated that these affect around 40% of all children. Adequate sleep is important for all aspects of daytime functioning including maintenance of alertness, memory and school performance. Unlike adults where sleep disruption results in daytime sleepiness, in children this can manifest as disruptive behavior. Disruption of sleep due to sleep disordered breathing not only affects daytime functioning but also has significant effects on the cardiovascular system. This symposium will discuss the broad spectrum of sleep disorders that occur during childhood. Associate Professor Harriet Hiscock will explore alternative strategies to settle infants including modified graduated extinction and adult fading. It will outline the evidence base for these strategies and discuss uncommon medical causes of infant settling problems including cow’s milk protein allergy. Finally, it will highlight a recently developed online training program for health professionals to help parents settle their infant aged 6 months or older. Dr Stephanie Yiallourou will discuss why preterm infants are at increased risk for abnormalities in cardiorespiratory control during sleep and the mechanisms which may underpin their increased risk for SIDS. Dr Lisa Walter will focus on the cardiovascular effects of sleep disordered breathing in children and how age affects these. She will also discuss the effectiveness of treatment and whether children should be treated earlier and more aggressively. Associate Professor Barbara Galland will discuss the behavioral problems associated with sleep disorders in children and adolescents.

5:30pm – 5:35pm
Introduction
Rosemary Horne (Australia)

5:35pm – 5:55pm
Safe Strategies For Settling Infants
Harriet Hiscock (Australia)

5:55pm – 6:15pm
Why are preterm infants at increased risk for SIDS?
Stephanie Yiallourou (Australia)

6:15pm – 6:35pm
Age affects the cardiovascular consequences of sleep disordered breathing in children
Lisa Walter (Australia)

6:35pm – 6:55pm
Daytime consequences of sleep disruption in children
Barbara Galland (New Zealand)

6:55pm – 7:00pm
Questions and Answers
Rosemary Horne (Australia)
Wednesday, March 25, 2015
5:30pm to 7:00pm
S57: REM Sleep Behavior Disorder—Clinical Implications Beyond Neurodegeneration

Chair:
Garima Shukla (India)

Speakers:
Garima Shukla (India), Nana Tachibana (Japan), In-Young Yoon (South Korea), Federica Provini (Italy)

Learning Objectives:
• Recognize the essential components of patient education and care, during long term follow up and management of patients with RBD
• Review REM sleep without atonia (RSWA) as well as RBD seen in young patients with diverse range of underlying disorders
• Review neurological abnormalities including quantitative EEG and cognitive function changes in patients with idiopathic RBD
• Recognize sleep disorders, as a primary manifestation of PD and Parkinsonian syndrome (PS), in a newly diagnosed PD and PS patients

Target Audience:
The target audience for this symposium will be practicing physicians, mainly neurologists and psychiatrists, nurse practitioners and technologists involved in the evaluation and care of patients suffering from RBD

Summary:
The interest in REM sleep behavior (RBD) has remarkably multiplied with establishment of progression to neurodegenerative disease, especially synucleopathies. In view of non-availability of disease-modifying therapy for these, though, this association becomes important only much later in life. The importance of recognizing other characteristics and associations of RBD, like neurological abnormalities including EEG slowing and cognitive dysfunction, and REM sleep without atonia with or without RBD among a younger population needs to be emphasized. Meanwhile, patients with Parkinson's disease (PD) and Parkinsonian syndromes (PS) can present with different sleep disorders including RBD. Since patients with apparent idiopathic RBD have two worrying health risks: harmful nocturnal behaviors and possible future conversion to neurodegenerative diseases, when following them up on a long-term basis, physicians should sensitively select strategies of patient education and interaction to deal with these two risks. This will form the core of the first talk. Another major area of growing interest, to be discussed, is the observation of REM sleep without atonia (RSWA) especially in younger patients with various underlying disorders, as well as identification of RBD, often secondary; among young, as a differential for paroxysmal events during sleep. Quantitative EEG changes have been reported in idiopathic RBD, but controversies about the relationship between EEG slowing and mild cognitive impairment in RBD needs to be explained. Also, whether cognitive dysfunction observed at the initial diagnosis of RBD will be aggravated as a result of clonazepam treatment and disease progression will be addressed. The last talk will be about sleep disorders in PD and PS. Sleep disorders are among the most common non-motor symptoms of PD, and frequently observed in multiple system atrophy and Lewy body dementia. RBD and excessive daytime sleepiness (EDS) may arise as a primary manifestations of PD and PS.

5:30pm – 5:35pm
Introduction
Garima Shukla (India)

5:35pm – 5:55pm
“What should idiopathic RBD patients be informed about their disorders?” – data from long term follow-up
Nana Tachibana (Japan)

5:55pm – 6:15pm
REM sleep without atonia (RSWA) and RBD among younger patients – the spectrum
Garima Shukla (India)

6:15pm – 6:35pm
Quantitative EEG and cognitive function in idiopathic RBD cohort
In-Young Yoon (South Korea)

6:35pm – 6:55pm
Sleep disorders in a newly diagnosed Parkinson’s disease and Parkinsonian syndrome patients cohort
Federica Provini (Italy)

6:55pm – 7:00pm
Questions and Answers
Garima Shukla (India)
Wednesday, March 25, 2015
5:30pm to 7:00pm • Room 208 A
O-14: Memory, Behavior, Cognition, and Pharmacology

Effect Of Conditioned Stimulus Exposure During Slow-wave Sleep On Fear Memory Extinction In Humans
Jia He (China)

Effective Add-on Treatment With Fenofibrate In Patients With Nocturnal Frontal Lobe Epilepsy
Liborio Parrino (Italy)

Association Between Sleep Characteristics And Mild Cognitive Impairment: The Hypnolaus/psycholaus Study
José Haba-Rubio (Switzerland)

Orderly Dissolution Of Thalamo-cortical Responses To Pain. Studies With Intracortical Electrodes In Humans
Luis Garcia-larrea (France)

Risk Factors Of Frequent Nightmares Among The General Finnish Adult Population
Nils Sandman (Finland)

Partial Directed Coherence And Memory Impairments In Osa Participants In A Population Based Study (EPISONO) From Sao Paulo - Brazil
Altay Lino De Souza (Brazil)

Wednesday, March 25, 2015
5:30pm to 7:00pm • Room 203
O-16: Insomnia and Psychiatric Disorders Affecting Sleep

Can Sleep Disturbances Predict Suicide Risk In Patients With Schizophrenia-spectrum Disorders? A 8-year Naturalistic Longitudinal Study
Shirley Xin Li (United Kingdom)

Insomnia And All-cause Mortality: A Register-linked Study Among Finnish, Norwegian And Lithuanian Women And Men
Ossi Rahkonen (Finland)

Polysomnographic And Mslt Data In A Large Sample Of Patients With Unexplained Chronic Fatigue And Their Relation With Subjective Scores
Els Tobbback (Belgium)

The Effect Of Caffeine Consumption On Sleep Parameters Is Dependent On Adora2a C.1083t>c Genotypes In A Large Population-based Cohort From S?o Paulo, Brazil
Diego Mazzotti (Brazil)

Blood Lead Levels And Sleep Quality In Workers Of Lead– Zinc Companies
Mina Yoosefian (Iran)

The Effects Of Middle-of-the-night Administration Of Hypnotic Drugs On Next-morning On-Road Driving Performance
Joris Verster (Netherlands)
Poster Presentations

Poster abstracts should be posted on the boards by 10:00am each day and removed after 6:00pm, with all posters removed by 6:30pm daily. Authors need to be present by their posters during the scheduled time of either 10:30am to 11:00am (odd number poster board numbers) or 3:30pm to 4:00pm (even number poster board numbers).

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Monday - A - Board #001
Presenting Author: Yoan Cherasse (Japan)
IMPLICATION OF THE STRIATOPALLIDAL PATHWAY IN PARKINSON’S DISEASE (PD) RELATED SLEEP DISORDER
Cherasse Y, Zhang B, Urade Y, Lazarus M

Monday - A - Board #002
Presenting Author: Micheli Fagundes (Brazil)
SOMATIZATION SYMPTOMS IN ELDERLY WITH SUSPECT OF SLEEP-DISORDERED: IS IT EFFECT OF AGE OR OF SLEEP QUALITY?

Monday - A - Board #003
Presenting Author: Xuemei Gao (China)
GROWTH AND DEVELOPMENT OF UPPER AIRWAY AND SURROUNDING TISSUES IN NON-SNORING CHILDREN
Liu S, Zhou Y, Gao X

Monday - A - Board #004
Presenting Author: Poul Jennum (Denmark)
SLEEP SPINDLE ALTERATIONS IN PATIENTS WITH PARKINSON’S DISEASE

Monday - A - Board #005
Presenting Author: Yasunori Oka (Japan)
EFFECT OF SLEEP INTERVENTION USING A SUMMER HOLIDAY WORKBOOK FOR JUNIOR HIGH-SCHOOL STUDENTS
Oka Y, Horiuchi F, Kawabe K

Monday - A - Board #006
Presenting Author: Elaine Tham (Singapore)
NOCTURNAL WAKEFULNESS AT 3 MONTHS PREDICTS TODDLER COGNITIVE, LANGUAGE AND MOTOR ABILITIES
Tham E, Broekman B, Goh D, Teoh O, Chong Y, Gluckman P; Godfrey K, Meaney M, Rifkin-Graboi A, Gooley J

Monday - A - Board #007
Presenting Author: Qun Wang (Hong Kong)
HOW EFFECTIVE IS THE MUSIC INTERVENTION IN IMPROVING SLEEP QUALITY AMONG ELDER PEOPLE? RESULTS OF A RANDOMIZED CONTROL TRIAL
Wang Q, Chair S, Wong E, Li X

Monday - A - Board #008
Presenting Author: Qun Wang (Hong Kong)
SLEEP QUALITY IN CHINESE OVERWEIGHT AND OBESE ELDER PEOPLE
Wang Q, Chair S, Wong E, Li X

Monday - I - Board #009
Presenting Author: Tantawan Awirutworakul (Thailand)
THE CORRELATION OF INSOMNIA AND MMSE-THAI 2002: RESULTS FROM A STUDY OF THAI ELDERLY POPULATION.
Awirutworakul T, Sukying C, Udomsubpayakul U

Monday - I - Board #010
Presenting Author: Sally Bailes (Canada)
HOW DO PEOPLE WITH AND WITHOUT INSOMNIA EVALUATE THEIR SLEEP: ARE THEY DIFFERENT?

Monday - I - Board #011
Presenting Author: Kerry Conrod (Canada)
THE PATIENT’ VIEW OF CPAP TREATMENT: A PRELIMINARY STUDY OF PATIENT-REPORTED OUTCOMES

Monday - I - Board #012
Presenting Author: Shima Khazaee (Iran)
STUDYING IN SLEEP DISORDERS IN FLIGHT GROUP &COMPARE WITH LAND GROUP IN IRAN PRIVATE AVIATION COMPANY IN THE YEAR 2010
Sadeghniiat K, Khazaee S, Aminian O, Momeni P

Monday - I - Board #013
Presenting Author: Habibolah Khazaie (Iran)
PTSD-RELATED PARADOXICAL INSOMNIA: AN ACTIGRAPHIC STUDY
Khazaie H, Ghadami M, Nasoori M, Khaledi Paveh B

Monday - I - Board #014
Presenting Author: Gui-Xia Li (China)
THE PRELIMINARY STUDY ON PARENTING STYLES,EMOTION,INTERPERSONAL RELATIONSHIP IN CHILDHOOD OF INSOMNIA PATIENTS
Wang W, Li G, Lv X, Hong L, Zhou X

Monday - I - Board #015
Presenting Author: Gui-Xia Li (China)
The Traditional Chinese Medicine Pathogenesis Review of Insomnia
Li G, Wang W, Hong L, Zhang J, Feng F

Monday - I - Board #016
Presenting Author: Diego Iván Ortega Díaz (Mexico)
INSOMNIA PREVALENCE AMONG PHYSICIANS AND NURSES IN A NIGHT SHIFT IN A SECOND HEALTHCARE LEVEL HOSPITAL IN MÉXICO.
Ortega Díaz D, Sánchez González V

Monday - I - Board #017
Presenting Author: Ngoc To (Viet Nam)
VALIDITY OF THE VIETNAMESE VERSION OF THE PITTSBURGH SLEEP QUALITY INDEX
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Monday - I - Board #018
Presenting Author: Wei-Dong Wang (China)
THE CLINICAL EFFECT OF LOW RESISTANCE THOUGHT INDUCTION SLEEP-REGULATING TECHNIQUE ON INSOMNIA

Monday - I - Board #019
Presenting Author: Weidong Wang (China)
A CLINICAL STUDY ON THE EFFECT OF TRADITIONAL CHINESE MEDICAL PSYCHOTHERAPY OF THOUGHT IMPRINT PSYCHOTHERAPY IN LOWER RESISTANCE STATE TO INSOMNIA WITH ESTAZOLAM DEPENDENCE
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Monday - I - Board #020
Presenting Author: Wei-Dong Wang (China)
THOUGHTS ON LOCALIZATION OF INSOMNIA TREATMENT AND INNOVATIVE TECHNIQUES IN CHINA

Monday - I - Board #021
Presenting Author: Lipong Wu (China)
CLINICAL AND POLYSOMNOGRAPHY CHARACTERISTICS OF FIVE CHINESE PATIENTS WITH FATAL FAMILIAL INSOMNIA
Wu L, Zhan S, Wang X, Lu H, Ye J, Jia J

Monday - I - Board #022
Presenting Author: Zhou Xuanzi (China)
SURVEY ON THE CLINICAL FEATURES OF FEMALE INSOMNIA PATIENTS
Xuanzi Z, Yoann B, Weidong W

Monday - NA - Board #023
Presenting Author: Hiroaki Kawashima (Japan)
THE UTILITY OF A NOCTURNAL SLEEP ONSET REM PERIOD IN THE DIAGNOSIS OF NARCOLEPSY IN CLINICAL SETTING
Kawashima H, Tanaka H, Yamamoto H, Tanahashi E

Monday - NA - Board #024
Presenting Author: Tae Won Kim (South Korea)
HEALTH RELATED QUALITY OF LIFE IN KOREAN PATIENTS WITH NARCOLEPSY
Kim T, Joo S, Hong S

Monday - NA - Board #025
Presenting Author: Wei-Dong Wang (China)
THE RELATIONSHIP OF NARCOLEPSY AND PSYCHOLOGY

Monday - NA - Board #026
Presenting Author: Haijuan Wu (China)
SYMPTOMS AND OCCURRENCES OF NARCOLEPSY: A RETROSPECTIVE STUDY OF 162 PATIENTS DURING A 10-YEAR PERIOD IN EASTERN CHINA

Monday - NA - Board #027
Presenting Author: Liu Yanjiu (China)
A CLINICAL AND GENEALOGICAL REPORT ON A FAMILY WITH 6 CASES OF NARCOLEPSY
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Monday - NE - Board #028
Presenting Author: Im Her-Jin (South Korea)
THE CAUSAL LINK BETWEEN EPILEPSY AND SLEEP DISTURBANCE
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Monday - NE - Board #029
Presenting Author: Rohan Mahale (India)
QUALITY OF SLEEP IN YOUNG ONSET PARKINSON’S DISEASE: ANY DIFFERENCE FROM OLDER ONSET PARKINSON’S DISEASE
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Monday - NE - Board #030
Presenting Author: Olga Mchedlidze (Georgia)
REPETITIVE INTRACEREBROVENTRICULAR (ICV) MICRONJECTION OF OREXINA REGULATES SLEEP HOMEOSTASIS AND FASTENS RECOVERY FROM DEEP BARBITURATE ANESTHESIA INDUCED SLEEP
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Monday - NE - Board #031
Presenting Author: Tatyana Mollayeva (Canada)
THE RELATIONSHIP BETWEEN SLEEP, DEPRESSION, AND TRAUMATIC BRAIN INJURY: A STUDY OF ONTARIO WORKERS WITH HEAD TRAUMA
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Monday - NE - Board #032
Presenting Author: Dean Wu (Taiwan)
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Monday - NE - Board #033
Presenting Author: Chia-Cheng Wu (Taiwan)
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Monday - O - Board #034
Presenting Author: Hrayr Attarian (United States)
THE IMPORTANCE OF CREATING AN INTERDISCIPLINARY NETWORK TO STUDY SEX AND GENDER DIFFERENCES IN SLEEP
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Monday - O - Board #035
Presenting Author: Omokehinde Fakorede (Nigeria)
SLEEP EFFICIENCY AND SLEEP QUALITY AMONG MALE INMATES IN NIGERIA
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Monday - O - Board #036
Presenting Author: Heloise Glass (Brazil)
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Monday - O - Board #037
Presenting Author: Tania Emma Gómez Fernández (Mexico)
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Gómez Fernández T

Monday - O - Board #038
Presenting Author: Belgüzar Kara (Turkey)
PREDICTORS OF POOR SLEEP QUALITY AND EXCESSIVE DAYTIME SLEEPINESS IN TURKISH ADULTS WITH TYPE 2 DIABETES
Kara B, Kılıç Ö

Monday - O - Board #039
Presenting Author: Belgüzar Kara (Turkey)
PREDICTORS OF POOR SLEEP QUALITY IN OLDER TURKISH ADULTS WITH HYPERTENSION
Kara B, Tenekeci E

Monday - O - Board #040
Presenting Author: Youngmoon Kwon (South Korea)
THE RELATIONSHIP BETWEEN QUALITY AND REGULARITY OF SLEEP BASED ON KOREAN ADOLESCENTS’ SLEEP DURATION BY AGE
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Monday - O - Board #041
Presenting Author: Ruth Leong (Singapore)
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Monday - O - Board #042
Presenting Author: Ye Lu (China)
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Monday - O - Board #043
Presenting Author: Karen Mabilangan (Philippines)
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Mabilangan K, Moral-Valencia M

Monday - O - Board #044
Presenting Author: Prasit Mahakit (Thailand)
SHORT TERM AND LONG TERM OUTCOME OF PALATAL SURGERY (PALATAL MUSCLE PLICATION & PALATAL BURIED SUTURE) FOR SDB PATIENTS
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Monday - O - Board #045
Presenting Author: Tatjana Mollayeva (Canada)
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Monday - O - Board #046
Presenting Author: Mahmoudreza Moradi (Iran)
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Monday - O - Board #047
Presenting Author: Zan Wang (China)
SLEEP DISORDERS AND DIABETES

Monday - O - Board #048
Presenting Author: Cheng-Jung Wu (Taiwan)
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Monday - PA - Board #049
Presenting Author: Shin-Hye Baek (South Korea)
PREVALENCE OF RAPID EYE MOVEMENT SLEEP BEHAVIOR DISORDER: A POPULATION-BASED STUDY
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Monday - PA - Board #050
Presenting Author: Lidia Boriskina (Russia)
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Monday - PA - Board #051
Presenting Author: Yang-Je Cho (South Korea)
TWO CASES OF SLEEP-RELATED PAINFUL ERECTION IN KOREA
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Monday - S - Board #052
Presenting Author: Diane Lim (United States)
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Monday - PA - Board #053
Presenting Author: Siri Waage (Norway)
PARASOMNIAS AMONG SHIFT WORKERS IN NORWAY
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Monday - PA - Board #054
Presenting Author: Hikmet Yilmaz (Turkey)
COMORBIDITY BETWEEN EPILEPSY AND PARASOMNIA
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Monday - PH - Board #055
Presenting Author: Nur Hashima Abdul Rashid (Malaysia)
A STUDY OF THE CHANGE IN THE SEVERITY OF APNEA IMMEDIATELY AFTER MODIFIED CAUTERY ASSISTED PALATAL STIFFENING OPERATION.
Abdul Rashid N, Mat Baki M, Tajudin N, Maaya M, Mohamed A

Monday - PH - Board #056
Presenting Author: Li-Chin Ko (Taiwan)
THE EFFECT OF ANTHYPERTENSIVE DRUGS ON HEART RATE VARIABILITY AND SLEEP PARAMETERS IN HYPERTENSIVE PATIENTS
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Monday - PH - Board #057
Presenting Author: Olga Malyshevskaya (Japan)
WHAT KIND OF SLEEP IS NARCOTIC SLEEP? HOW DIFFERENT CANNABINOIDS INDUCE CHANGES IN THE EEG OF MICE AND THE MECHANISM BEHIND IT.
Malyshevskaya O, Aritake K, Urade Y

Monday - PH - Board #058
Presenting Author: Ronaldo Piovezan (Brazil)
EFFECTS OF GABAPENTIN ON BREATHING SLEEP PARAMETERS IN OLDER HEALTHY MEN: A RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED STUDY
Piovezan R, Kase C, Tufik S, Poyares D

Monday - PH - Board #059
Presenting Author: Fuping Xu (China)
INFLUENCE OF SHUXIN ANSHEN PASTE ON ZEBRAFISH BEHAVIOR
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Monday - PH - Board #060
Presenting Author: Rajesh Yadav (India)
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Monday - PS - Board #061
Presenting Author: Stéphanie Bioulac (France)
THE MAINTENANCE OF WAKEFULNESS TEST: AN ELECTRO-PHYSIOLOGICAL MEASURE TO BETTER EVALUATE ADHD ADULT PATIENTS
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Monday - PS - Board #062
Presenting Author: Hsinte Michael Huang (Taiwan)
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Monday - PS - Board #063
Presenting Author: Arla Cinderella Stokes Brackett (Guatemala)
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Monday - PS - Board #064
Presenting Author: Mark Lawrence Wong (Hong Kong)
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Monday - PS - Board #065
Presenting Author: Geert Mayer (Germany)
THE PREVALENCE AND CHARACTERISTICS OF REM SLEEP WITHOUT ATONIA IN PATIENTS TAKING CERTAIN ANTIDEPRESSANTS.
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Monday - PS - Board #066
Presenting Author: Youngjun Jung (United States)
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Monday - PS - Board #067
Presenting Author: Laura Lillo Triguero (Spain)
PROSPECTIVE STUDY OF IRON METABOLISM AND RLS IN BLOOD DONORS

Monday - PS - Board #068
Presenting Author: Maryam Masoumi (Iran)
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Monday - PS - Board #069
Presenting Author: Maryam Masoumi (Iran)
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Presenting Author: Graham Mcallister (Canada)
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Monday - R - Board #073
Presenting Author: Sayonara Beatriz Ranciaro Fagundes
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Monday - R - Board #074
Presenting Author: Sayonara Beatriz Ranciaro Fagundes
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Monday - R - Board #075
Presenting Author: Sayonara Beatriz Ranciaro Fagundes
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Monday - R - Board #076
Presenting Author: Wu Si (China)
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Monday - R - Board #077
Presenting Author: Shiho Suzuki (Japan)
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Presenting Author: Shabnam Banafsheh Alemohammad
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Monday - S - Board #080
Presenting Author: Shabnam Banafsheh Alemohammad (Iran)
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Monday - S - Board #081
Presenting Author: Chun Ting Au (Hong Kong)
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Monday - S - Board #082
Presenting Author: Wu Yong Bae (South Korea)
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Monday - S - Board #083
Presenting Author: Wu Yong Bae (South Korea)
THE USEFULNESS OF CEPHALOMETRIC
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RETROSPECTIVE STUDY
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Monday - S - Board #084
Presenting Author: Inkyung Baik (Korea)
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Monday - S - Board #085
Presenting Author: Ramendu Mitra (India)
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Monday - S - Board #086
Presenting Author: Jane (Pei-Chen) Chang (Taiwan)
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Monday - S - Board #087
Presenting Author: Che-Chia Chang (Taiwan)
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Monday - S - Board #088
Presenting Author: Yen-Lung Chen (Taiwan)
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Monday - S - Board #089
Presenting Author: Valérie Cochen De Cock (France)
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Monday - S - Board #090
Presenting Author: Liying Deng (China)
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Deng L, Sun M, Ding W

Monday - S - Board #091
Presenting Author: Wenxiao Ding (China)
ADIPONECTIN PROTECTS RAT MYOCARDIUM AGAINST CHRONIC INTERMITTENT HYPOXIA-INDUCED INJURY VIA INHIBITION OF ENDOPLASMIC RETICULUM STRESS
Ding W, Zhang X

Monday - S - Board #092
Presenting Author: Fatemah Faras (Kuwait)
MULTILEVEL APPROACH FOR OSA WITH BARIATRIC SURGERY SIMULTANEOUSLY, CASE REPORT AND LITERATURE REVIEW
Faras F, Abo-Alhassan F, Al-Terki A

Monday - S - Board #093
Presenting Author: Mihaltan Florin (Romania)
BIRD EYE VIEW OF ROMANIAN SLEEP APNOEA OBSTRUCTIVE SINDROM IN THE OBESE ROMANIAN POPULATION
Mihaltan F, Jeler E, Munteanu I, Deleanu O

Monday - S - Board #094
Presenting Author: Xu Gong (China)
LONG-TERM THERAPEUTIC EFFICACY OF ORAL APPLIANCES IN TREATMENT OF OBSTRUCTIVE SLEEP APNEA-HYPOPNEA SYNDROME
Gong X, Zhang J, Zhao Y, Gao X

Monday - S - Board #095
Presenting Author: Christian Guilleminault (United States)
OBSTRUCTIVE-SLEEP-APNEA AND ALVEOLO-DENTAL SYNCHONDROSIS
Guilleminault C, Abad V, Chiu H, Quo S

Monday - S - Board #096
Presenting Author: Priscilla Vani Gunawan (Indonesia)
PREVALENCE OF OBSTRUCTIVE SLEEP APNEA USING THE STOP-BANG QUESTIONNAIRE AND IT’S CORRELATION TO OTHER STROKE RISK FACTORS IN THE NORMAL POPULATION
Gunawan P, Harris S, Octaviana F

Monday - S - Board #097
Presenting Author: Anne Hsu (Singapore)
RARE ETIOLOGIES OF SLEEP DISORDERED BREATHING
Hsu A

Monday - S - Board #098
Presenting Author: Rajkumar Js (India)
OBESITY AND BARIATRIC SURGERY IN OBSTRUCTIVE SLEEP APNEA – OUR SERIES
Js R

Monday - S - Board #099
Presenting Author: Hyo Yol Kim (Korea)
EFFECT OF PARAPHARYNGEAL FAT ON DYNAMIC OBSTRUCTION OF UPPER AIRWAY IN OBSTRUCTIVE SLEEP APNEA PATIENTS

Monday - S - Board #100
Presenting Author: Sang-Wook Kim (Korea)
DETECTION OF THE UPPER AIRWAY OBSTRUCTION USING ELECTRICAL IMPEDANCE TOMOGRAPHY: A PRELIMINARY STUDY
Kim S, Woo E, Oh T, Kwon O, Jeon S, Joo Y

Monday - S - Board #101
Presenting Author: Hong Joong Kim (South Korea)
THE CHANGE OF POLYSOMNOGRAPHIC AND CEPHALOMETRIC PARAMETERS ACCORDING TO MANDIBULAR ADVANCEMENT DEVICE APPLICATION

Monday - S - Board #102
Presenting Author: Se Joong Kim (Korea)
HIGH FLOW NASAL CANNULA THERAPY FOR IMPROVING OBSTRUCTIVE SLEEP APNEA: A CASE REPORT

Monday - S - Board #103
Presenting Author: Srinivas Kishore (India)
ADDRESSING LATERAL PHARYNGEAL WALL COLLAPSE AT THE LEVEL OF VELUM AND OROPHARYNX IN OBSTRUCTIVE SLEEP APNEA TO IMPROVE TREATMENT OUTCOMES
Kishore S

Monday - S - Board #104
Presenting Author: Teeradej Kuptanon (Thailand)
CAN HOME VIDEO-CLIP PREDICT MODERATE-TO-SEVERE OBSTRUCTIVE SLEEP APNEA IN CHILDREN?
Kuptanon T, Chirawutthinan N, Preutthipan A

Monday - S - Board #105
Presenting Author: Jie Li (China)
EFFECT OF OBSTRUCTIVE SLEEP APNEA ON THE SERUM LIVER ENZYMES
Li J, Zhang Y, Mao C, Huang J, Han F, Liu C
MONDAY - S - Board #106
Presenting Author: Huei-Chen Lin (Taiwan)
SUBMAXIMAL EXERCISE AND FLOW-VOLUME LOOPS IN SUBJECTS WITH MODERATE TO SEVERE OBSTRUCTIVE SLEEP APNEA SYNDROME
Lin H, Ong J, Lin C, Hung C

MONDAY - S - Board #107
Presenting Author: Tsuyoshi Mikami (Japan)
TONGUE MORPHOLOGY ANALYSIS IN UPPER AIRWAY MRI FOR CLASSIFICATION OF SEVERE OBSTRUCTIVE SLEEP APNEA
Mikami T, Yonezawa K, Kojima Y, Yamamoto M

MONDAY - S - Board #108
Presenting Author: Mario Milkov (Bulgaria)
ANTERIOR PALATOPLASTY WHY, WHOM, HOW
Milkov M, Adali M, Nedev P, Tonchev T, Vicheva D

MONDAY - S - Board #109
Presenting Author: Vijaya Krishman Paramasivan (India)
ROLE OF HYOID ADVANCEMENT IN ADDRESSING LATERAL HYPOPHARYNGEAL WALL COLLAPSE IN OBSTRUCTIVE SLEEP APNEA
Paramasivan V, Arumugan S, Kameswaran M

MONDAY - S - Board #110
Presenting Author: Jung Hyun Park (South Korea)
LINEAR AND NONLINEAR ANALYSES OF HEART RATE VARIABILITY IN OBSTRUCTIVE SLEEP APNEA WITH OR WITHOUT WHITE MATTER CHANGE
Choi K, Kim J, Jung A, Lee H

MONDAY - S - Board #111
Presenting Author: Antonio Quan Chan (United States)
CENTRAL SLEEP APNEA CHEYNE STOKES RESPIRATION ARE SEEN MORE IN DIASTOLIC DYSFUNCTION WITH PRESERVED EJECTION FRACTION AND SINUS RHYTHM THAN SYSTOLIC HEART FAILURE AND ATRIAL FIBRILLATION, A PARADIGM SHIFT IN CONVENTIONAL THINKING
Quan Chan A, Chan M, Antonio N, Patouga L, Chan E, Cabe R, Hsu A, Maggioli M, Crespo J, Tan G

MONDAY - S - Board #112
Presenting Author: Natalia Strueva (Russia)
DECREASED PLASMA OREXIN-A LEVELS IN OBESE PATIENTS WITH AND WITHOUT OBSTRUCTIVE SLEEP APNEA
Strueva N, Poluektov M, Melnichenko G, Savelyeva L, Katsya G, Goncharov N

MONDAY - S - Board #113
Presenting Author: Darwin Vizcarra (Peru)
VALIDATION OF A MODIFIED PERUVIAN VERSION OF THE BERLIN QUESTIONNAIRE TO IDENTIFY PATIENTS AT HIGH RISK FOR THE SLEEP APNEA-HYPOPNEA SYNDROME (SAHS).

MONDAY - S - Board #114
Presenting Author: Hang Siang Wong (Singapore)
ASSOCIATION BETWEEN SEVERITY OF OBSTRUCTIVE SLEEP APNEA (OSA) AND OBESITY IN MAJOR ETHNIC GROUPS OF AN ASIAN POPULATION
Wong H, Mok Y, Poh Y, Kam C

MONDAY - S - Board #115
Presenting Author: Yao Yujing (China)
EEG AROUSALS IN ATTENTION-DEFICIT/HYPERACTIVITY DISORDER (ADHD) CHILDREN WITH SLEEP-DISORDERED BREATHING (SDB)
Yujing Y, Dabo L, Zhenyun H, Jianwen Z

MONDAY - S - Board #116
Presenting Author: Bin Zhang (China)
EFFECT OF SERTRALINE ON BREATHING IN DEPRESSED PATIENTS WITHOUT MODERATE-TO-SEVERE SLEEP RELATED BREATHING DISORDERS

MONDAY - S - Board #117
Presenting Author: Xilong Zhang (China)
ADIPONECTIN ALLEVIATES GENIOGLOSSAL MITOCHONDRIAL DYSFUNCTION IN RATS EXPOSED TO INTERMITTENT HYPOXIA
Zhang X, Huang H, Ding W

MONDAY - S - Board #118
Presenting Author: Huang Zhenyun (China)
EEG AROUSALS IN CHILDREN EXHIBITING PRIMARY SNORING
Zhenyun H, Yujing Y, Dabo L, Jianwen Z, Shuyao Q, Jiajian X, Jing Z, Xinhua Y, Shaofeng L

MONDAY - S - Board #119
Presenting Author: Jianyin Zou (China)
AN EFFECTIVE MODEL FOR SCREENING OBSTRUCTIVE SLEEP APNEA: A LARGE-SCALE DIAGNOSTIC STUDY
Zou J, Guan J, Yi H, Yin S

MONDAY - S - Board #120
Presenting Author: Jianyin Zou (China)
EVALUATION OF A TWO-CHANNEL PORTABLE DEVICE AND A PREDICTIVE MODEL TO SCREEN FOR OBSTRUCTIVE SLEEP APNEA IN A LABORATORY ENVIRONMENT
Zou J, Meng L, Yi H, Yin S

MONDAY - S - Board #121
Presenting Author: Jianyin Zou (China)
EFFECT OF LAPAROSCOPIC ROUX-EN-Y GASTRIC BYPASS SURGERY ON OBSTRUCTIVE SLEEP APNEA IN A CHINESE POPULATION WITH OBESITY AND T2DM
Zou J, Zhang P, Yu H, Yin S, Yi H
Monday - SD - Board #122
Presenting Author: Young Kyung Do (South Korea)
CAUSAL EFFECT OF SLEEP DURATION ON ADOLESCENT BODY WEIGHT: EVIDENCE FROM A NATURAL EXPERIMENT
Do Y

Monday - SD - Board #123
Presenting Author: Catherine Jay Escuadra (Philippines)
ASSOCIATION OF SLEEP DEPRIVATION WITH HYPERTENSION AMONG ADULT RESIDENTS OF MAKATI CITY, PHILIPPINES

Monday - SD - Board #124
Presenting Author: Margarida Gaspar De Matos (Portugal)
SLEEP DEPRIVATION IN ADOLESCENTS: CORRELATIONS WITH SCHOOL ACHIEVEMENT AND HEALTH RELATED QUALITY OF LIFE
Gaspar De Matos M, Gaspar T; Tome G, Paiva T

Monday - SD - Board #125
Presenting Author: Bowon Kim (South Korea)
CHRONIC SLEEP DEPRIVATION ALTERS THETA AND GAMMA POWERS DURING REM SLEEP IN MICE
Kim B, Kim Y, Hwang E, Strecker R, Mccarley R, Choi J

Monday - SD - Board #126
Presenting Author: Masako Okawa (Japan)
SLEEP DAYS IN JAPAN
Okawa M, Takahashi K

Monday - T - Board #127
Presenting Author: Leya Anishchenko (Russia)
MONITORING OF SLEEPING ANIMAL RESPIRATORY PATTERN USING A NON-CONTACT BIORADAR
Anishchenko L, Gennarelli G, Tataraidze A, Sviryaev Y, Soldovieri F, Ivashov S

Monday - T - Board #128
Presenting Author: Eliot Baker (Finland)
SCREENING OF PERIODIC LIMB MOVEMENTS (PLM) VIA SMARTPHONE-CONNECTED BALLISTOCARDIOGRAPHIC FLEXIBLE BED SENSOR STRIP
Sannholm F, Baker E, Paalasmaa J, Partinen M

Monday - T - Board #129
Presenting Author: Hilmi Dajani (Canada)
NON-INVASIVE ESTIMATION OF NOCTURNAL CARDIAC OUTPUT IN HEART FAILURE PATIENTS WITH PERIODIC BREATHING USING MULTIPLE REGRESSION
Dajani H, Hosokawa K, Ando S

Monday - T - Board #130
Presenting Author: Li-Jen Hsin (Taiwan)
TRANSVERSELY RETROPALATAL COLLAPSIBILITY MEASURED BY REGULAR ENDOSCOPY IS ASSOCIATED WITH POSITION INDEPENDENCY AND APNEA-HYPOPNEA INDEX
Hsin L, Lee L, Li H

Monday - T - Board #131
Presenting Author: Atsushi Kawakubo (Japan)
PSYCHOLOGICAL EVALUATION OF THE DEPRESSION AND SLEEP TO IMPROVE THE QUALITY OF LIFE
Kawakubo A, Oguchi T

Monday - T - Board #132
Presenting Author: Chuen Peng Lee (Singapore)
SOUNDPROOFING THE SLEEP LABORATORY
Lee C, Chang R, Teh , Aabisheganaden J

Monday - T - Board #133
Presenting Author: Neha Shah (India)
RADIOFREQUENCY IN OSA
Shah N

Monday - T - Board #134
Presenting Author: Eduardo Valle (Brazil)
TIPS AND TRAPS ON POLYSOMNOGRAPHY INTERPRETATION
Valle E

Monday - REM - Board #135
Presenting Author: Maria-Lucia Munthean (Germany)
ARE REM SLEEP BEHAVIORAL EVENTS DREAM ENACTMENTS?
Muntean M, Trenkwalder C, Walters A, Mollenhauer B, Sixel-Döring F

Monday - S - Board #136
Presenting Author: Masaaki Suzuki (Japan)
RELATIONSHIP BETWEEN ORAL FLOW PATTERNS, NASAL AIRWAY, AND RESPIRATORY EVENTS DURING SLEEP
Suzuki M

Monday - R - Board #137
Presenting Author: Jung-won Shin (Republic of Korea)
PREVALENCE AND CHARACTERISTICS OF PERIODIC LIMB MOVEMENTS DURING SLEEP IN KOREAN ADULT PATIENTS WITH RESTLESS LEG SYNDROME

Tuesday, March 24, 2015

Tuesday - A - Board #001
Presenting Author: Rita Homem (Brazil)
INFLUENCE OF HIPPOTHERAPY ON THE SLEEP IN PATIENTS WITH PARKINSON’S DISEASE AT ADVANCED STAGE
Homem R, Oliveira R

Tuesday - A - Board #002
Presenting Author: Miguel Meira E Cruz (Portugal)
SLEEP AND CHRONOTYPE OF PORTUGUESE ADOLESCENTS: RESULTS FROM A NATIONAL SURVEY
Meira E Cruz M, Loureiro H, Duarte I, Teixeira C, Pereira C
Tuesday - A - Board #003
Presenting Author: Vathsala Sagayadevan (Singapore)
PREVALENCE AND CORRELATES OF SLEEP PROBLEMS AMONG OLDER SINGAPOREANS
Sagayadevan V, Subramaniam M, Abdin E, Ajit Vaingankar J, Chong S

Tuesday - B - Board #004
Presenting Author: Olga Berdina (Russia)
ASSOCIATIONS BETWEEN SLEEP PATTERNS AND COGNITIVE FUNCTIONING IN ADOLESCENTS WITH ESSENTIAL HYPERTENSION
Berdina O, Madaeva I, Dolgikh V, Polyakov V

Tuesday - B - Board #005
Presenting Author: Mohammad Rasoul Ghadami (Iran)
UNPLEASANT DREAM CONTENT AND RISK OF SLEEP APNEA
Khazaie H, Masoudi M, Ghadami M

Tuesday - B - Board #006
Presenting Author: Rini Sekartini (Indonesia)
FACTORS RELATED TO ACADEMIC ACHIEVEMENT IN JUNIOR HIGH SCHOOL STUDENTS IN JAKARTA WITH SLEEP DISORDERS
Sekartini R, Auliyanti F, Mangunatmadja I

Tuesday - C - Board #007
Presenting Author: Diane B. Boivin (Canada)
CIRCADIAN VARIATION OF SUBJECTIVE SLEEP QUALITY AND ALERTNESS IN A TRAUMATIC BRAIN INJURY PATIENT
Guo J, Shechter A, Boivin D

Tuesday - C - Board #008
Presenting Author: Wing Yan Joey Chan (Hong Kong)
RELATIONSHIP OF CIRCADIAN TYPOLOGY AND BIG-FIVE PERSONALITY IN PATIENTS WITH MAJOR DEPRESSIVE DISORDER
Chan W, Li X, Lam S, Wing Y

Tuesday - C - Board #009
Presenting Author: Su Jung Choi (Korea)
ARE CIRCADIAN PREFERENCES AND SLEEP QUALITY DIFFERENT ACCORDING TO EPILEPSY CLASSIFICATION?
Choi S, Joo E, Hong S

Tuesday - C - Board #010
Presenting Author: Jason Ellis (United Kingdom)
ASSESSING THE DAILY STABILITY OF THE CORTISOL AWAKENING RESPONSE: A CONTROLLED LABORATORY PROTOCOL
Elder G, Wetherell M, Ellis J, Barclay N

Tuesday - C - Board #012
Presenting Author: Hee-Jin Im (South Korea)
SOCIAL JETLAG IN KOREAN POPULATION: CAN IT BE A SEQUENCE OF THE WEEKEND CATCH-UP SLEEP?
Im H, Baek S, Lee J, Ha Y, Yun C, Park S

Tuesday - C - Board #013
Presenting Author: Mohsen Monadi Nia (Iran)
THE RELATIONSHIP BETWEEN ROAD ACCIDENTS AND CIRCADIAN RHYTHM
Moradi Nia M, Sadeghniat K, Aminian O, Azizi F

Tuesday - C - Board #014
Presenting Author: Abolfazl Mozaffari (Iran)
MORNINGNESS-EVENINGNESS CHRONOTYPES, SLEEP QUALITY AND INSOMNIA AMONG MEDICAL STUDENT OF QOM
Mozafari A, Mohamadi H, Tabaraie M, Ansarg S

Tuesday - C - Board #015
Presenting Author: Insung Park (Japan)
RELATIONSHIP BETWEEN METABOLIC RATE AND CORE BODY TEMPERATURE DURING SLEEP IN HUMAN
Park I, Kayaba M, Iwayama K, Ogata H, Sengoku Y, Tokuyama K, Satoh M

Tuesday - C - Board #016
Presenting Author: Kirsi-Marja Zitting (United States)
INCREASED SUBJECTIVE SLEEPINESS AND GLOBAL EEG THETA POWER DURING A POST-NIGHT SHIFT DRIVE

Tuesday - E - Board #017
Presenting Author: Valerie Cochen De Cock (France)
DAYTIME SLEEPINESS IN PARKINSON’S DISEASE

Tuesday - E - Board #018
Presenting Author: Oguz Erdinc (Turkey)
THE RELATIONSHIP BETWEEN EXCESSIVE DAYTIME SLEEPINESS AND DEPRESSION IN MEDICAL STUDENTS
Erdinc O, Unal E, Aydin R, Uzuner G, Metintas S

Tuesday - E - Board #019
Presenting Author: Dong Chang Lee (South Korea)
A CASE OF OBSTRUCTIVE SLEEP APNEA DUE TO NASAL TUMOR
Lee D, Kim G, Jeong S, Lee J

Tuesday - E - Board #020
Presenting Author: Shang-Hsuan Wu (Taiwan)
LONG-TERM OUTCOME OF KLEINE-LEVIN SYNDROME(KLS): BRAIN IMAGE AND NEUROCOGNITIVE FINDINGS AFTER 5 YEARS
Wu S, Huang Y, Guilemainault C
Tuesday - I - Board #021
Presenting Author: Catherine Fichten (Canada)
SLEEP QUALITY IS IN THE EYE OF THE ONE WHO EXPERIENCES IT
Fichten C, Bailes S, Creti L, Conrod K, Tran L, Rizzo D, Libman E

Tuesday - I - Board #022
Presenting Author: Gui-Xia Li (China)
SLEEP EXPERIENCE TECHNOLOGY
INTRODUCTION

Tuesday - I - Board #023
Presenting Author: Chia-Mo Lin (Taiwan)
DRINKING HABIT AS A MODERATOR IN ADJUSTING ANXIETY AND SLEEP QUALITY IN POOR SLEEPERS
Chueh K, Guilleminault C, Lin C

Tuesday - I - Board #024
Presenting Author: Natalia Strueva (Russia)
INSOMNIA AFFECTS THE EXTENT OF WEIGHT LOSS IN OBESE PATIENTS
Strueva N, Poluektov M, Melnichenko G, Savelyeva L

Tuesday - I - Board #025
Presenting Author: Wataru Yamadera (Japan)
CLINICAL STUDY OF ESCITALOPRAM MONOTHERAPY FOR MAJOR DEPRESSIVE DISORDER WITH INSOMNIA

Tuesday - I - Board #026
Presenting Author: Xianxin Yuan (China)
PREVALENCE OF INSOMNIA IN A LARGE SAMPLE OF ADULTS WHO UNDERWENT A GENERAL MEDICAL EXAMINATION IN CHINA
Yuan J, Yang Z, Huang L, Xu F, Guan H

Tuesday - NA - Board #031
Presenting Author: Yan Hu (China)
THE RELATIONSHIP BETWEEN THE CLINICAL FEATURES OF NARCOLEPSY AND THE 2009/2010 H1N1 PANDEMIC IN CHINA

Tuesday - NA - Board #032
Presenting Author: Qinghua Li (China)
UTILITY OF NOCTURNAL SOREMP FOR DIAGNOSING NARCOLEPSY IN CHILDREN

Tuesday - NA - Board #033
Presenting Author: Chin-Yang Lin (Taiwan)
RELATIONSHIP BETWEEN BRAIN IMAGE AND NEUROCOGNITIVE FUNCTIONS IN PATIENTS WITH NARCOLEPSY-CATAPLEXY
Lin C, Huang Y, Guilleminault C

Tuesday - NA - Board #034
Presenting Author: Shan Qu (China)
ATTENTION DEFICIT HYPERACTIVITY DISORDER AND NARCOLEPSY IN CHILDREN
Qu S, Xu L

Tuesday - NA - Board #035
Presenting Author: Tomi Sarkanen (Finland)
RITUXIMAB TREATMENT IN A NARCOLEPSY PATIENT: TEMPORARY RELIEF OF SYMPTOMS
Sarkanen T, Alén R, Partinen M

Tuesday - NA - Board #036
Presenting Author: Xiaozhe Zhang (China)
DYNAMICS OF SLEEP-WAKE TRANSITIONS IN SLEEP DISEASES
Zhang X, Kantelhardt J, Li J, Zhao L, Dong X, Glos M, Penzel T, Han F
Tuesday - NE - Board #039
Presenting Author: Izumi Itabashi (Japan)
THREE PATIENTS WITH POSTERIOR QUADRANT EPILEPSY SHOWING FOCAL ICTAL EEG ONSET DURING NREM SLEEP, BUT NOT DURING WAKEFULNESS

Tuesday - NE - Board #040
Presenting Author: Kazutaka Jin (Japan)
THREE PATIENTS WITH EXTRA-TEMPORAL LOBE EPILEPSY HAVING SEIZURES DURING REM SLEEP

Tuesday - O - Board #041
Presenting Author: ()

Tuesday - NE - Board #042
Presenting Author: Nargiz Nachkebia (Georgia)
NEW APPROACH TO THE DEVELOPMENT OF ANIMAL MODEL OF DEPRESSION CHARACTERIZED BY SUPER-SENSITIVITY OF BRAIN MUSCARINIC CHOLINERGIC SYSTEM
Nachkebia N, Chkhartishvili E, Mchedlidze O, Dzadzamia S, Maglakelidze N, Babilodze M, Chijavadze E

Tuesday - NE - Board #043
Presenting Author: Sona Nevsimalova (Czech Republic)
CATAPLEXY AND SLEEP DISORDERS IN NIEMANN-PICK DISEASE TYPE C
Nevsimalova S, Malinova V

Tuesday - O - Board #044
Presenting Author: Kouke Aritake (Japan)
CROCIN, A CAROTENOID PIGMENT OF SAFFRON, PROMOTES NON-RAPID EYE MOVEMENT SLEEP
Aritake K, Ito N, Shoyama Y, Urade Y

Tuesday - O - Board #045
Presenting Author: Secil Aydinoz (Turkey)
CENTRAL APNEA LIKE EVENTS AND IRON DEFICIENCY
Aydinoz S, Kendirli M

Tuesday - O - Board #046
Presenting Author: Yoan Cherasse (Japan)
ZINC PROMOTES NON-RAPID EYE MOVEMENT SLEEP IN MICE
Cherasse Y, Saitou H, Urade Y

Tuesday - O - Board #047
Presenting Author: Valery Gafarov (Russia)
RISK OF MYOCARDIAL INFARCTION IN MALE POPULATION AGED 25-64 YEARS WITH SLEEP DISTURBANCES: WHO PROGRAM MONICA – PSYCHOSOCIAL
Gafarov V, Gromova E, Gagulin I, Gafarova A, Panov D

Tuesday - O - Board #048
Presenting Author: Paul Jørgensen (Denmark)
THE IMPACT OF NOCTURNAL HYPOGLYCAEMIA ON SLEEP IN SUBJECTS WITH TYPE 2 DIABETES
Jørgensen N, Rabøl R, Chu P, Stender-Petersen K, Madsbad S

Tuesday - O - Board #049
Presenting Author: Allana Leblanc (Canada)
ASSOCIATIONS BETWEEN SLEEP CHARACTERISTICS AND DIETARY INTAKE PATTERNS IN 10-YEAR OLD CANADIAN CHILDREN
Leblanc A, Tremblay M, Boyer C, Borghese M, Leduc G, Chaput J

Tuesday - O - Board #050
Presenting Author: Irina Madaeva (Russia)
SLEEP DISORDERS IN MONGOLOID AND EUROPEAN IN EASTERN SIBERIA
Madaeva I, Kolesnikova L, Bainova T, Ablamskaya O, Kolesnikov S, Semenova N, Berdina O

Tuesday - O - Board #051
Presenting Author: Chie Magota (Japan)
A STUDY ON THE METEOROLOGICAL ANALYSIS OF NOCTURNAL FALLS DURING SLEEP IN HOSPITAL
Magota C, Ando S, Nishizaka M, Horikoshi K, Tanaka K, Miyazono M, Hashiguchi N, Ohkusa T, Chishaki A

Tuesday - O - Board #052
Presenting Author: Margarita I. Rodrigo-Angulo (Spain)
IMPLICATION OF BASAL FOREBRAIN NEURONS IN AROUSAL THROUGH DIFFERENT PROJECTING PATHWAYS TO SENSORY PRIMARY CORTICAL AREAS IN THE RAT.
Rodrigo-Angulo M, Chaves-Coira I, Núñez Á

Tuesday - O - Board #053
Presenting Author: Joris Verster (Netherlands)
THE IMPACT OF HAVING A 15-MINUTE BREAK WITH AND WITHOUT CONSUMING AN ENERGY DRINK ON PROLONGED SIMULATED HIGHWAY DRIVING
Van De Loo A, Bervoets A, Mooren L, Carssen J, Roth T, Verster J

Tuesday - PS - Board #054
Presenting Author: Tarek Asaad (Egypt)
EFFECT OF QUETIAPINE ON SLEEP PROFILE IN TREATMENT OF OPIOID ABUSE PATIENTS: A POLYSOMNOGRAPHIC EVALUATION STUDY IN AN EGYPTIAN SAMPLE"
Asaad T, El Ghoneimy S, El Rassas H

Tuesday - PS - Board #055
Presenting Author: Jong-Hyun Jeong (South Korea)
SLEEP AND COGNITIVE PROBLEMS IN PATIENTS WITH ATTENTION-DEFICIT HYPERACTIVITY DISORDER
Jeong J, Kim N, Kim T, Lim H, Hong S, Han J
Tuesday - PS - Board #056
Presenting Author: Francesca Liboni (Italy)
METHYLPHENIDATE EFFECTS ON SLEEP AFTER FIVE-MONTHS TREATMENT IN CHILDREN WITH ATTENTION-DEFICIT/HYPERACTIVITY DISORDER. A PILOT STUDY.

Tuesday - PS - Board #057
Presenting Author: Dmitriy Panov (Russia)
RELATIONS OF SLEEP DISTURBANCES WITH PSYCHOSOCIAL FACTORS IN FEMALE POPULATION 25-64 YEARS IN RUSSIA: MONICA-PSYCHOSOCIAL EPIDEMIOLOGICAL STUDY
Gafarov V, Panov D, Gromova E, Gagulin I, Gafarova A

Tuesday - PS - Board #058
Presenting Author: Mark Lawrence Wong (Hong Kong)
THE ROLE OF INSOMNIA IN MEMORY COMPLAINT AMONG COMPULSIVE CHECKERS
Wong M, Leung C, Lau E

Tuesday - REM - Board #059
Presenting Author: Alain Gonfalone (France)
DOES WEIGHT INFLUENCE REM SLEEP?
Gonfalone A

Tuesday - REM - Board #060
Presenting Author: Poul Jennum (Denmark)
SLEEP STABILITY AND TRANSITIONS IN PATIENTS WITH IDIOPATHIC REM SLEEP BEHAVIOR DISORDER AND PATIENTS WITH PARKINSON’S DISEASE.

Tuesday - REM - Board #061
Presenting Author: Takashi Nomura (Japan)
olfactory dysfunction in patients with parkinson’s disease complicated rem sleep behavior disorder
Nomura T, Inoue Y, Kishi M, Nakashima K

Tuesday - REM - Board #062
Presenting Author: Marielle Zoetmulder (Denmark)
INCREASED MOTOR ACTIVITY DURING REM SLEEP IS LINKED WITH DOPAMINE-FUNCTION IN IDIOPATHIC REM SLEEP BEHAVIOUR DISORDER AND PARKINSON’S DISEASE.
Zoetmulder M, Nikolic M, Biernat H, Korbo L, Friberg L, Jennum P

Tuesday - REM - Board #063
Presenting Author: Marielle Zoetmulder (Denmark)
SENSORIMOTOR GATING DEFICITS IN MULTIPLE SYSTEM ATROPHY: COMPARISON WITH PARKINSON’S DISEASE AND IDIOPATHIC REM SLEEP BEHAVIOR DISORDER.
Zoetmulder M, Biernat H, Nikolic M, Korbo L, Jennum P

Tuesday - R - Board #064
Presenting Author: Nadia Beyzaei (Canada)
WILLIS-EKBMOM DISEASE (WED) AND SLEEP PROBLEMS IN CHILDREN WITH DOWN SYNDROME (DS)
Chan M, Beyzaei N, Stockler S, Ipsirolou I

Tuesday - R - Board #065
Presenting Author: Nadia Beyzaei (Canada)
SUGGESTED CLINICAL IMMOBILIZATION TEST (SCIT) FOR DIAGNOSIS OF WILLIS EKBMOM DISEASE IN CLINICAL PRACTICE

Tuesday - R - Board #066
Presenting Author: Eun Yoon Joo (Korea)
SLEEP DISTURBANCES IN PATIENTS WITH IDIOPATHIC RESTLESS LEG SYNDROME: CLINICAL, MOOD, AND POLYSOMNOGRAPHIC COMPARISONS WITH OTHER SLEEP DISORDERS
Jang H, Joo E, Yun S, Choi S, Hong S

Tuesday - R - Board #067
Presenting Author: Yuqing Li (United States)
ANALYSIS OF BTBD9 CONDITIONAL KNOCKOUT MICE AS MODELS OF RESTLESS LEGS SYNDROME
Li Y, Deandrade M, Yokoi F

Tuesday - R - Board #068
Presenting Author: Masayoshi Takahashi (Japan)
THE PREVALENCE AND RISK FACTOR OF AUGMENTATION IN JAPANESE PATIENTS WITH RESTLESS LEGS SYNDROME RECEIVING PRAMIPEXOLE TREATMENT

Tuesday - R - Board #069
Presenting Author: Kangping Xiong (China)
THE INCREASE OF LEG MOTOR ACTIVITIES IN PARKINSON’S DISEASE ACCOMPANIED WITH SLEEP APNEA
Xiong K, Shen Y, Liu C, Huang J

Tuesday - S - Board #070
Presenting Author: Susumu Abe (Japan)
SLEEP QUALITY IN SLEEP BRUXISM PATIENTS USING ORAL APPLIANCES: A RETROSPECTIVE ANALYSIS OF 2 STUDIES

Tuesday - S - Board #071
Presenting Author: Maryam Al Hooti (Oman)
EFFECT OF CORONARY ARTERY BYPASS GRAFTING SURGERY ON SLEEP APNEA IN OMANI PATIENTS
Al Hooti M
Tuesday - S - Board #072
Presenting Author: Aisha Aladab (Saudi Arabia)
COMPLIANCE TO CPAP THERAPY IN PATIENTS WITH SEVERE OBSTRUCTIVE SLEEP APNEA
Aladab A, Hahammam A, Alsadhan I, Altheyab A, Al-Rayes A, Alkhawajah M, Olaish A

Tuesday - S - Board #073
Presenting Author: Ryo Aoki (Japan)
ASSESSMENT OF FATIGUE IN OBSTRUCTIVE SLEEP APNEA BY USING SALIVARY HUMAN HERPES VIRUS (HHV)-6 AND HHV-7 REACTIVATION AS A BIOMARKER

Tuesday - S - Board #074
Presenting Author: Tarek Asaad (Egypt)
NEURO-COGNITIVE ASSESSMENT IN OBSTRUCTIVE SLEEP APNEA SYNDROME (OSAS) VERSUS PRIMARY INSOMNIA PATIENTS: A COMPARATIVE STUDY IN AN EGYPTIAN SAMPLE
Asaad T, Said A

Tuesday - S - Board #075
Presenting Author: Chun Ting Au (Hong Kong)
FAMILIAL AGGREGATION OF OBSTRUCTIVE SLEEP APNEA IN CHILDREN WITHOUT TONSILLAR HYPER TROPHY
Au C, Zhang J, Wing Y, Li A

Tuesday - S - Board #076
Presenting Author: Chun Ting Au (Hong Kong)
FAMILIAL AGGREGATION OF OBSTRUCTIVE SLEEP APNEA USING CHILDREN PROBANDS – OBESITY MAKES THE DIFFERENCE
Au C, Zhang J, Wing Y, Li A

Tuesday - S - Board #077
Presenting Author: Christofer Avellan-Hietanen (Finland)
LONG-TERM CPAP THERAPY FOLLOW-UP: REASONS FOR PATIENTS’ CONTACTS WITH THE SLEEP UNIT
Avellan-Hietanen H, Bachour A, Brander P

Tuesday - S - Board #078
Presenting Author: Lia Bittencourt (Brazil)
ORAL APPLIANCE (OA) VS. CPAP IN THE TREATMENT OF MILD OBSTRUCTIVE SLEEP APNEA (OSA): ARE THEY EQUALLY EFFECTIVE IN SHORT-TERM HEALTH OUTCOMES?
Bittencourt L

Tuesday - S - Board #079
Presenting Author: Heidi Avellan-Hietanen (Finland)
LONG-TERM CPAP THERAPY FOLLOW-UP: REASONS FOR PATIENTS’ CONTACTS WITH THE SLEEP UNIT
Avellan-Hietanen H, Bachour A, Brander P

Tuesday - S - Board #080
Presenting Author: Chun Ting Au (Hong Kong)
FAMILIAL AGGREGATION OF OBSTRUCTIVE SLEEP APNEA USING CHILDREN PROBANDS – OBESITY MAKES THE DIFFERENCE
Au C, Zhang J, Wing Y, Li A

Tuesday - S - Board #081
Presenting Author: Yung Chang (China)
CLINICAL OBSERVATION ON EFFECT OF AUTO-CPAP ON BLOOD PRESSURE IN OSAHS PATIENTS
Chang Y, Ma Y, Sun S

Tuesday - S - Board #082
Presenting Author: S.M. Chien (Canada)
PREVALENCE OF OBSTRUCTIVE SLEEP APNEA IN AN AMBULATORY COLONOSCOPY CLINIC
Chien S, O’Connell-Goff S, Tang S, Chien K, Ho S

Tuesday - S - Board #083
Presenting Author: Uma Devaraj (India)
UNDIAGNOSED OBSTRUCTIVE SLEEP APNEA AND POST-OPERATIVE OUTCOMES: A PROSPECTIVE OBSERVATIONAL STUDY FROM TERTIARY CARE CENTER
Devaraj U, Rajagopala S, Kumar A, Ramachandran P, D’Souza G, Devereaux P

Tuesday - S - Board #084
Presenting Author: Xiaosong Dong (China)
TREATMENT EFFECTS WITH SHORT-TERM CONTINUOUS POSITIVE AIRWAY PRESSURE ON BLOOD GLUCOSE CONTROL IN TYPE 2 DIABETIC PATIENTS WITH OBSTRUCTIVE SLEEP APNEA SYNDROME

Tuesday - S - Board #085
Presenting Author: Souheir Elghonemy (Egypt)
OBSTRUCTIVE SLEEP APNEA: IMPACT ON DAYTIME FUNCTIONING AND QUALITY OF LIFE
Elghonemy S

Tuesday - S - Board #086
Presenting Author: Cintia Fiori (Brazil)
INSOMNIA-SLEEPINESS RELATIONSHIP: A CROSS-SECTIONAL STUDY OF 3808 POLYSOMNOGRAPHIES

Tuesday - S - Board #087
Presenting Author: Banu Gulbay (Turkey)
POLYSOMNOGRAPHIC, DEMOGRAPHIC, AND CLINIC DIFFERENCES BETWEEN MALE AND FEMALE OBSTRUCTIVE SLEEP APNEA PATIENTS
Erdemir Isik M, Gulbay B, Acican T, Çifçi F
Tuesday - S - Board #088
Presenting Author: Stanley Ching Nam Ha (Hong Kong)  
COMPLIANCE IMPROVEMENT TO USE CPAP FOR PATIENTS WITH OBSTRUCTIVE SLEEP APNEA DIAGNOSED BY PORTABLE DEVICE  
Ha S, Lee D, Abdullah V, Van Hasselt C

Tuesday - S - Board #089
Presenting Author: Subash Heraganahally (Australia)  
OBSTRUCTIVE SLEEP APNEA IN INDIGENOUS AND NON-INDIGENOUS POPULATION.  
Heraganahally S, Kruavit A

Tuesday - S - Board #090
Presenting Author: Milada Hobzova (Czech Republic)  
CONTINUOUS POSITIVE AIRWAY PRESSURE TREATMENT AND LIVER ENZYMES IN SLEEP APNEA PATIENTS  
Hobzova M, Ludka O, Stepanova R, Sovova E

Tuesday - S - Board #091
Presenting Author: Sang Duk Hong (Korea)  
UPPER AIRWAY ANATOMY CAN AFFECT COMPLIANCE WITH CONTINUOUS POSITIVE AIRWAY PRESSURE  
Hong S, Kim H, Ryu G

Tuesday - S - Board #092
Presenting Author: Seok Jin Hong (South Korea)  
ASSOCIATION BETWEEN METABOLIC SYNDROME, NON-ALCOHOLIC FATTY LIVER DISEASE AND OBSTRUCTIVE SLEEP APNEA SYNDROME IN KOREAN ADULTS.  

Tuesday - S - Board #093
Presenting Author: Yu-Shu Huang (Taiwan)  
INFLAMMATORY CYTOKINES IN PEDIATRIC OBSTRUCTIVE SLEEP APNEA  
Cheng C, Huang Y, Guilleminault C

Tuesday - S - Board #094
Presenting Author: Jingjing Huang (China)  
COMPARISON OF CURATIVE EFFECTS OF 112 CASES OF CHILDREN WITH OSAHS BEFORE AND AFTER INTERVENTION  
Huang J, Lin Y, Xiao K, Sun X, Zhang T

Tuesday - S - Board #095
Presenting Author: Eun Yeon Joo (South Korea)  
ANALYSIS OF SLEEP QUALITY AFTER UVULOPALATOPHARYNGOPLASTY IN PATIENTS WITH OBSTRUCTIVE SLEEP APNEA BASED ON CARDIOPULMONARY COUPLING ANALYSIS  

Tuesday - S - Board #096
Presenting Author: Eun Yeon Joo (South Korea)  
IS SLEEP DISTURBANCES IN MEN WITH OBSTRUCTIVE SLEEP APNEA SYNDROME RELATED TO LIBIDO?  
Mun J, Joo E, Yun S, Choi S, Hong S

Tuesday - S - Board #097
Presenting Author: Ameer K A (India)  
CORRELATION OF OPTIMAL CPAP PRESSURE WITH EPWORTH SLEEPINESS SCORE, BODY MASS INDEX, COLLAR SIZE AND APNEOA HYPOPNOEA INDEX OBTAINED BY POLYSOMNOGRAPHY IN PATIENTS WITH OBSTRUCTIVE SLEEP APNEA IN A TERTIARY HEALTH CARE CENTRE  
K A D

Tuesday - S - Board #098
Presenting Author: Yi-Chun Kuan (Taiwan)  
effects of Modafinil in patients with Obstructive Sleep Apnea: a systematic review and meta-analysis  
Kuan Y, Huang Y

Tuesday - S - Board #099
Presenting Author: Anchalee Leejakpai (Thailand)  
POSITIVE AIRWAY PRESSURE THERAPY IN OSA CHILDREN AT RAMATHIBODI HOSPITAL  
Leejakpai A, Hongtong V, Kuptanon T, Preuthiphan A, Kamalaporn H

Tuesday - S - Board #100
Presenting Author: ()

Tuesday - S - Board #101
Presenting Author: Mario Milkov (Bulgaria)  
A SCIENTOMETRIC APPROACH TO THE ADVANCES IN OBESITY-RELATED SLEEP APNEA RESEARCH IN CHILDHOOD  
Milkov M, Iotova V, Nedev P, T, D, C, Avramov T, Tomov D, Matev L, Pomakova A

Tuesday - S - Board #102
Presenting Author: Abolfazl Mozaffari (Iran)  
OBSTRUCTIVE SLEEP APNEA AS A RISK FACTOR IN CORONARY ARTERY DISEASE  
Mozaffari A, Hejazi S, Afrakhteh Z, Shakeri F, Mohebi S, Zamanian H

Tuesday - S - Board #103
Presenting Author: Yoichi Nishimura (Japan)  
RETROPHARYNGEAL AIRWAY HAS NO CHANGE IN VOLUME, BUT THAT MORPHOLOGICAL FINDINGS MANIFEST CHANGE AFTER UVULOPALATOPHARYNGOPLASTY  

Tuesday - S - Board #104
Presenting Author: Liborio Parrino (Italy)  
THE ADDITIONAL VALUE OF CAP MEASURES IN THE DETECTION OF FLOW LIMITATION EVENTS IN OSAS PATIENTS: A COMPARISON WITH AASM AROUSALS  
Tuesday - S - Board #105
Presenting Author: Timo Peltomäki (Finland)
THE EFFECT OF SURGICAL MAXILLOMANDIBULAR ADVANCEMENT ON SLEEP APNEA
Peltomäki T, Kurimo J, Järnstedt J, Miettinen A, Himanen S

Tuesday - S - Board #106
Presenting Author: Barbara Peukert (Brazil)
INTENSIVE NIGHTTIME AMBULATORY BLOOD PRESSURE MONITORING DURING POLYSOMNOGRAPHY: EFFECT OF WAKEFULNESS, NON-REM, AND REM SLEEP ON DIPPING.

Tuesday - S - Board #107
Presenting Author: Ashna Pinto (India)
PREVALENCE AND RISK FACTORS OF OBSTRUCTIVE SLEEP APNEA IN A RURAL POPULATION IN INDIA
Pinto A, Devaraj U, Ramachandran P, Joseph B, D’Souza G

Tuesday - S - Board #108
Presenting Author: Khosro Sadeghniiat-Haghighi (Iran)
PREVALENCE OF PATIENTS AT HIGH RISK OF OBSTRUCTIVE SLEEP APNEA AMONG INDIVIDUALS ADMITTED FOR MYOCARDIAL INFARCTION
Sadeghniiat-Haghighi K, Khajeh-Mehrizi A, Rahimi-Golkhandan A, Sedaghat M

Tuesday - S - Board #109
Presenting Author: Hiroyuki Sawatari (Japan)
ACCUMULATED NOCTURNAL HYPOXEMIA WAS A BETTER PREDICTING FACTOR IN VASCULAR ENDOTHELIAL DYSFUNCTION IN PATIENTS WITH CHRONIC HEART FAILURE AND SLEEP DISORDERED BREATHING
Sawatari H, Ando S, Nishizaka M, Miyazono M, Sakamoto T, Chishaki H, Ohkusa T, Magota C, Sunagawa K, Chishaki A

Tuesday - S - Board #110
Presenting Author: Anchana Thongyam (Thailand)
PREDICTORS OF PERIOPERATIVE Complications in Higher Risk Children After Adenotonsillectomy for Obstructive Sleep Apnea: A Prospective Study

Tuesday - S - Board #111
Presenting Author: Hiroo Wada (Japan)
CONTINUOUS POSITIVE AIRWAY PRESSURE (CPAP) IMPROVED PERFORMANCE OF JUDO PLAYER (JUDOKA) WITH SLEEP DISORDERED BREATHING (SDB)

Tuesday - S - Board #112
Presenting Author: Lisa Walter (Australia)
AUGMENTED CARDIOVASCULAR RESPONSES TO EPISODES OF REPEATED RESPIRATORY EVENTS COMPARED WITH ISOLATED EVENTS IN PRESCHOOL CHILDREN WITH SLEEP DISORDERED BREATHING

Tuesday - S - Board #113
Presenting Author: Meng Wang (China)
SLEEP DISORDERS BREATHING IN POST POLIO SYNDROME

Tuesday - S - Board #114
Presenting Author: Xiaoxi Xu (China)
SERUM TUMOR NECROSIS FACTOR-α AND INTERLEUKIN-6 IN OVERWEIGHT AND OBESE PATIENTS WITH OBSTRUCTIVE SLEEP APNEA-HYPOPNEA SYNDROME
Xu X, Yi H, Yin S

Tuesday - S - Board #115
Presenting Author: Lyne Xu (China)
CATATHRENIA: IS IT A SLEEP RELATED BREATHING DISORDER?

Tuesday - S - Board #116
Presenting Author: Zhifei Xu (China)
LONG-TERM NON-INVASIVE VENTILATION AT HOME IN CHILDREN: BEIJING EXPERIENCE
Xu Z, Li B, Zhang Y, Shen K

Tuesday - S - Board #117
Presenting Author: David Zemanek (Czech Republic)
PREVALENCE OF SLEEP DISORDERED BREATHING IN PATIENTS WITH HYPERTROPHIC CARDIOMYOPATHY
Zemanek D, Veselka J, Belehrad M, Somers V, Kara T

Tuesday - S - Board #118
Presenting Author: He Zhongming (China)
THE EFFECT OF DIFFERENT ELEVATION ON SLEEP APNEA
Zhongming H, Fang H, Qingsheng L

Tuesday - SD - Board #119
Presenting Author: Valery Gafarov (Russia)
QUALITY OF SLEEP IN 45–69-YEAR-OLD POPULATION IN RUSSIA
Gafarov V, Gagulin I, Gromova E, Panov D, Gafarova A

Tuesday - SD - Board #120
Presenting Author: Yanrui Jiang (China)
THE EFFECT OF SLEEP MODIFICATION ON THE ASSOCIATION BETWEEN FAT MASS AND OBESITY ASSOCIATED GENE (FTO) RS9939609 AND DIETARY PATTERN
Tuesday - SD - Board #121
Presenting Author: Lia Maisuradze (Georgia)
WAKING STATE RESISTS REM SLEEP ONSET: EXPERIMENTAL EVIDENCES
Maisuradze L, Lortkipanidze N, Eliozishvili M, Oniani N

Tuesday - SD - Board #122
Presenting Author: Yuuki Matsumoto (Japan)
SUICIDAL FEELINGS ARE RELATED TO SLEEP PHASE, SLEEP QUALITY, AND SLEEP QUANTITY: A STUDY ON THE RELATIONSHIP BETWEEN SLEEP AND SUICIDE PREVENTION BY USING 3DSS (3 DIMENSIONAL SLEEP SCALE)
Matsumoto Y, Uchimura N, Ishida T, Toyomasu K, Kushino N, Mori M, Morimatsu Y, Hoshiko M, Ishitake T

Tuesday - SD - Board #123
Presenting Author: Roomila Naeck (France)
TIME RECOVERING FROM CHRONIC PARTIAL SLEEP DEPRIVATION DUE TO WATCHKEEPING
Naeck R, Bouazizi E, Mateo M, D’Amore D, Rabat A, Ginoux J

Tuesday - SD - Board #124
Presenting Author: Cátia Reis (Portugal)
INDIVIDUAL VARIABILITY TO BIOLOGICAL, HORMONAL AND PSYCHOLOGICAL RESPONSES TO SLEEP DEPRIVATION
Reis C, Domingues A, Mestre C, Sanches J, Paiva T

Tuesday - SD - Board #125
Presenting Author: Wang Zhinan (China)
THE MANAGEMENT EXPERIENCE OF SLEEP MONITORING CENTER FOR CHILDREN
Zhinan W

Tuesday - T - Board #126
Presenting Author: Guillaume Baffet (France)
SENSOR FOR APNEA CLASSIFICATION AND DETECTION
Baffet G, Montaron C, Boissinot J, Freycenon C, Pinguet J

Tuesday - T - Board #127
Presenting Author: Aykut Cilli (Turkey)
THE ACCURACY OF BPAP DETERMINED APNEA-HYPOPEAN INDEX
Uluçoban Dede H, Çilli A

Tuesday - T - Board #128
Presenting Author: Raphael Heinzer (Switzerland)
SCORING CRITERIA FOR PORTABLE MONITOR RECORDINGS: A COMPARISON OF FOUR HYPOPEAN INDEX DEFINITIONS IN A POPULATION BASED COHORT.
Vat S, Haba-Rubio J, Tobback N, Andries D, Tafti M, Heinzer R

Tuesday - T - Board #129
Presenting Author: Chen Lin (Taiwan)
TIME-FREQUENCY REPRESENTATIONS OF THE TIME-VARYING, NONSTATIONARY SIGNALS: A COMPARISON STUDY BASED ON HILBERT-HUANG AND FOURIER TRANSFORMS
Lin C, Lo M, Guilleminault C

Tuesday - T - Board #130
Presenting Author: Graham Mcallister (Canada)
COMMUNICATION ERROR ANALYZES OF SLEEP/WAKE-BEHAVIOUR ASSESSMENTS: THE NEED FOR OPTIMIZING COMMUNICATION AND DATA GATHERING WITH NEW TECHNOLOGIES.

Tuesday - T - Board #131
Presenting Author: Roomila Naeck (France)
MATHEMATICAL MODELLING OF SLEEP FRAGMENTATION DIAGNOSIS

Tuesday - T - Board #132
Presenting Author: Jong-Uk Park (South Korea)
AUTOMATIC CLASSIFICATION OF SLEEP-DISORDERED BREATHING USING CARDIOPULMONARY COUPLING ANALYSIS
Park J, Erdenebayar U, Jeong I, Lee K

Tuesday - T - Board #133
Presenting Author: Kassym Serik (Kazakhstan)
FAST AND SECURE ACCESS TO MEDICINE OF DIFFERENT CONSISTENCIES AND DIFFERENT FORMS THROUGH UNIVERSAL DEVICES
Serik K, Yelzhas Y, Omarova K

Tuesday - T - Board #134
Presenting Author: Visasiri Tantrakul (Thailand)
EFFECT OF MUSIC THERAPY ON SLEEP, STRESS AND ANXIETY LEVEL IN PATIENTS UNDERGOING OVERNIGHT POLYSOMNOGRAPHY: A RANDOMIZED-CONTROLLED TRIAL.
Suwansathit W, Tantrakul V, Pengjam J, Amornputthisathaporn N

Tuesday - B - Board #136
Presenting Author: Hoo Rim Song (Korea)
WHAT ARE THE DIFFERENCES IN SLEEP SKILLS BETWEEN INSOMNIA PATIENTS WITH AND WITHOUT NEED OF HYPNOTICS?
Song H, Shim S, Lee H, Kwon Y

Tuesday - S - Board #137
Presenting Author: Lauren Nisbet (Australia)
CAN INDICES OF BODY FAT DISTRIBUTION BE USED AS INDICATORS OF PAEDIATRIC OBSTRUCTIVE SLEEP APNEA SEVERITY?
Nisbet L, Walter L, Nixon G, Davey M, Horne R
Wednesday, March 25, 2015

Wednesday - B - Board #001
Presenting Author: Eeesung Byun (United States)
SLEEP QUALITY AND FATIGUE ARE ASSOCIATED WITH COGNITIVE FUNCTION IN ADULTS LIVING WITH HUMAN IMMUNODEFICIENCY VIRUS/ACQUIRED IMMUNODEFICIENCY SYNDROME
Byun E, Gay C, Lee K

Wednesday - B - Board #002
Presenting Author: Joanne Chan (Hong Kong)
PROMOTING SLEEP AMONG UNDERGRADUATE NURSING STUDENTS IN HONG KONG
Chan J, Lam S, Cheung M, Lee K, Lee J

Wednesday - B - Board #003
Presenting Author: Joseph De Koninck (Canada)
WAKING THREATS AND THE TEMPORAL REFERENCES OF DREAM THREAT SIMULATIONS
Lafrenière A, Robidoux R, Dale A, De Koninck J

Wednesday - B - Board #004
Presenting Author: Joseph De Koninck (Canada)
DREAM MOOD AND MORNING MOOD DIFFERENTiates EMOTIONALLY IMPACTFUL VERSUS MUNDANE DREAMS FOR NEGATIVE BUT NOT FOR POSITIVE VALENCE
Robidoux R, Allyson D, Lafrenière A, Nixon A, De Koninck J

Wednesday - B - Board #005
Presenting Author: Alain Gonfalone (France)
SLEEP DURATION AND WEIGHT
Gonfalone A

Wednesday - B - Board #006
Presenting Author: Alain Gonfalone (France)
CLUES TO THE FUNCTIONS OF SEALS SLEEP
Gonfalone A

Wednesday - B - Board #007
Presenting Author: Yin Wing Edith Lee (Hong Kong)
The EFFECT OF DAYTIME SLEEP OPPORTUNITY ON RISKY DECISION-MAKING
Lee Y, Hung P, Wong M, Lau E

Wednesday - B - Board #008
Presenting Author: Jong-Geun Seo (Korea)
The IMPACT OF SLEEP QUALITY ON COGNITIVE FUNCTION IN IDIOPATHIC PARKINSON’S DISEASE: QUANTITATIVE EEG STUDY
Seo J

Wednesday - B - Board #009
Presenting Author: Wenjie Subbotina (United States)
POOR SLEEP QUALITY ASSOCIATED WITH OBESITY IN MEN
Sun W

Wednesday - B - Board #010
Presenting Author: Ding Yongmin (China)
CLINICAL CHARACTERISTICS OF RESTLESS LEGS SYNDROME AFTER ACUTE CEREBRAL INFARCTION
Yongmin D

Wednesday - I - Board #011
Presenting Author: Zamroni Afif (Indonesia)
INSOMNIA AND DEPRESSION AMONG POST ISCHEMIC STROKE PATIENTS
Afif Z, Munir B

Wednesday - I - Board #012
Presenting Author: Sohyun Ahn (Korea)
PREVALENCE OF INSOMNIA AND ASSOCIATED FACTORS IN COMMUNITY-DWELLING KOREAN ELDERLY
Ahn S, Kim J

Wednesday - I - Board #013
Presenting Author: Ivy Y. Chen (Canada)
VALIDATION OF THE FRENCH VERSION OF THE FORD INSOMNIA RESPONSE TO STRESS TEST AND THE ASSOCIATION BETWEEN SLEEP REACTIVITY AND HYPERAROUSAL
Chen I, Jarrin D, Rochefort A, Lamy M, Ivers H, Morin C

Wednesday - I - Board #014
Presenting Author: Yung-Ming Chung (Taiwan)
The RESPIRATORY REGULATION EFFECT OF AUTONOMIC NERVOUS SYSTEM
Chung Y, Tsai P, Lou S

Wednesday - I - Board #015
Presenting Author: Wei-Sheng Chung (Taiwan)
SLEEP DISORDERS INCREASE THE RISK OF VENOUS THROMBOEMBOLISM IN INDIVIDUALS WITHOUT SLEEP APNEA: A NATIONWIDE POPULATION-BASED COHORT STUDY
Chung W, Chen Y, Lin C, Kao C

Wednesday - I - Board #016
Presenting Author: Seockhoon Chung (Korea)
ARE YOU ASKING WHAT TIME DID YOUR PATIENTS TAKE SLEEPING PILLS?: SLEEPING PILLS TAKING TIME AND PATIENT SATISFACTION
Chung S, Youn S, Yi K, Park B, Lee S

Wednesday - I - Board #017
Presenting Author: Seockhoon Chung (Korea)
The PREVALENCE OF DEPRESSION AND INSOMNIA AMONG PATIENTS: RESULTS FROM HEALTH INSURANCE AND REVIEW AND ASSESSMENT SERVICE - NATIONAL PATIENT SAMPLE
Park B, Yi K, Lee J, Chung S
Wednesday - I - Board #018
Presenting Author: Sang-Keun Chung (Korea)
IS MIRTAZAPINE REALLY EFFECTIVE IN THE TREATMENT OF KOREAN ELDERLY DEPRESSED PATIENTS WITH INSOMNIA AFTER PREVIOUS ANTIDEPRESSANT FAILURE: AN OPEN-LABEL, MULTICENTER STUDY
Chung S, Park J, Choi M, Yang J, Park T, Kim M, Lee N, Moon S

Wednesday - I - Board #019
Presenting Author: Laura Creti (Canada)
HOW DO NEW MOTHERS EXPERIENCE SLEEP?
Creti L, Tran D, Rizzo D, Zelkowitz P, Libman E

Wednesday - I - Board #020
Presenting Author: Zoe Gotts (United Kingdom)
FEASIBILITY OF DELIVERING CBT-I IN CHRONIC FATIGUE SYNDROME (CFS)
Gotts Z, Newton J, Deary V, Ellis J

Wednesday - I - Board #021
Presenting Author: Lai Yan Ho (Hong Kong)
THE EFFECTIVENESS OF MINDFULNESS MEDITATION WITH COGNITIVE BEHAVIORAL THERAPY IN PATIENTS WITH CHRONIC INSOMNIA
Ho L

Wednesday - I - Board #022
Presenting Author: Seung-Chul Hong (South Korea)
THE EFFECTIVENESS OF MINDFULNESS MEDITATION WITH COGNITIVE BEHAVIORAL THERAPY IN PATIENTS WITH CHRONIC INSOMNIA
Hong S, Kim T, Kim S, Jeong J, Han J

Wednesday - I - Board #023
Presenting Author: Mahesh K. Kaushik (Japan)
IDENTIFICATION OF SOMNOGENIC COMPONENT OF ASHWAGANDHA (WITHANIA SOMNIFERA) LEAF.
Kaushik M, Kaul S, Wadhwa R, Urade Y

Wednesday - I - Board #024
Presenting Author: Seong-Jae Kim (South Korea)
EFFECTS OF PHYSICAL EXERCISE ON SLEEP, QUALITY OF LIFE AND MOOD IN COMMUNITY-DWELLING ADULTS
Kim S, Lee J, Lim Y, Bang J, Lee M, Lee J

Wednesday - I - Board #025
Presenting Author: Kristy Nga Ting Lau (Hong Kong)
MORE STABLE EMOTIONAL PERCEPTION AFTER DAYTIME NAP IN INDIVIDUALS WITH INSOMNIA
Lau K, Cheng D, Tseng C, Lau E

Wednesday - I - Board #026
Presenting Author: Kristy Nga Ting Lau (Hong Kong)
INTERACTIVE EFFECT OF DEPRESSIVE SYMPTOMS AND NAP ON VALENCE JUDGMENT IN INDIVIDUALS WITH INSOMNIA
Yee K, Lau K, Tseng C, Lau E

Wednesday - I - Board #027
Presenting Author: Eva Libman (Canada)
WHAT DETERMINES PERCEIVED SLEEP QUALITY IN PEOPLE WITH AND WITHOUT INSOMNIA?
Libman E, Fichten C, Jorgensen M, Tran D, Conrod K, Creti L

Wednesday - I - Board #028
Presenting Author: Yingping Liu (Hong Kong)
HELP-SEEKING BEHAVIORS FOR INSOMNIA AND THEIR CORRELATES AMONG ADULTS AND ADOLESCENTS IN HONG KONG CHINESE

Wednesday - I - Board #029
Presenting Author: Laura Palagini (Italy)
DETERMINANTS OF SELF EFFICACY FOR SLEEP IN INSOMNIA DISORDER: PRELIMINARY RESULTS
Palagini L, Gronchi A, Caccavale L, Mauri M

Wednesday - I - Board #030
Presenting Author: Laura Palagini (Italy)
DYSFUNCTIONAL BELIEFS ABOUT SLEEP ARE ASSOCIATED WITH STRESS-RELATED SLEEP REACTIVITY IN INSOMNIA DISORDER: PRELIMINARY DATA

Wednesday - I - Board #031
Presenting Author: Laura Palagini (Italy)
ITALIAN VALIDATION OF THE SLEEP CONDITION INDICATOR A CLINICAL SCREENING TOOL TO EVALUATE INSOMNIA DISORDER ACCORDING TO DSM-5 CRITERIA: PRELIMINARY RESULTS

Wednesday - I - Board #032
Presenting Author: Dorrie Rizzo (Canada)
ARE DRIVERS WITH OSA GETTING BAD PRESS?

Wednesday - I - Board #033
Presenting Author: Dieu-Ly Tran (Canada)
CHARACTERISTICS OF MOTHERS’ SLEEP AT 2 MONTHS AND 6 MONTHS POSTPARTUM
Tran D, Creti L, Rizzo D, Zelkowitz P, Libman E

Wednesday - I - Board #034
Presenting Author: Joris Verster (Netherlands)
NOCTURNAL RUMINATION AS A MEDIATOR BETWEEN SLEEP DISTURBANCE AND NEGATIVE AFFECT

Wednesday - I - Board #035
Presenting Author: Chu-Yuan Wang (China)
PSYCHOLOGICAL MECHANISM OF DREAMS AND NIGHTMARES
Wednesday - I - Board #036
Presenting Author: Zhou Xuanzi (China)
SHORT PRESENTATION OF INSOMNIA NON-DRUGS THERAPIES
Xuanzi Z, Xue L, Jiapeng X, Yoann B, Weidong W

Wednesday - I - Board #037
Presenting Author: Zhou Xuanzi (China)
CHINESE MEDICINE TREATMENT OF HYPNOTICS-DEPENDENT INSOMNIA
Xuanzi Z, Fang W, Weidong W

Wednesday - I - Board #038
Presenting Author: Ari Ylikoski (Finland)
PARKINSON’S DISEASE AND CHRONIC INSOMNIA DISORDER
Ylikoski A, Martikainen K, Partinen M

Wednesday - I - Board #039
Presenting Author: Wai Man Mandy Yu (Hong Kong)
VALIDATION OF CHINESE VERSION OF STRUCTURED DIAGNOSTIC INTERVIEW FOR INSOMNIA DISORDER: A PRELIMINARY REPORT
Yu W, Zhang J, Wing Y

Wednesday - I - Board #040
Presenting Author: Jinhua Zhang (China)
COMMON WRONG COGNITIONS OF CHINESE INSOMNIACS IN THE CLINIC

Wednesday - M - Board #042
Presenting Author: Sizhi Ai (China)
EXPOSURE TO EXTINCTION-ASSOCIATED CONTEXT TONE DURING SLOW-WAVE SLEEP AND WAKEFULNESS DIFFERENTIALLY MODULATES FEAR EXPRESSION
Ai S, Chen J, He J, Bao Y, Han F, Tang X, Lu L, Shi J

Wednesday - M - Board #043
Presenting Author: Saman Seifpour (Iran)
LEARNING OF EMOTIONAL AND NON EMOTIONAL VISUAL STIMULI IS RELATED TO SLEEP MACROSTRUCTURE
Seifpour S, Khorrami Banaraki A, Torabi Nami M, Sadeghniat Haghhighi K, Mikaili M, Hekmatmanesh A

Wednesday - M - Board #044
Presenting Author: Maria Subbotina (Russia)
THE IMPAIRMENT OF COGNITIVE FUNCTIONS IN PATIENTS WITH CHRONIC INSOMNIA
Poluectov M.G S

Wednesday - NA - Board #045
Presenting Author: Yan Han (China)
CLINICAL MANIFESTATION OF NARCOLEPTIC PATIENTS WITH FAMILY HISTORY

Wednesday - NA - Board #046
Presenting Author: Won Jung Kim (Korea)
INCIDENCE OF NARCOLEPSY BEFORE AND AFTER THE PANDEMIC INFLUENZA A (H1 N1) VACCINATION IN THE KOREAN MILITARY

Wednesday - NA - Board #047
Presenting Author: Hernán Andrés Marín Agudelo (Colombia)
COPEING STRATEGIES IN PATIENTS WITH NARCOLEPSY: ANOTHER FOCUS OF COGNITIVE BEHAVIORAL INTERVENTION IN NARCOLEPSY.
Marín Agudelo H, Jiménez Correa U, Haro Valencia R, Tufik S

Wednesday - NA - Board #048
Presenting Author: Keisuke Suzuki (Japan)
PREVALENCE AND CHARACTERISTICS OF PRIMARY HEADACHE AND DREAM-ENACTING BEHAVIOR IN PATIENTS WITH NARCOLEPSY AND IDIOPATHIC HYPERSONNIA: A MULTI-CENTER CROSS-SECTIONAL STUDY

Wednesday - NA - Board #049
Presenting Author: Ming-Ju Tsai (Taiwan)
INCREASED CANCER INCIDENCE IN PATIENTS OF NARCOLEPSY – A NATIONWIDE POPULATION-BASED STUDY

Wednesday - NA - Board #050
Presenting Author: Shih-Chi Chung (Taiwan)
A LONGITUDINAL ASSOCIATION BETWEEN SLEEP AND BODY WEIGHT CHANGES FROM BIRTH TO 2 YEARS
Wednesday - O - Board #053
Presenting Author: Shan Gao (China)
ASSOCIATIONS OF SLEEP DURATION WITH CARDIAC REMOLDING IN ADOLESCENTS AND YOUNG ADULTS AT RISK OF METABOLIC SYNDROME
Jiao Y, Zhang J, Wang Y, Wing Y, Kong A

Wednesday - O - Board #054
Presenting Author: Miguel Garzón (Spain)
MOST NORADRENERGIC NEURONS AND A FEW GABAERGIC AXONS WITHIN THE CAT LOCUS COERULEUS CONTAIN MU OPIOID RECEPTOR ACTIVATION SITES CONTRIBUTING TO LOCUS COERULEUS OPIATE-INDUCED SLEEP ENHANCEMENT
Robayo O, Alvira-Botero M, Garzón M

Wednesday - O - Board #055
Presenting Author: Jun-Ying Huang (China)
CHARACTERISTICS OF SLEEP DISTURBANCE IN 103 PATIENTS WITH PARKINSON’S DISEASE AND STUDY ON THE CLINICAL NURSING STRATEGY
Hung J, Xiong K, Mao C, Li J, Chen R, Liu C

Wednesday - O - Board #056
Presenting Author: Su Jin Kim (Korea)
GENIAL TUBERCLE: AN ANATOMICAL ANALYSIS AND THE IMPLICATIONS FOR GENIOGLOSSUS ADVANCEMENT
Kim S, Lee K, Cho J, Kim S

Wednesday - O - Board #057
Presenting Author: Xue Ming (United States)
NOCTURNAL TEXT MESSAGING PATTERNS ON SLEEP HEALTH IN ADOLESCENTS

Wednesday - O - Board #058
Presenting Author: Jin Taek Park (South Korea)
CORRELATION BETWEEN TONSIL SHADOW ON LATERAL CEPAHALOMETRY AND VOLUME OF TONSIL AFTER TONSILLECTOMY
Park J

Wednesday - O - Board #059
Presenting Author: Yoshitaka Nakamura (Japan)
ORAL ADMINISTRATION OF JAPANESE SAKE YEAST (SACCHAROMYCES CEREVISIAE SAKE YEAST) PROMOTES NON-RAPID EYE MOVEMENT (NREM) SLEEP IN MICE, AND IMPROVES THE SLEEP QUALITY IN HUMAN.

Wednesday - O - Board #060
Presenting Author: Judith Owens (United States)
SHORT SLEEP TIME INCREASES RISK BEHAVIOR AMONG U.S. MIDDLE SCHOOL STUDENTS

Wednesday - O - Board #061
Presenting Author: Jin Taek Park (South Korea)
CORRELATION BETWEEN TONSIL SHADOW ON LATERAL CEPAHALOMETRY AND VOLUME OF TONSIL AFTER TONSILLECTOMY
Park J

Wednesday - O - Board #062
Presenting Author: Miguel Garzón (Spain)
ERYTHROPOIETIN (EPO) INHIBITS THE INCREASE OF NON RAPID-EYE-MOVEMENTS SLEEP (NREMS) THAT IS PRESENT IN RATS WITH BLEOMYCIN (BLM)- INDUCED PULMONARY FIBROSIS (PF)
Tsavlis D, Tektonidou A, Tzoumaka A

Wednesday - O - Board #063
Presenting Author: Chengxi Xu (China)
SLEEP PATTERNS OF THE 29TH CHINESE WINTER-OVER EXPEDITIONERS DURING PROLONGED STAY AT ANTARCTICA
Xu C, Chen N, Hu J, Xiong Y

Wednesday - O - Board #064
Presenting Author: Jinhua Zhang (China)
A BRIEF DESCRIPTION OF DROWSINESS PHENOMENON TREATED BY SUPERSTITION RITUALS
Zhang J, Feng F, Feng J, Wang W

Wednesday - PS - Board #065
Presenting Author: Emerson Ferreira-Martins (Brazil)
PSYCHOMETRIC PROPERTIES OF THE SYMPTOM CHECKLIST-90-R IN ELDERLY OVER 80 YEARS

Wednesday - PS - Board #066
Presenting Author: Chun-Cheng Lin (Taiwan)
A COMPARISON OF TREATMENT OUTCOME OF COGNITIVE BEHAVIORAL THERAPY FOR INSOMNIA (CBT-I) AND BEHAVIORAL ACTIVATION THERAPY FOR DEPRESSION (BAT-D) IN PATIENTS WITH COMORBID DEPRESSION AND INSOMNIA
Lin C, Lane H, Huang C, Yang C

Wednesday - PS - Board #067
Presenting Author: Esmond Seow (Singapore)
SLEEP DISTURBANCE AMONG PEOPLE WITH MAJOR DEPRESSIVE DISORDERS (MDD) IN SINGAPORE
Seow L, Subramanian M, Abdin E, Vaingankar J, Chong S

Wednesday - PS - Board #068
Presenting Author: Tokusei Tanahashi (Japan)
SLEEP DISTURBANCE IN PATIENTS WITH DIFFERENT SUBTYPES OF EATING DISORDERS
Tanahashi T, Wakabayashi K, Sonoda M, Suda M, Hoshi A, Tamura N, Ishikawa T
Wednesday - PS - Board #069
Presenting Author: Guanghui Wang (China)
SLEEP DISTURBANCES AND ASSOCIATED FACTORS IN CHINESE KINDERGARTEN CHILDREN: A MIXED-METHODS STUDY
Wang (Corresponding Author) G, Sun Y, Xu G, Skora E, Lewin D, Owens J

Wednesday - PS - Board #070
Presenting Author: Josef Zeitlhofer (Austria)
HEART RATE VARIABILITY (HRV) AND BASIC REST ACTIVITY CYCLE (BRAC) - NEW VARIABLES FOR THE AUTONOMIC FUNCTION IN SLEEP-WAKE CYCLE?
Zeitlhofer J, Hauschild P

Wednesday - REM - Board #071
Presenting Author: Gyeong Seon Choi (Korea)
POLYSOMNOGRAPHIC AND CORTICOMUSCULAR COHERENCE ANALYSES CHARACTERIZING PATIENTS WITH REM SLEEP BEHAVIOR DISORDER WITH OR WITHOUT SYNUCLEIDOPATHY

Wednesday - REM - Board #072
Presenting Author: Hakan Ekmekci (Turkey)
THE COMPARISON OF SLEEP STRUCTURE, REM PERIOD FEATURES AND TONUS IN BETWEEN IDIOPATHIC PARKINSON’S DISEASE AND PARKINSON’S PLUS SYNDROME PATIENTS WITH HEALTHY SUBJECTS.
Ekmekci H, Kaplan E, Ozturk S

Wednesday - REM - Board #073
Presenting Author: Elena Lyashenko (Russia)
REM SLEEP BEHAVIOR DISORDER IS A PREDICTOR OF DEMENTIA IN PARKINSON’S DISEASE
Lyashenko E, Poluektov M, Levin O

Wednesday - REM - Board #074
Presenting Author: Muventhiran Ruthrane san (Malaysia)
CASE SERIES OF SLEEP DISORDERS WITH PARKINSON DISEASE
Ruthrane san M, Am A

Wednesday - REM - Board #075
Presenting Author: Erik St. Louis (United States)
REM SLEEP WITHOUT ATONIA PREDICTS COGNITIVE IMPAIRMENT IN REM SLEEP BEHAVIOR DISORDER
Sandness D, St. Louis E, Boeve B, Silber M

Wednesday - R - Board #076
Presenting Author: Kwang Su Cha (South Korea)
RECOVERY OF THETA-BAND NEURAL SYNCHRONIES DURING A WORKING MEMORY TASK AFTER DOPAMINERGIC MEDICATION IN PATIENTS WITH RESTLESS LEGS SYNDROME

Wednesday - R - Board #077
Presenting Author: Jose Haba-Rubio (Switzerland)
PREVALENCE AND DETERMINANTS OF PERIODIC LIMB MOVEMENTS DURING SLEEP IN THE GENERAL POPULATION: THE HYPNOLAUS STUDY

Wednesday - R - Board #078
Presenting Author: Minhee Jeong (South Korea)
RECOVERY OF ABNORMAL SLOW-WAVE ACTIVITY DURING NREM SLEEP AFTER DOPAMINERGIC TREATMENT IN PATIENTS WITH RESTLESS LEGS SYNDROME

Wednesday - R - Board #079
Presenting Author: Gerhard Kloesch (Austria)
FRAGMENTARY MYOCLONUS DURING FULL-NIGHT POLYSOMNOGRAPHY IN A NEUROLOGICAL SLEEP LAB – A COHORT STUDY

Wednesday - R - Board #080
Presenting Author: Yasunori Oka (Japan)
RESTLESS LEGS SYNDROME / WILLIS-EKBOM DISEASE AMONG JAPANESE CHILDREN

Wednesday - R - Board #081
Presenting Author: Aaro Salminen (Finland)
PERIODIC LEG MOVEMENTS ASSOCIATED WITH PERIPHERAL VASOCONSTRICTION DURING SLEEP
Salminen A, Nupponen J, Rimpilä V, Polo O

Wednesday - R - Board #082
Presenting Author: Kwang Ik Yang (South Korea)
ASSOCIATION OF CO-INCIDENTAL HYPERTENSION WITH PERIODIC LIMB MOVEMENTS DURING SLEEP IN HOSPITAL BASED CROSS-SECTIONAL STUDY
Yang K, Cho Y, Hwangbo Y, Kim D, Song M

Wednesday - S - Board #083
Presenting Author: Jae-Cheul Ahn (South Korea)
CORRELATION BETWEEN UPPER AIRWAY OBSTRUCTION SITES DURING SLEEP VIDEO FLUOROSCOPY AND NATURAL OVERNIGHT SLEEP
Ahn J, Lee W, Kim H, Kim J

Wednesday - S - Board #084
Presenting Author: Jung Ho Bae (Korea)
NASAL CHONDROMESENCHYMAL HAMARTOMA CAUSING SLEEP-DISORDERED BREATHING IN AN INFANT
Bae J, Kim S, Park Y
Wednesday - S - Board #085
Presenting Author: Jung Ho Bae (Korea)
ACOUSTIC ANALYSIS OF WHOLE NIGHT SNORING EVENTS IN HABITUAL SNORING CHILDREN.
Bae J, Lee H, Kim S, Park Y

Wednesday - S - Board #086
Presenting Author: Wang Bei (China)
EFFECTS OF ENDOCANNABINOIDS SYSTEM ON GLUCOSE METABOLISM OF CHRONIC INTERMITTENT HYPOXIA RATS
Bei W

Wednesday - S - Board #087
Presenting Author: Qian Cai (China)
STUDY ON ASSESSING SUBJECTIVE SLEEP QUALITY IN PATIENTS WITH OBSTRUCTIVE SLEEP APNEA SYNDROME AND ITS EFFECTIVE FACTORS
Cai Q, Xu J

Wednesday - S - Board #088
Presenting Author: Ting-So Chang (Taiwan)
EVALUATION OF POSSIBLE PREDICTING FACTORS OF ADENOTONSILLECTOMY FOR PEDIATRIC OSAS
Chang T

Wednesday - S - Board #089
Presenting Author: Chung-Chu Chen (Taiwan)
SAFETY AND EFFECTIVENESS OF INTRAORAL PRESSURE GRADIENT DEVICE FOR OBSTRUCTIVE SLEEP APNEA PATIENTS
Liu T, Hsieh W, Chen B, Su W

Wednesday - S - Board #090
Presenting Author: Shintaro Chiba (Japan)
NASAL CYCLE DURING SLEEP

Wednesday - S - Board #091
Presenting Author: Aleksi Chikadze (Georgia)
ASSOCIATION BETWEEN SLEEP APNEA SEVERITY AND BLOOD HEMORHEOLOGY

Wednesday - S - Board #092
Presenting Author: Hyung-Ju Cho (Korea)
THE TONGUE VOLUME INFLUENCES ON THE LOWEST OXYGEN SATURATION THAN APNEA-HYPOPNEA INDEX IN OBSTRUCTIVE SLEEP APNEA

Wednesday - S - Board #093
Presenting Author: Sudhansu Chokroverty (United States)
SLEEP SPINDLE DENSITY BEFORE AND AFTER CPAP TITRATION IN SEVERE OBSTRUCTIVE SLEEP APNEA: A PILOT STUDY
Chokroverty S, Bhat S, Donnelly D, Gupta D, Rubenstein M, Debari V

Wednesday - S - Board #094
Presenting Author: Roberto Da Silva (Brazil)
HOW SEDENTARISM AFFECTS THE SLEEP APNEA?

Wednesday - S - Board #095
Presenting Author: Parastoo Dehkordi (Canada)
DETERRENDED FLUCTUATION ANALYSIS OF PHOTOPLETHYSMOGRAM PULSE INTERVALS DURING SLEEP DISORDERED BREATHING
Dehkordi P, Garde A, Petersen C, Wensley D, Ansermino J, Dumont G

Wednesday - S - Board #096
Presenting Author: Uma Devaraj (India)
CPAP COMPLIANCE AMONG PATIENTS WITH MODERATE / SEVERE OSA – APPEARANCES ARE DECEPTIVE!

Wednesday - S - Board #097
Presenting Author: Hun Jeong Eun (Korea)
EFFECTS OF THYROIDECTOMY FOR THYROID CANCER PATIENTS ON SLEEP APNEA
Eun H, Oh S

Wednesday - S - Board #098
Presenting Author: Lina Fine (United States)
USE OF ONLINE EDUCATIONAL MODULE DOES NOT IMPROVE ADHERENCE TO CLINICAL FOLLOW-UP OR CPAP TREATMENT FOR OSA
Fine L, Repovic P, Schulz K, Li C

Wednesday - S - Board #099
Presenting Author: Heloisa Glass (Brazil)
COMPARING ACCEPTANCE OF FOUR QUESTIONNAIRES BY PATIENTS OF A SLEEP LABORATORY IN A TERCIARY HOSPITAL

Wednesday - S - Board #100
Presenting Author: Raphael Heinzer (Switzerland)
EFFECTS OF FLUID REMOVAL BY HEMODIALYSIS ON SLEEP APNEA IN END-STAGE RENAL DISEASE PATIENTS

Wednesday - S - Board #101
Presenting Author: Leh-Kiong Huon (Taiwan)
STATIC HYOID POSITION AND DYNAMIC LATERAL PHARYNGEAL WALL COLLAPSE PREDICT OSA SEVERITY: OBSERVATIONS BASED ON SLEEP MRI
Wednesday - S - Board #102
Presenting Author: Deepali Jaju (Oman)
RISK OF OBSTRUCTIVE SLEEP APNEA SYNDROME AND ITS DETERMINANTS IN DIABETICS: OMAN DIABETES STUDY
Jaju D, Al-Sinani S, Al-Abri M, Al-Hashmi K, Hassan M, Al Mamari A, Bayouni R

Wednesday - S - Board #103
Presenting Author: Maria Carlos Janeiro (Portugal)
SLEEP QUALITY AND ASTHMA CONTROL IN ASTHMATIC CHILDREN-PRELIMINARY RESULTS
Janeiro M, Sokolova A, Meira Cruz M, Loureiro H

Wednesday - S - Board #104
Presenting Author: Yung Jin Jeon (Korea)
THE RELATIONSHIP AND PREDICTORS OF ERECTILE DYSFUNCTION IN OBSTRUCTIVE SLEEP APNEA SYNDROME.
Jeon Y, Han D, Won T, Kim D, Shin H

Wednesday - S - Board #105
Presenting Author: Eun Yeon Joo (Korea)
LONG-TERM ADHERENCE OF POSITIVE AIRWAY PRESSURE THERAPY IN PATIENTS WITH OBSTRUCTIVE SLEEP APNEA SYNDROME; ARE APAP AND CPAP DIFFERENT?
Joo E, Kim S, Hong S

Wednesday - S - Board #106
Presenting Author: Dob-Eui Kim (Korea)
CORRELATION BETWEEN THE APNEA-HYPOPNEA INDEX DETERMINED BY SLEEPSTYLE HC608, A CONTINUOUS POSITIVE AIRWAY PRESSURE DEVICE AND BY MANUAL SCORING IN PATIENTS WITH OBSTRUCTIVE SLEEP APNEA SYNDROME
Kim D, Hwangbo Y, Back J, Bae J, Moon J, Yang K

Wednesday - S - Board #107
Presenting Author: Dae Lim Koo (Korea)
ASSOCIATION BETWEEN OBSTRUCTIVE SLEEP APNEA SYNDROME AND CEREBRAL MICROCIBLEEDS IN PATIENTS WITH ISCHEMIC STROKE
Koo D, Nam H

Wednesday - S - Board #108
Presenting Author: Lyudmila Korostovtseva (Russia)
THE RELATION BETWEEN SLEEP-DISORDERED BREATHING, EMOTIONAL COMPLAINTS AND ANTHROPOMETRIC PARAMETERS: THE RESULTS OF A SCREENING SURVEY IN ST PETERSBURG (RUSSIA)
Korostovtseva L, Dubinina E, Rotar O, Moguichaia E, Boyarinova M, Kolesova E, Kravchenko S, Sviryaev Y, Alekhin A, Konradi A

Wednesday - S - Board #109
Presenting Author: Peilin Lee (Taiwan)
PREVALENCE AND PREDICTORS OF NOCTURNAL HYPOVENTILATION IN AMYOTROPHIC-LATERAL-SCLEROSIS PATIENTS WITH PRESERVED RESPIRATORY FUNCTIONS: A TWO-CENTER TRIAL
Lee P, Hsu N, Wu H, Tsai C, Shiao T, Shiao G, Yang C

Wednesday - S - Board #110
Presenting Author: Seo-Young Lee (Korea)
DOES TREATMENT OF SDB WITH CPAP HAVE A PROTECTIVE EFFECT ON STROKE? A SYSTEMIC REVIEW

Wednesday - S - Board #111
Presenting Author: Woo Hyun Lee (South Korea)
ELEVATED ERYTHROCYTE SEDIMENTATION RATE MAY REFLECT SEVERITY OF OBSTRUCTIVE SLEEP APNEA.
Lee W

Wednesday - S - Board #112
Presenting Author: Geng-Hao Liu (Taiwan)
EFFICACY OF CPAP TREATMENT FOR BLOOD PRESSURE REDUCTION IN HYPERTENSIVE OSA PATIENTS
Liu G, Lin S, Chuang L, Lin Y, Chen Y, Chen N

Wednesday - S - Board #113
Presenting Author: Jiannan Liu (China)
BENEFICIAL EFFECT OF BILEVEL POSITIVEAIRWAY PRESSURE ON CHEYNE-STOKES RESPIRATION IN PATIENTS WITH CONGESTIVE HEART FAILURE

Wednesday - S - Board #114
Presenting Author: Kanit Muntarbhorn (Thailand)
SEVERITY OF APNEA-HYPOPNEA INDEXES AMONG ADULTS WITH OBSTRUCTIVE SLEEP APNEA: 26 A-Z SUB-GROUPS FOR ASSESSMENTS AND EASY COMMUNICATION
Muntarbhorn K, Kunachak S

Wednesday - S - Board #115
Presenting Author: Kanit Muntarbhorn (Thailand)
SEVERITY GRADING OF LOWEST OXYGEN DESATURATIONS AMONG ADULT SNORES WITH OSA AND ABNORMAL APNEA-HYPOPNEA INDEXES: ALPHABET MINOR GROUPS AND MAJOR GROUPS. MUNTARBHORN K, KUNACHAK S.
Muntarbhorn K, Kunachak S

Wednesday - S - Board #116
Presenting Author: Midori Nakauchi (Japan)
COMPARISON OF MOUTH LEAKS DURING CPAP TITRATION BETWEEN LONG TERM ADHERENCE AND NON-ADHERENCE PATIENTS WITH MOUTH DYNESS.
Nakauchi M, Nonoue S, Kato T, Shigedo Y, Kabeshita Y, Adachi H, Mikami A
Wednesday - S - Board #117
Presenting Author: Priya Ramachandran (India)
PROSPECTIVE STUDY OF PATIENTS UNDERGOING POLYSOMNOGRAPHY
Ramachandran D, Devaraj D

Wednesday - S - Board #118
Presenting Author: Ville Rimpilä (Finland)
TRANSCUTANEOUS CARBON DIOXIDE DURING SLEEP-DISORDERED BREATHING
Rimpilä V, Saaresranta T, Hosokawa K, Huhtala H, Salminen A, Polo O

Wednesday - S - Board #119
Presenting Author: Michele Romano (Italy)
IMPACT OF MAXILLO-MANDIBULAR ADVANCEMENT ON QUALITY OF LIFE IN OSAS PATIENTS
Laganà F, Rossi D, Beltramini G, Romano M, Russillo A, Gianni A

Wednesday - S - Board #120
Presenting Author: Muventhiran Ruthranesan (Malaysia)
PHENOTYPING OBSTRUCTIVE SLEEP APNEA
Ruthranesan M, Am A

Wednesday - S - Board #121
Presenting Author: Ingvild Saxvig (Norway)
PREVALENCE OF EXCESSIVE SLEEPINESS AND INSOMNIA IN RELATION TO SEVERITY OF OBSTRUCTIVE SLEEP APNEA
Saxvig I, Lehmann S, Gulati S, Aurlien H, Pallesen S, Bjorvatn B

Wednesday - S - Board #122
Presenting Author: Hyun-Woo Shin (Korea)
HYPOXIA-INDUCIBLE 5-EICOSATETRAENOATES ARE POTENTIAL MARKERS FOR DIAGNOSING OBSTRUCTIVE SLEEP APNEA
Shin H, Cho K, Rhee C, Hong I, So D, Cho J, Park J

Wednesday - S - Board #123
Presenting Author: Pamela Song (Korea)
EFFECTS OF MANDIBULAR ADVANCEMENT DEVICES FOR THE TREATMENT OF SLEEP APNEA SYNDROME BASED ON CARDIOPULMONARY COUPLING ANALYSIS
Song P, Lee H, Lee Y, Joo E, Hong S

Wednesday - S - Board #124
Presenting Author: Kate Sutherland (Australia)
PRELIMINARY EXPERIENCES WITH REMOTELY CONTROLLED MANDIBULAR PROTRUSION SLEEP STUDIES FOR PREDICTION OF ORAL APPLIANCE TREATMENT RESPONSE IN AN AUSTRALIAN SLEEP CLINIC
Sutherland K, Ngiam J, Cistulli P

Wednesday - S - Board #125
Presenting Author: Visairi Tantrakul (Thailand)
PREDICTORS OF INITIAL ACCEPTANCE OF CONTINUOUS POSITIVE AIRWAY PRESSURE (CPAP) IN OBSTRUCTIVE SLEEP APNEA PATIENTS AFTER INTENSIVE EDUCATIONAL-BEHAVIORAL PROGRAM.
Pengjam J, Tantrakul V, Suwansathit W

Wednesday - S - Board #126
Presenting Author: Zan Wang (China)
DIFFERENT PROTEIN EXPRESSION IN THE SERUM OF CHINESE PATIENTS WITH OSA
Wang Z, Wu X, Sun Q, Lv Y, Piao Y

Wednesday - S - Board #127
Presenting Author: Rashidah Yasin (Malaysia)
UNCOVERING THE SLEEP DISORDERS AMONG YOUNG DOCTORS
Yasin R, Muntham D, Chirakalwasan N

Wednesday - S - Board #128
Presenting Author: Haibo Yuan (China)
ANATOMICAL RISK FACTORS IN OBESE ADOLESCENTS WITH OBSTRUCTIVE SLEEP APNEA
Yuan H, Zhang Z, Hua S, Peng L

Wednesday - S - Board #129
Presenting Author: Parounak Zelveian (Armenia)
SYMPATHETIC OVERACTIVITY DURING NREM SLEEP STAGE IN PATIENTS WITH ARTERIAL HYPERTENSION AND OBSTRUCTIVE SLEEP APNEA
Zelveian P, Aleksanyan A, Matevosyan A, Podosyan G

Wednesday - S - Board #130
Presenting Author: Liqiang Zhang (China)
EFFECTS OF PEROXISOME PROLIFERATOR-ACTIVATED RECEPTOR (PPAR)-DELTA AGONIST ON STERNOHYOID MUSCLE IN MS MODEL RATS

Wednesday - SD - Board #131
Presenting Author: Mohammed Al-Abri (Oman)
SHORT NIGHT SLEEP DURATION IS ASSOCIATED WITH TYPE2 DIABETES IN A CASE CONTROL STUDY

Wednesday - SD - Board #132
Presenting Author: Ngan Yin Chan (Hong Kong)
THE EFFECT OF A MODEST DELAY IN SCHOOL START TIME ON HONG KONG ADOLESCENT SLEEP AND DAYTIME FUNCTIONING
Chan N, Yu M, Tsang C, Lam S, Zhang J, Wing Y

Wednesday - SD - Board #133
Presenting Author: Valery Gafarov (Russia)
SLEEP DURATION IN 45–69-YEAR-OLD POPULATION IN RUSSIA
Gafarov V, Gagulin I, Gromova E, Panov D, Gafarova A
Wednesday - SD - Board #134
Presenting Author: Jung Ji-Young (Korea)
EFFECTS OF CHRONIC CAFFEINE ADMINISTRATION AT TWO DIFFERENT TIME OF DAY ON SLEEP IN RAT
Ji-Young J, Mootack R, Ho-Won2 L, Kyoungho S, Jeoung Hee H, Maan-Gee L

Wednesday - SD - Board #135
Presenting Author: Won Hee Seo (South Korea)
THE ASSOCIATION BETWEEN SLEEP DURATION AND OBESITY IN KOREAN ADOLESCENTS: 2010-2012 KOREAN NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY
Jeong Y, Lee J, Han K, Choi B, Seo W

Wednesday - E - Board #136
Presenting Author: Tae Kim (Korea)
CLINICAL COURSE OF EXCESSIVE DAYTIME SLEEPINESS
Kim T, Lee J, Lee C, Yoon I

Wednesday - A - Board #137
Presenting Author: Hyeeun Seo (Korea)
SLEEP PROBLEMS IN CHILDREN WITH GROWTH HORMONE DEFICIENCY
Seo H
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