

ISSTA and STC NEWSLETTER 2017



INTERNATIONAL
SLEEP
SCIENCE
TECHNOLOGY
ASSOCIATION



Dear International Sleep Science & Technology Association (ISSTA) members, Sleep Technology Consortium (STC, under Ministry of Science and Technology, Taiwan) members, ISSTA Consortium members, ISSTA officers and friends, I have to thank you for your continuing support for ISSTA in the past years.

The ISSTA and STC have been kept promoting “Sleep Technology” to be engaged in the international collaboration between government sectors, academia and industry. During the first half of 2016, there are several important events to announce:

1. The supervisors’ change of ISSTA
2. The Founding Conference of “Sleep Technology Consortium under MOST” was convened at Taipei Veterans General Hospital on 28th June, 2016
3. The conference of the IEEE EMBC’16 in Orlando.



The new (right) and past (middle) president of ISSTA



President Chiang was invited as a keynote speaker in Peking University, Beijing, China, to share knowledge with other experts from UPenn and China.



1. Introduction of Board of Directors 2016-2018

PRESIDENT



RAYLEIGH PING-YING CHIANG, M.D., M.M.S.

- ◆ **Deputy Superintendent**, Kang-Ning General Hospital
- ◆ **Vice-President**, University of Kang Ning, Taipei, Taiwan
- ◆ **Director**, Sleep Technology Special Interest Group (SIG), INSIGHT (Innovation and Synergy for Intelligent Home and Living Technology) Center, **National Taiwan University**, Taipei
- ◆ **Director**, Sleep Technology Consortium (**STC**, <http://sleeptechconsortium.org>) under Ministry of Science and Technology, Taiwan
- ◆ **Contributing physician**, Department of **Otolaryngology Head & Neck Surgery**, Taipei Veterans General Hospital, Taipei, Taiwan
- ◆ Advisory Committee of **tFDA**, Minister of Health & Welfare, Executive Yuan, Taiwan Government
- ◆ **President**, **International Sleep Science and Technology Association (ISSTA)**, Berlin, Germany and Taiwan Chapter
- ◆ **Visiting Professor**, Department of Otolaryngology Head and Neck Surgery, School of Medicine, **University of Washington**, **Seattle**, WA, U.S.A.

- ◆ ESRS (EU) Board Certificated "**Grandparent**" **Somnologist**
- ◆ Board of Director, Stanford Taiwan Club
- ◆ *Editorial Board, Journal of Clinical Sleep Medicine* (Official Publication of American Academy of Sleep Medicine. SCI, IF = 3.926)
- ◆ *Editorial board, Frontiers in Human Neuroscience (SCI IF = 3.634)* a prestigious academic journal on neuroscience based in U.K..ESRS (European Sleep Research Society) Board Certificated "Grandparent Somnologist"

EXECUTIVE VICE-PRESIDENT



Prof. Dr. MURAT ÖZGÖREN

- ◆ **Vice-Rector**, Dokuz Eylül University, Turkey
- ◆ **Professor**, Faculty of Medicine, Department of Biophysics, Brain Dynamics Research Center, Dokuz Eylul University, Izmir 35340, Turkey

MEMBERSHIP VICE-PRESIDENT



Prof. Dr. rer. Physiol. THOMAS PENZEL

- ◆ **Research director**, Sleep Medicine Center at the Charité, University Hospital Berlin
- ◆ **Senior researcher** in cardiovascular sleep research, St. Anne's University Hospital, Brno, Czech Republic
- ◆ **Treasurer**, World Association on Sleep Medicine (WASM)
- ◆ **Chair**, European Sleep Research Society (ESRS), sleep medicine committee,
- ◆ **Co-chair**, European Sleep Research Society (ESRS), examination committee,
- ◆ **Chair**, IEEE Engineering in Medicine and Biology, TC Cardiopulmonary
- ◆ Member, European Respiratory Society (ERS), harmonising education for respiratory medicine of European specialists (HERMES) for respiratory sleep
- ◆ **Co-chair**, World Association on Sleep Medicine, examination committee,
- ◆ **Treasurer**, World Sleep Society
- ◆ **Chair of the board**, German Sleep Foundation (charitable foundation)
- ◆ **Shareholder**, Somnico GmbH (a medical education and consulting company)
- ◆ **Scientific director and shareholder**, Advanced Sleep Research GmbH (a clinical research organization)

SECRETARY GENERAL



OFER JACOBOWITZ, M.D., Ph.D. FAASM FAAOA

- ◆ Partner, ENT and Allergy Associates, Manhattan and Middletown, NY.
- ◆ Sleep Medicine and Sleep Surgery for obstructive sleep apnea
- ◆ Perform diagnosis and multimodal management of OSA using CPAP, Oral appliances, and sleep surgery.
- ◆ Perform advanced surgical procedures including palatal advancement pharyngoplasty, lateral pharyngoplasty, UPPP, genioglossus advancement, hyoid suspension, partial glossectomy
- ◆ Treat Adult and Pediatric OSA, and other sleep disorders.
- ◆ **Associate Director**, the Orange Regional Medical Center for Sleep Disorders.

TREASURER



PD Dr. NIELS WESSEL

- ◆ Heading the Cardiovascular Physics group at the Department of Physics of Humboldt-Universität zu Berlin.
- ◆ He has been working in nonlinear time series analysis and modelling with regard to their applications to medical data and risk stratification since 1993.
- ◆ Guest scientist at Charité, Berlin.

2. Introduction of Advisory Board



MICHAEL V. VITIELLO, PhD.

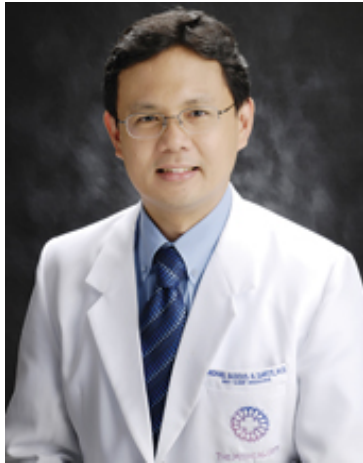
- ◆ Professor, Department of Psychiatry and Behavioral Sciences, University of Washington
- ◆ Adjunct Professor, Department of Bio-behavioral Nursing and Health Systems, University of Washington
- ◆ Adjunct Professor, Department of Medicine, Division of Gerontology and Geriatrics, University of Washington
- ◆ **Research Affiliate, Alcohol and Drug Abuse Institute**, University of Washington
- ◆ Member, Institute for Translational Health Sciences, UW
- ◆ **Investigator**, INSIGHT Center, National Taiwan University
- ◆ **Consulting Professor**, Division of Public Mental Health and Population Sciences, Department of Psychiatry and Behavioral Sciences, Stanford University
- ◆ **Chair**, UWMC Psychiatry Space Committee, UW
- ◆ **Co-Director**, Northwest Geriatric Workforce Enhancement Center

- (NW GWEC), UW
- ◆ **Chair**, UWMC Psychiatry Space Committee, UW
 - ◆ **Co-Director**, Northwest Geriatric Workforce Enhancement Center (NW GWEC), UW.
 - ◆ **Visiting Professor**, Department of Neurology, Northwestern University, Chicago, IL
 - ◆ **Invited Participant**, 9th Annual Trans-NIH Pain Consortium Symposium, Bethesda, MD
 - ◆ **Invited Participant** Trans-NIH Sleep/Pain Workshop, NIH, Bethesda, MD
 - ◆ **Consulting Professor**, Division of Public Mental Health and Population Sciences, Department of Psychiatry and Behavioral Sciences, Stanford University.
 - ◆ **Executive Council Member**, Specialty Committee of Sleep Medicine, World Federation of Chinese Medicine Societies (WFCMS)
 - ◆ **Executive Council Member**, Specialty Committee of TCM Psychology, World Federation of Chinese Medicine Societies (WFCMS)
 - ◆ **Editorial Board**, *Neurobiology of Sleep and Circadian Rhythms*



Yu-che, JERRY Wang, Ph.D.

- ◆ **Director**, Chung-hua University, HSINCHU, TAIWAN
- ◆ **Associate Professor**, Department of Business Administration, Chung-hua University, HSINCHU, TAIWAN



MICHAEL SARTE, M.D.

- ◆ Chairman, Dept. Otolaryngology, Head & Neck Surgery, RIZAL MEDICAL CENTER, Pasig Blvd., Pasig City, Philippines
- ◆ CONSULTANT DIRECTOR, CENTER FOR SNORING AND SLEEP DISORDERS ,THE MEDICAL CITY, Manila, Philippines
- ◆ CHAIRMAN,FELLOWSHIP TRAINING ACCREDITATION COMMITTEE ,PHILIPPINE SOCIETY OF SLEEP MEDICINE (PSSM), Manila, Philippines
- ◆ PAST PRESIDENT, PHILIPPINE SOCIETY OF SLEEP MEDICINE (PSSM), Manila, Philippines
- ◆ PAST CHAIRMAN, MEMBERSHIP COMMITTEE, INTERNATIONAL SLEEP SCIENCE AND TECHNOLOGY ASSOCIATION (ISSTA-BERLIN), Berlin, Germany
- ◆ PAST CHAIRMAN, PHILIPPINE SOCIETY OF SLEEP SURGEONS (PASS) under the PHILIPPINE SOCIETY OF OTOLARYNGOLOGY, HEAD AND NECK SURGER (PSOHNS), Pasig City, Philippines



Prof Dr. Zhaochen Ding

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



Dr. med. Christoph Schöbel

- Sleep Center, Charité - Universitätsmedizin Berlin



Dr. rer. medic. Martin Glos

- ◆ Research associate, Somnologist (German Sleep Society)
Charité - Universitätsmedizin Berlin, Interdisciplinary Center of Sleep
Medicine, Berlin, Germany.



Prof. Dr. Adile Oniz

- ◆ Head of Department of Biophysics, Faculty of Medicine, Dokuz Eylul University
- ◆ Board member and secretary general of Dokuz Eylul University Sleep and Conscious States Research and Application Center
- ◆ The academic coordinator of Dokuz Eylul Technology Development Zone
- ◆ The editor of Dokuz Eylul University Journal of Research and Innovation (DERIN)
- ◆ The project coordinator of International Health Technologies Development & Accelerator Center (BioIzmir) within the scope of Izmir Development Agency's (IZKA) Guided Project Support
- ◆ The project coordinator of Dokuz Eylul University Technology Transfer Office within the scope of Scientific and Technological Research Council of Turkey (TUBITAK) 1513 Project and deputy project coordinator of Dokuzgen Information Platform
- ◆ Provider of trainings for Entrepreneurship Certificate Program at Dokuz Eylul University Entrepreneurship Academy



Dr. med. Helmut Frohnhofen

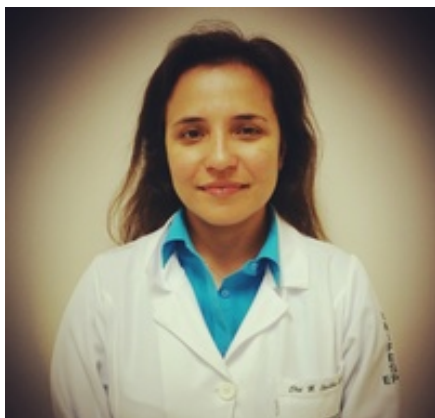
- ◆ Director, Kliniken Essen-Mitte (Clinic for Geriatrics and center for old age medicine), Essen, Germany
- ◆ Specialist in internal medicine, Knappschafts hospital, teaching hospital of the University of Duisburg-Essen, Essen, Germany



KANNAN RAMAR, M.B.B.S., M.D.

- ◆ Associate Professor, Pulmonary and Critical Care Medicine
Fellowship Director, MAYO CLINIC, ROCHESTER, MN, U.S.A.

3. Executive Secretary



MARIA-CECILIA LOPES, M.D., PH.D.

- ◆ ASSISTANT PROFESSOR, UNIVERSIDADE FEDERAL DE SAO PAULO, BRAZIL

JOSEF CHIANG, M.S.

- ◆ CEO, INTERBEST ASIA LIMITED, BRITISH VIRGIN ISLANDS



PO-HAN CHIU, M.D.

- ◆ Chief Doctor, Keelung Hospital, Department of Health, Executive Yuan, R.O.C, Keelung, Taiwan.
- ◆ Member, American Academy of Otolaryngology-head and neck surgery, Virginia, America.
- ◆ Specialist & Member, Taiwan society of sleep medicine, Taipei, Taiwan
- ◆ Adjunct Professor, Ching Kuo Institute of Management and Health, Keelung, Taiwan
- ◆ Member, Taiwan Academy of Facial Plastic and Reconstructive Surgery, Taipei, Taiwan

4. Committees Chairs & Co-Chairs

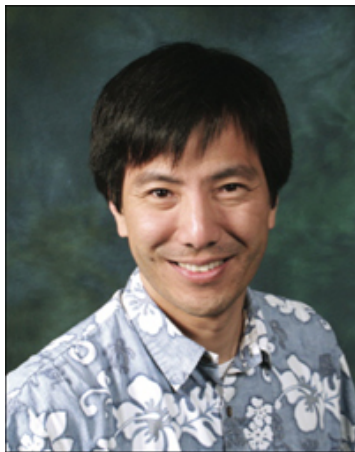
INTERNATIONAL COMMITTEE



Chair

MIGNONNE CHAN, PH.D.

- ◆ Chairperson, Global Strength Institute, Taipei, Taiwan
- ◆ Assistant Professor, Department of Political Science & History, Fairleigh Dickinson University, New Jersey, USA (1990/09 – 1991/06)
- ◆ Associate-in-Research, Harvard Business School, USA



Co-Chair

GINO YU, Ph.D

- ◆ Director, Digital Entertainment and Game Development, Hong Kong
- ◆ Associate Professor, The Hong Kong Polytechnic University, Hong Kong



Co-Chair

Dr. MURALI MAHADEVAN, MBCHB, FRACS

- ◆ Clinical Director / Surgeon, Starship Children's Hospital, Auckland, New Zealand
- ◆ Senior Lecturer, the Department of Surgery, University of Auckland, Auckland, New Zealand
- ◆ Operator, Ascot and Mercy hospitals, Auckland, New Zealand

PUBLIC ADVOCACY COMMITTEE



Chair

Rita Carter

- ◆ Medical writer, contributing to, among others, the *Independent*, *New Scientist*, *Daily Mail* and *Telegraph*.

- ◆ Twice awarded the Medical Journalists' Association prize for outstanding contribution to medical journalism.

Co-Chair

EMILIA HSIEH, M.S.

- ◆ INTERNATIONAL CHANNEL, PUBLIC TELEVISION SERVICE
TAIWAN

RESEARCH & DEVELOPMENT COMMITTEE



Co-Chair

JOSE HABA-RUBIO, M.D.

- ◆ Neurologist, somnologist, Centre Hospitalier Universitaire Vaudois, European Sleep Research Society, Lausanne, Switzerland
- ◆ Neurologist, Center for Investigation and Research in Sleep, Lausanne University Hospital, Lausanne, Switzerland



Co-Chair

CHIH-TING TIM LIN, PH.D.

- ◆ **Professor**, Department of Electrical Engineering, National Taiwan University, Taipei, Taiwan.

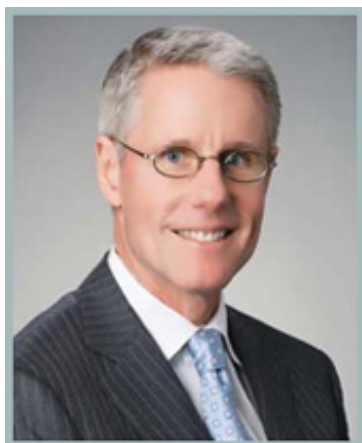


Principal Investigator

YAO-JEN LIANG D.V.M, PH.D

- ◆ Associate Dean, College of Science and Engineering, Fu-Jen University, Taipei, Taiwan
- ◆ Director of Graduate Institute of Applied Science and Engineering, Fu-Jen University, Taipei, Taiwan
- ◆ Professor , Department & Institute of Life Science, Fu-Jen University, Taipei, Taiwan

INDUSTRIALIZATION COMMITTEE



ADVISORY BOARD

DAVID WHITE, M.D

- ◆ Member, Association of American Physicians
- ◆ Board of Directors, Sleep Research Society
- ◆ Chief Medical Officer, Phillips Respironics
- ◆ Chief Medical Officer, Apnicure Inc.
- ◆ Physician, Brigham and Women's Hospital, Boston, MA
- ◆ Part time Professor of Medicine, Sleep Medicine, Harvard Medical School
- ◆ *Ad hoc* Reviewer SLEEP, Chest, New England Journal of Medicine
Journal of Applied Physiology, PLOS One



Chair

GOW-JIURN HUANG, PH.D.

- ◆ Fellow, Institute for Information Industry, Taipei, Taiwan



Co-chair

XIANGYU WANG, PH.D.

- ◆ Professor, Woodside Chair, Faculty of Humanities,
School of Built Environment, Department of Construction
Management, Curtin University, Perth, Western Australia, Australia

Education Committee



Chair

JENNIFER L. MARTIN, PH.D

.

- ◆ Adjunct Associate Professor, VA Greater Los Angeles, GRECC; David Geffen School of Medicine at UCLA, Geriatric Medicine, LA, USA



Co-chair

Sharon A. Keenan, R EEG T, R PSG T, Ph.D., D, ABSM

- ◆ Founder, director and one of the principal lecturers at The School of Sleep Medicine, Inc. Palo Alto CA, California, USA.



Co-Chair

Hsin-Chien Lee, M.D., M.P.H.

- ◆ Associate Professor, Department of Medicine, School of Medicine, Taipei Medical University, Taipei, Taiwan
- ◆ Chair, Department of Psychiatry, Taipei Medical

University-Shuang Ho Hospital, New Taipei City, Taiwan

- ◆ Chair, Sleep Center, Taipei Medical University Hospital, Taipei, Taiwan
- ◆ Specialist in Psychiatry & Sleep Medicine

Co-Chair

SUNG-WAN KIM, M.D., PH.D.

[Kyung Hee University](#)

Otorhinolaryngology-Head and Neck Surgery

DIRECTOR OF GLOBAL PH.D. AND MASTER PROGRAM



PREDIDENT RAYLEIGH PING-YING CHIANG IS IN THIS POSITION.

GLOBAL POLICY and REGULATION COMMITTEE



Co-Chair

KENNETH P. WRIGHT JR., PH.D.

- ◆ Professor, Department of Integrative Physiology, University of Colorado, Boulder, CO, USA
- ◆ Director, Administrative research Center (ARC), Sleep and Chronobiology Laboratory, Boulder, CO, USA



Co-Chair

Patrick J. Strollo, Jr. MD

- ◆ Professor ,Medicine and Clinical and Translational Science, University of Pittsburgh, Pittsburg, USA
- ◆ Medical Director, UPMC Sleep Medicine Center , Montefiore University Hospital, Pittsburg, USA



Co-Chair

Prof. Dr. iur. Ulrich M. Gassner, Mag. rer. publ., M. Jur.
(Oxon.)

- ◆ **Founding director**, research centers for medical product law “FORSCHUNGSSTELLE FÜR MEDIZINPRODUKTERECHT (FMPR)” and e-health law “E-Health-Recht” (FEHR), Augsburg University, Augsburg, Germany

The Founding Conference of “Sleep Technology Consortium under MOST” was convened in Taipei Veterans General Hospital on 28th June, 2016



As information technology advances and teaching equipment updates and spread, there are many people have been getting used to tapping and sliding their fingers on the screen of smartphones, laptops and other 3C products.

It's been causing the long-term sleep disorder. It not only affects your daily routine, but also raises many chronic diseases, such as depression/anxiety, high pressure, cardiac disease, stroke, abnormally low level of glucose in blood and sexual Dysfunction....etc. Everyone should not be underestimated! According to the definition by American Academy of Sleep Medicine, there are 80 kinds of sleep disorder, especially; "Insomnia" is the most common phenomenon in society. In terms of insomnia treatment, traditional remedy has the side effect; in addition, the healing efficacy could not be sustained for a long time once quitting the drug.

Founding Conference of ISSTA was convened at Taipei Veterans General Hospital on 28th June, 2016, in this Conference; there were lots of honored guest who are the pioneers of industrial circles, educational circles, Political circles, academic circles and; business circles, participant information as below:

Academic Sinica, Ministry of economic affairs, Industrial Economics and Knowledge Center, Market Intelligence & Consulting Institute, Taiwan Institute of Economic Research, Commerce Development Research, ASUS, ACER, Coretronic, HTC, HOLUX, Wistron ITS, Compal Electronics, INC, FIDELITAS (Companies listed on NASDAQ), TOKUYO, Altai Hu Group, E-Top ,Zoetek, UL, AiQ, Tendays, Bedding World, Baniduen.....etc. In addition, there were many representatives from various quarters, such as law, design, and medical quarter. Furthermore the center for industry and development of Beiin



China and Am-Life International Sdn Bhd from Malaysia were participating too. The purpose of this conference is not only to transfer the aim of ISSTA, but also to attract more members to join ISSTA, which for binding up to devote the development of sleep technology.

ISSTA has been officially supported by Ministry of Science and Technology, R.O.C, there is 4 main founded purposes:

1. By integration of industrial circles, educational circles, Political circles, academic circles and business circles to promote sleep technology and improve the qualities of sleep and life.
2. To net professional talents of other than who is from bio-medical background, such as management, leisure tourism.....etc, and it is able to promote the application and implement of sleep technology.
3. To build a bridge of communication between various international large organizations, and advocate the importance of sleep technology.
4. As a platform, to develop a system of industrial ecology, meanwhile, to promote the innovative research and service of sleep technology, and achieve the well development of emerging industries.

Dr. Rayleigh Ping Ying Chiang, as the President of International Sleep Science Technology Association (ISSTA) in Berlin Headquarter also Chapter of the Taiwanese branch, published the first English textbook for definition of the range of sleep technology-“International to Modern Sleep Technology” in 2012, it mentioned that the “sleep treatment” has been gradually built up a whole new “Modern Sleep technology” area in the past few years, by integration of technology and cooperation between different circles, binding up the achievements of professional experts who are from the clinic and basic medicine, psychology, law study, economic study, social study, industrial engineering, designing, and management. Currently, ISSTA is devoting itself to integration of the modern technology; develop the innovative detection of sleep quality; the diagnosis of difficulty in sleep and prevention, for reduction the incidence rate in difficulty of sleep by building up the systematic treatment procedure.

“Sleep technology is urgent needed the supports by every circle, welcome every single pioneer who has strong sense of purpose in sleep technology or correlated industrial development to join our association, let’s create the whole new opportunity together!” said by Dr. Chiang.



IEEE EMBC'16 in Orlando.



August, 2016, President Chiang and Immediate Past President Penzel were invited to "The 38th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC'16)" to chair symposia and to give lectures on sleep science and technology. In this conference, President Chiang also presented on the "Global Sleep Technology Standards Establishment" which still attracts attention and results in discussion among the participants during recent weeks. During this period, Dr. Chiang successfully exchanged point of views with most of the participants and companies from the industry, including Medtronic which is one of the leading medical instrument companies rooted in U.S. and Quanta Computer Inc, which is a globally known company from Taiwan. They achieved consensus on the sleep technology standards. According to the conclusion, the ISSTA is preparing to form 10 committees on:

1. Characterization of Bio-signals for Sleep Technology
2. Quality for Sleep-Related Bio-signals monitoring (including Wearable technology)
3. Quality of Sleep Health and Wellness Apps
4. Standards on Information Provision Assisting Sleep-Related Life Style
5. Sleep Health Framework for Community
6. Sleep Technology Framework for Smart Wellness Park
7. Sleep Technology Infrastructure for Smart Cities
8. The Standards for Detection and Analysis of Fatigue Level
9. The Standards of Sleep Environment
10. Risk Assessment for Errors of Sleep Technology Monitoring



Dr. Chiang hoped this critical international communication can create opportunities for future collaboration between academia, industry, including the members from International Sleep Science and Technology Association (ISSTA, www.issta-sleep.org) Berlin Headquarter, Taiwan Chapter, Turkish Hub, and also members from the Sleep Technology Consortium (STC, <http://sleeptechconsortium.org>) under MOST (Ministry of Science and Technology) of Taiwan government, including Quanta Computer Inc., ASUS Inc., Compal Electronics Inc., Wistron Inc., AIQ Smart Clothing Inc., Zoetek Inc. ...etc. In addition, Dr. Chiang has been invited to be the chief editor of the very big project - "Handbook Series of Health and Wellness Industry" from the most prestigious publisher-Springer - in the world, which might be able to facilitate this "Global Sleep Technology Standards Establishment



