The 5th International Sleep Medicine & Science Expert Forum 2017 ISSTA Assembly of Members

Date:08/10/2017 Place:Room202, Prague Convention Centre, Czech Republic



國際睡眠醫學與科學專家論壇 International Sleep Medicine & Science Expert Forum

Agenda

10/08/2017	Topics	Speakers
08:30 – 08:35	Welcome Remark	Prof. Dr. med. Rayleigh Chiang <i>President, ISSTA</i> <i>National Taiwan University</i>
08:35 – 08:50	New methods for Sleep recording and signal processing in sleep research	Prof. Dr. Thomas Penzel Membership Vice-President, ISSTA Charite - Universitätsmedizin Berlin
08:50 – 09:05	Urban Sleep Sanctuary – A Sleep Design project for Chinese young people	Prof. Dr. Ding Zhaochen Beijing Institute of Fashion Technology, China ISSTA China Chapter Preparation Committee
09:05 - 09:20	"Sleepy in the USA"	Ofer Jacobowitz, M.D., Ph.D. Secretary General, ISSTA. Mt Sinai School of Medicine
09:20 - 09:35	The Combination of Personalized Automatic Feedback and Self-help CBT for Patients with Insomnia: An Ongoing Clinical Study	Prof. Dr. med. Hsin-Chien Lee <i>Taipei Medical University, Taiwan</i>



APEC (Asia-Pacific Economic Coporation) Sleep Technology Agenda	Prof. Dr. med. Rayleigh Chiang ISSTA President National Taiwan University
Break	
Investigation of Brain with Objective and Subjective Methods during Sleep and Wakefulness Processes	Prof. Adile Özgören Coordinator, DEPARK; Professor, Dokuz Eyliil Universitesi, Izmir, Turkey
Do Objective Markers of Vigilance Exist?	Prof. Dr. med. Murat OZGOREN <i>Vice President, ISSTA.</i> <i>Dokuz Eylul University, Turkey</i>
"Designer" Sleep Surgery	Assistant Prof. Stanley Liu Dept. Otolaryngology Co-Director, Sleep Surgery Fellowship, Stanford University School of Medicine
Management of Residual Daytime Sleepiness in OSA	Prof. Dr. med. Patric Strollo University of Pittsburgh, U.S.A. Co-Chair, Global Policy and Regulation Committee, ISSTA
 2017 ISSTA Assembly of Members Agenda: opening by President of ISSTA approval of minutes from the last meeting by President update on current membership report on the financial status of the ISSTA approval of board report and approval of financial report by voting proposal about future activities and discussion proposal on how to increase membership Young Surgeons Section, Young Physician Section and Young Scientist Section establishment APEC Sleep Technology 	Prof. Dr. med. Rayleigh Chiang ISSTA President National Taiwan University Ofer Jacobowitz, M.D., Ph.D. Secretary General, ISSTA. Mt Sinai School of Medicine
	Break Investigation of Brain with Objective and Subjective Methods during Sleep and Wakefulness Processes Do Objective Markers of Vigilance Exist? "Designer" Sleep Surgery "Designer" Sleep Surgery Management of Residual Daytime Sleepiness in OSA 2017 ISSTA Assembly of Members Agenda: 1) opening by President of ISSTA 2) approval of minutes from the last meeting by President 3) update on current membership 4) report on the financial status of the ISSTA 5) approval of board report and approval of financial report by voting 6) proposal about future activities and discussion 7) proposal on how to increase membership 8) Young Surgeons Section, Young Physician Section and Young Scientist Section establishment



Words from President



It is with great honor to welcome you to ISSTA activities in Prague and to have been able to lead ISSTA this term to work further on the research in the sleep science and technology field and facilitate cooperation between sleep science researchers and industries to cooperate and also government sectors on making a societal impact.

This August, I was invited to Ho Chi Minh City in Vietnam for the APEC(Asia-Pacific Economic Cooperation) Senior Officials' Meeting (SOM) III with 2nd Health Working Group (HWG) meeting and hosted a project presentation on "APEC Conference on Sustaining a Healthy Asia-Pacific by Adopting the Health Innovative Technology to Reduce Non-Communicable Diseases(NCDs)" as the first step of APEC Sleep Technology Agenda. In the presentation, we discussed how APEC could work to reduce NCDs by adopting health innovative technology, especially the most influential sleep health technology, to reduce health cost, to increase national productivity, and to promote public safety in Asia-Pacific Regions (APR). In a room filled with government health officials from 21 APEC economies, I stated that the goal of this project is to promote the sleep and health related technology industry and to foster sustainable innovative and inclusive economic growth and shared interests among the APEC economies.

This October in Prague, we have invited **10 world-famous speakers** for our annaul event. They will present vibrant topics on sleep science and technology relevant to their most advanced research and performance. The speakers include the following: Professor Thomas Penzel from the Charité University Hospital in Berlin, Germany; Professor Ding Zhaochen from Beijing Institute of Fashion Technology, China, Professor Ofer Jacobowitz from Mt. Sinai Hospital in New York; Professor. Patrick J. Strollo, Jr. from the University of Pittsburgh, U.S.A; Professor Hsin-Chien Lee from Taipei Medical University, Taipei, Taiwan; Professor Adile Oniz and Professor Murat Ozgoren from Dokuz Eylul University in Turkey; and Professor Stanley Liu from Stanford University, U.S.A.



In addition to continue the projects on "Global Sleep Technology Standards Establishment" and promote academia-industry collaboration, this year, ISSTA begins to launch the programs to recruit "Young Physicians", "Young Surgeons", and also "Young Scientists" members, by establishing respective committees. With this event, we hope to bring sleep science researchers and clinicians together and to collectively discuss relevant ideas and to inspire and facilitate cooperation to push forward the knowledge and research in sleep science and technology. I am eager to seeing you all to participate and to discuss exciting ideas during the ISSTA event in Prague Convention Center on October 8th.

Rayleigh Ping-Ying Chiang, M.D., M.M.S

President, International Sleep Science & Technology Association (ISSTA), Berlin Headquarter and Taiwan Chapter Director, Sleep Technology Consortium (STC), Ministry of Science

and Technology, Taiwan Director, Sleep Technology SIG, INSIGHT Center, National Taiwan University Deputy Superintendent, Kang-Ning General Hospital, Taipei ESRS (EU) Board Certificated "Grandparent" Somnologist Board of Director, Stanford Taiwan Club



Speakers and Topics I.Thomas Penzel, Ph.D., Berlin, Germany



Biography:

Dr. Thomas Penzel graduated from physics (1986), human biology (1991), and physiology (1995) at the University Marburg, Germany. In 1997 he received a certificate for sleep medicine and for medical informatics. In 2001 became extraordinate Professor at the University of Marburg. At the University hospital Marburg in 1982 he joint the first sleep research group in Internal Medicine in Germany. This sleep lab initiated many activities in the field of sleep medicine like home sleep apnea testing,

deriving sleep apnea and sleep stages from ECG and heart rate, German sleep center accreditation, cardio respiratory coupling analysis, sleep physician training and certification, and conferences with engineers and physicians on sleep medicine. In 2006 he moved to Berlin to join the interdisciplinary sleep medicine center at the Charité University hospital.

He received the Bial award for clinical medicine in Portugal 2001, the Bill Gruen Award for Innovations in Sleep Research by the Sleep Research Society in 2008, the Somnus Award by Sleep apnea patient groups in Germany 2012, and the distinguished development award by the Chinese sleep research society in 2014. He is treasurer of the World Sleep Society (WSS), secretary of the German Sleep Society (DGSM), and board member of more societies, such as ISSTA. He authored more than 300 papers, book chapters and books. He is an editorial board member on journals in sleep research and biomedical engineering. His research focus is on new methods in sleep recording and cardiovascular consequences of sleep disorders.

Abstract - New methods for Sleep recording and signal processing in sleep research

Sleep disorders are found to be more prevalent than previously realized. This may be a consequence of a modern society which optimizes work and social activities up to the edge. In order to investigate normal and disturbed sleep, we record biosignals both in the sleep laboratory and at home. Signals may be recorded directly, such as EEG, EOG, EMG from the head of the sleeping person, or indirectly, such as ECG, heart rate, respiration, pulse wave. Signals may be recorded with little contact or no contact systems such as actigraphy, body movement, bed sensors or bedside radiofrequency sensors. Some signals are new in sleep research and require new technology and analysis concepts. It is important to consider that biosignals must be recorded with a appropriate time and amplitude resolution. Only then it is possible to derive physiological functions. We can identify wakefulness and sleep, we can derive details about sleep, such as light sleep, deep sleep, and REM sleep, arousals and sleep fragmentation. Beside visual scoring, not only classical methods in the time and frequency domain are used, but also recent methods using statistical approaches are applied. This allows recognizing normal and restorative sleep and identifying sleep disorders as well. Some sleep disorders imply cardiovascular consequences and require treatment. Sleep disordered breathing is the disorder with most cardiovascular consequences. Many diagnostic tools focus on this group of disorders. Diagnostic methods and perspectives are presented here. IEEE Engineering in Biology and Medicine Society: "The Science of Sleep". Pulse Magazine. Sept. / Oct. issue 2014.



2. Ding, Zhaochen, Ph.D., Beijing, China



Biography:

Prof. Ding, Zhaochen, PhD, MArch, BSArch

Director of New Media Department Director of International Office, School of Art & Design Beijing Institute of Fashion Technology

His current research focuses on Sleep Design and Digital Lifestyle Design. He serves as Director of New Media Department of Beijing Institute of Fashion Technology, graduate advisor in Software and Microelectronics of Peking University, and researcher in Game and Experimental Entertainment Lab of Royal Melbourne Institute of Technology. He received the Ph.D. degree from Academy of Art of Tsinghua University in 2006, and was a post-doctoral researcher at both Polytechnic University of Milan (2014-2016) and China Academy of Social Science (2008-2010). He had previously worked as Director of Design Talent Program in Beijing Design Week, Juror of Grand Prize of Beijing Design Week, and Design Director of prestigious China Red Star Award Milan Exhibition.

Urban Sleep Sanctuary - A Sleep Design project for Chinese young people

Urban Sleep Sanctuary aims to find out their sleep problems and thus create a healthy lifetyle accordingly. It is also a future simulator of living environment, mobile and with fun. In this space, a large number of technological and media apps are combined with daily services. Users get tips on living habits and sleep from this very space to improve life quality.

Lauched in Beijing Insitute of Fashion Technology in 2014, Urban Sleep Sanctuary is the first university reasearch project on "sleep design", which includes design subtopics of lifestyle, food, digital entertainment, space, book, film, information visualization, smart home, and furniture. We hope to enhance happiness of young urban dwellers by guiding them to form healthy sleep habits.



3. Ofer Jacobowitz, M.D., Ph.D., FAASM, New York, U.S.A.



Biography:

Ofer Jacobowitz MD PhD FAASM is an internationally-recognized expert in personalized treatment of obstructive sleep apnea and snoring. He is a recognized researcher and consultant in implantable hypoglossal neurostimulation. He conducts research on the surgical treatment of sleep apnea, nasal obstruction and consults for new technologies and treatments in the US and abroad. He is an international speaker and course director on sleep apnea and nasal obstruction, having presented in academic venues in Europe, Australia, North and South America, the Middle-East and

he Far East. He has authored peer reviewed journal articles, book chapters and is associate editor for the textbook "Sleep Apnea and Snoring".

Dr Jacobowitz is a fellow of the American Academy of Sleep medicine and the American Academy of Otolaryngology Head and Neck Surgery, where he received the honor award. He has served on the AASM's national outcome measures task force for sleep apnea and is a past national chair of the sleep-related breathing disorders section. He is the secretary general of the ISSTA and founding member of the International Surgical Sleep Society. He is a graduate of the Massachusetts Institute of Technology and the Medical Scientist training program of the Mount Sinai School of medicine where he is an assistant clinical professor.

Dr Jacobowitz practices in New York City with ENT and Allergy Associates, Inc.



Abstract - "Sleepy in the USA"

"Sleepiness at the Wheel" has been a major factor in numerous train crashes in the USA. In the New York area alone, three commuter train crashes occurred due to operator factors, due to probable or established diagnosis of untreated obstructive sleep apnea of train operators. Although automatic breaking systems, otherwise known as Positive Train Controls (PTC) became a regulatory requirement in 2015 for the railroad industry, extension of the deadline has now been allowed to 2018-2020. At the same time, automatic breaking systems will likely be a standard feature by 2022 in cars sold in the US. Multimodal driver distraction and fatigue detection/warning systems are needed to improve public safety. We will review technologies that have been implemented or are planned for the railroad systems and cars in the USA.



4. Hsin-Chien Lee, MD., MPH, Taipei, Taiwan



Biography:

Department of Psychiatry and Sleep Research Center, College of Medicine, Taipei Medical University, Taipei, Taiwan Department of Psychiatry and Sleep center, Taipei Medical University-Shuang- Ho Hospital, New Taipei City, Taiwan Ho Hospital, New Taipei City, Taiwan Director, Sleep Research Center, College of Medicine, Taipei Medical University, Taipei, Taiwan **Topic:**

The Combination of Personalized Automatic Feedback and Self-help CBT for Patients with Incompia: An Oppoing Clinical Study

with Insomnia: An Ongoing Clinical Study



Abstract

Insomnia is affecting approximately one third of the population, causing significant psychological, health and economic consequences. Untreated insomnia also contributes to excessive daytime sleepiness. On the other hand, pharmacological treatment of insomnia, particularly the use of hypnotics, may also result in daytime sleepiness. Therefore, psychological approach (e.g. Cognitive Behavioral Treatment for Insomnia, CBT-I) is recommended as treatment of choice for patients with insomnia and has been proved to be effective in clinical studies. However, the accessibility and availability is not so good for traditional face to face CBT-I due to several reasons. To date, different forms of self-help treatment have been developed. Self-help CBT-I is not as effective as the traditional one and poor adherence could be the main reason.

Therefore, we are conducting a clinical trial to use wearable device, electronic sleep diary and automated feedback to improve effectiveness of self-help of CBT-I without consuming extra therapeutic resources.



5. Rayleigh Ping-Ying Chiang, M.D., M.M.S., Taipei, Taiwan

Biography:

Prof. Dr. med. Chiang is the director in Sleep Technology Special Interest Group (SIG) of the Center of Innovation and Synergy for Intelligent Home and Living Technology (INSIGHT) at National Taiwan University in Taipei, Taiwan. He is the current president of International Sleep Science and Technology Association (ISSTA) in Berlin Headquarter after the 4-year-turn of secretary general during which he launched the "Global Sleep Technology Industry Standards Establishment" and "APEC Sleep Technology Agenda Proposal". In June 2010, he got the honor of "Investigator Award" from American Academy of Sleep Medicine (AASM). In addition to the invitation as a visiting professor of University of Washington, Seattle and Mayo Clinic, Rochester, MN, U.S.A. in 2011, Dr. Chiang also chief edited the textbook - "Introduction to Modern Sleep Technology" which defined the brand-new field "Sleep Technology" with Springer in the Netherlands in the end of 2012. Till now, Dr. Chiang is the only Asian scholar who got the honor from ESRS (European Sleep Research Society) Board Certificated Grandparent Somnologist and therefore is joined by the company of 121 other world class sleep experts in the year of 2012 and 2013. In 2013, ISSTA have made a proposal -"Sleep Science and Technology Research and Education Infrastructure" to the European Commission Research Infrastructure with ESRS. Dr. Chiang also coordinated the **ISSTA** *Consortium* for the application of Horizon 2020 of E.U. project with 12 other prestigious institutes in E.U. and Asia. In Taiwan, he has been invited to be the Deputy Superintendent of *Kang-Ning* General Hospital in Taipei since 2016, after stepping down the vice-CEO of Sleep Medicine Center from one of the three most prestigious hospitals - the Taipei Veterans General Hospital. In the same year, Prof. Chiang became the Director of *Sleep Technology Academic-Industrial Consortium* (STC) under Ministry of Science and Technology (MOST), Taiwan government. Sitting as the advisory board of tFDA since 2009, Prof. Chiang was invited into be the member of "Long-Term Care

Technology Committee" under Executive Yuan in 2017 based on his previous experiences as the governor general of a national project – "*International Smart Wellness Park*" under National Development Council between 2013-2015. Being an alumnus of Stanford University, Prof. Chiang is now the board of directors of *Stanford-Taiwan Club* and his team is also contributing to the *Asia-Silicon Valley Project* for Taiwan by focusing on several projects, such as the *Asia-Pacific Innovative Health Technology Center (AIHTC)*.

Topic: APEC (Asia-Pacific Economic Coporation) Sleep Technology Agenda

Abstract:

Project topic: Sleep: An Innovative Approach to Reduce Health-Cost, to Increase National Productivity, and to Promote Public Safety

Goals: By improving the quality of sleep in APR (Asia-Pacific Regions), this project aims to promote the physical and mental health and prevent tragedy caused by sleepy driving or working. By shaping a favorable institutional environment for innovative development and creating regional cooperation mechanisms in science and technology related to sleep, the final goal is to promote the sleep technology industry and foster sustainable economic growth and shared interests among the APEC economies.

Through this project, we hope to *promote "human security", "economic productivity", and reduce "health expenses"* by establishing frameworks of healthy work (daytime) and sleep (night time) schedules and monitoring, better quality of sleep and life, and promote innovation of sleep science and technology in APR, in addition to continue to organize the "International Sleep Medicine and Science Expert Forum" which we've been organizing annually in the past 4 years. To achieve the above mentioned goals, we would assist to establish the interoperability of sleep technology professional training programs among the 21 economies of APEC



6. Adile ONIZ, Ph.D., Izmir, Turkey



Biography:

Dokuz Eylul University, Faculty of Medicine Dept. of Biophysics, Izmir, Turkey Sleep and Conscious States Technology Research and Application Centre, Izmir, Turkey

She is currently chair of the Department of Biophysics in Dokuz Eylul University Medical Faculty. She currently is the project coordinator and Executive Director of BIOIZMIR, an integrative project which is part of the first Health Technopark of Turkey.

She also had been editor in chief of DERIN (Dokuz Eylul University Journal of Research and Innovation). Her research interests are application of cognitive processes, learning, brain dynamics, sleep, brain pathologies, electrophysiology and oscillations. She is a group psychotherapist and psychodramatist. She was the secretary of National Biomedical Engineering Congress (2009), which was bridging Engineering and Medical Faculties. She was in organizing committee of the two Brain Biophysics Workshops in Izmir and local organizing committee of 13th World Congress of Psychophysiology- The Olympics of the Brain in Istanbul (2006). She is a member of "Brain Dynamics Research Center" and "Sleep and Consciousness Research Laboratory" of Dokuz Eylul University. She is in DEU-BAP, TUBITAK, and COST Projects as a coordinator, advisor, and researcher.

Topic:

Investigation of brain with objective and subjective methods during sleep and wakefulness processes

Abstract:

As far as known the information processing continues during sleep. But it is still not clarified

the course of this process or the similarities and the differences between sleep and wake processes. In the study, where we investigated electrophysiological brain responsiveness to

non-painful tactile stimuli which was applied to subjects' right index and middle fingers during prior to sleep and sleep processes, P50, N100, P200, N300, P900 and N_late responses

were observed both during prior to sleep and sleep processes while P450 and N550 response

components were only observed during sleep processes (light, deep and REM sleep cycle).

P300 and N450 response components were observed during prior to sleep processes. P50,

N100 and P200 components related to sensorial processing had relatively higher amplitudes

in PS than in the sleep cycle. On the other hand, N300, P450, P900 and N_late responses had

the highest amplitudes during sleep.

Similarly, the effects of daytime napping on adult's cognitive functioning have been a popular

object for research. The vigilance levels decrease especially between 2-4 pm. Individuals tend

to take daytime napping at this time of day in varied lengths (30 mins-90 mins). We investigated the behavioural performance changes of sustained attention, reaction time, working memory and time perception after a 60-min day time napping.

Consequently, the brain displays different levels of cognitive capacity and attentiveness during different time settings. The talk will also bring the discussion about the cognitive load

and vigilance. The cognitive or operational readiness of an individual needs to be explored with subjective and objective methods.

Keywords: Sleep, prior to sleep, brain, napping, wakefulness





Biography:

Dokuz Eylul University, Faculty of Medicine Dept. of Biophysics, Izmir, Turkey Sleep and Conscious States Technology Research and Application Centre, Izmir, Turkey

His research interests include applied brain biophysics, signal processing, information processing in the brain, multidisciplinary and translational studies in the cognitive science incorporating memory, sleep and pathological processes. He is a member of Department of Biophysics, Faculty of Medicine, Dokuz Eylul University. He is the chair of Sleep and Conscious States Technology Research and Application Center

at the University and a member of the Sleep and Consciousness Research Laboratory. Additionally he is a delegate of European Strategic Forum on Research Infrastructures (ESFRI), as well as having served as chair of Health and Food Strategy Working Group. He is the associate editor of "Sleep and Biological Rhythms" Journal and is the member of the Editorial Board of "World Journal of Anesthesiology". He is the vice president of the "International Sleep Science and Technology Association (ISSTA)". He is also the vice president of Asian Sleep Research Society.



Topic:

Do Objective markers of Vigilance Exist?

Abstract:

In the pursuit of objective markers through different states of sleep and wakefulness our group has travelled via different modalities. The problem of methodologies in different conscious states make it so hard to design a continuous objective measurement method to assess level of vigilance continuously.

For this matter we have started with deep anaesthesia and have visited sleep and wakefulness under similar conditions of advanced sleep dynamics lab. The brain seem to organise a complex pattern of different waveform communication that might be defined differently in the radiology jargon and electrophysiology: resting state. The network gets broken around precuneus and the result is the loss of consciousness. However apart from this major change the deep sleep and light anaesthesia have some similarities. The change of electrophysiological waveforms show a similar trend. The use of fNIRS and similar brain oxygen/blood flow measurement techniques are catching up. On the other hand we have initiated a series of studies in relative entry and coherence. The communication in between brain regions seem to be critical for the information transfer. This information flow does not diminish during sleep. We have shown the environment monitoring in auditory modality during deep sleep. The communication of the brain with the external world is orchestrated mainly with the sensory inputs such as auditory, tactile etc. The design of tools for this "information channel" with the brain is shedding light to our journey for designing the objective tools for vigilance function assessment of the brain as responsiveness continuum. The critical detail for the responsiveness is that it remains intact until the brain death. So this becomes an important medium to design different analytical tools for monitoring the brain. On one hand it displays the uttermost importance for monitoring the sleepiness on wheel. On the other hand this would enable critical devices for Brain Computer interface.

Keywords: Brain responsiveness, vigilance, wakefulness, sleepiness





Assistant Professor of Otolaryngology Co-Director, Sleep Surgery Fellowship Stanford University School of Medicine

Topic: "Designer" Sleep Surgery

Abstract:

What is the face of sleep surgery in the era of precision health? In the last 3 years, I have focused on optimizing sleep apnea care in two key areas: 1) Precision in surgical patient selection, 2) Precision in performing facial skeletal surgery. Uniquely, I have developed virtual surgical planning (VSP) protocols for facial skeletal operations used to treat OSA. This includes classic maxillomandibular advancement (MMA) and genial tubercle advancement. A novel skeletal surgery procedure, Distraction Osteogenesis for Maxillary Expansion (DOME), was introduced to treat adult OSA patients with a high-arched, narrow maxilla (previously non-addressed phenotype). I have also applied dynamic airway evaluation to improve surgical patient selection. All patients at Stanford now who undergo facial skeletal reconstruction for OSA have specific VSP protocols. What we now sorely lack is the accurate translation of virtual surgical information to the actual operation. While virtual surgery and intra-operative navigation are mature technology, they are not integrated at all. Essentially, while we can google map facial skeletal surgery on paper, what we really desire is google map with GPS for facial skeletal surgery. This is the missing link in delivering true "designer" sleep surgery.

10. Patrick J. Strollo, Jr., M.D. , Pittsburgh, U.S.A.



Biography:

Dr. Strollo is Professor of Medicine and Clinical and Translational Science at the University of Pittsburgh. He is the Chairman of Medicine at the VA Pittsburgh Health System and Vice Chair of Medicine for Veterans Affairs at the University of Pittsburgh. He received his undergraduate degree in Chemistry from Washington College and his MD from the Uniformed Services University of the Health Sciences. He is certified by the by the American Board of Internal Medicine in Internal Medicine. Pulmonary

certified by the by the American Board of Internal Medicine in Internal Medicine, Pulmonary Diseases, and Sleep Medicine.

He has been an active member of the American Thoracic Society and the American Academy of Sleep Medicine for over 25 years. He served as President of the AASM 2010 -2011. His research has involved team science with an emphasis on translational investigations. His work along with his collaborators has focused on three broad areas

of investigation: 1) New strategies / tools for the diagnosis of sleep disordered breathing, 2) Management of sleep disordered breathing with positive pressure therapy and other novel treatments and 3) The impact of sleep disordered breathing on cardiovascular function. Dr. Strollo has over 100 publications that include 60 papers in peer reviewed journals in Sleep and Pulmonary Medicine and 60 book chapters and invited papers.

Topic:

Management of Residual Daytime Sleepiness in OSA

Abstract

The Obstructive Sleep Apnea Syndrome is a common medical condition that is associated with excessive daytime sleepiness. Treatment favorably impacts alertness and has been demonstrated to mitigate the risk of car crashes related to daytime sleepiness. Unfortunately, approximately 10% of individuals with OSA continue to be affected by daytime sleepiness despite successful treatment with positive pressure. The exact mechanism responsible for residual daytime sleepiness is not clear, however recent data suggests that global and regional white matter changes in the brain may explain the differential response to positive airway pressure regarding daytime sleepiness. In this population, treatment with a daytime stimulant should be considered to improve individual and public safety related to motor vehicle operation. The current and emerging pharmacologic options to treat residual daytime sleepiness will be reviewed.







he International Sleep Science and Technology Association (ISSTA) was founded in 2012 in Berlin, Germany and is headed by distinguished sleep science and sleep medicine experts from all over the world. The ISSTA goal is to integrate various disciplines in sleep medicine and science and combine modern research with emerging technologies to further raise the educational levels on sleep medicine. ISSTA aims to improve the quality of sleep, daytime function and overall quality of life of not only groups with sleep disorders, but also the population with sleep complaints and disturbances.

Sleep medicine will advance not only through incremental improvements of traditional sleep technology which focuses on the utilization of polysomnographyfor the diagnosis and management of sleep disorders, but also on how new and emerging technologies can assist in preventing sleep disorders, decreasing morbidity, and improving quality of sleep, daytime function and the overall quality of life. Through the co-operation between the governments, academia and industries in different countries, ISSTA should be able to foster sustainable economic growth and shared interests globally by raising the living standards and promoting the sleep-related industrial development.

ISSTA seeks to improve healthcare and decrease morbidity and mortality by working to develop new technologies directly relevant to all aspects of sleep medicine. By proposing the topics of "Sleep Technology" as the agenda in the international organizations, such as APEC (Asia-Pacific Economic Cooperation), EU (European Union), NAFTA(North American Free Trade Agreement) and WHO (World Health Organization)...etc., so ISSTA could achieve the vision mentioned above.

Become the ISSTA member today and get the benefits

Support

The ISSTA provides our members with support through the monitoring of relevant legislation and health policy in the field, as well as through the development of practice management resources for your facility.

- * Legislation and Health Policy
- * Coding & Compliance
- * Practice Management

Science

As the professional association for sleep science and technology, the ISSTA is committed to improving patient and people care through the development, support and publication of sleep science and technology related research.

- * Practice Parameters and Clinical Guidelines
- * Clinical Research Support
- * Sleep Science Research Support

Education

Members receive significant discounts on all ISSTA educational opportunities and products. Offered in a variety of formats and at different educational levels, these resources are of value to all professionals interested in sleep

Courses

- * Global Ph.D./Masters Program in Sleep Science
- and Technology of ISSTA
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The ISSTA brings together physicians, researchers, nurses, technologists and other professionals of all backgrounds and career paths to share their perspectives, resulting in an ongoing conversation about sleep disorders research, diagnosis, treatment , development and management.

- * Membership Directory
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- * Products discount

44 Joining the ISSTA puts the extensive resources of the premier medical association for sleep science and technology to work for you 33

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Germany Luisenstrasse 55, 10117 Berlin, Germany. Tel: +49-304-5051-3013 FAX: +49-304-5051-3906 Taiwan 5th Floor, No. 96, Sec. 2, Chung Shan N. Rd., (Chia Shin Building N518), Taipei, Taiwan. Tel: +886-2-2523-6271 FAX: +886-2-2523-7351



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