



 Prof. Dr. med. **Rayleigh Ping-Ying Chiang**

Prof. Dr. med. Chiang is the CEO of Asia-Pacific Branch of British *Innovative Medicine and Health Technology Center (IMHTC, www.imhtc.co.uk)*, and the director of Sleep Technology Special Interest Group (SIG) of the Center of Innovation and Synergy for Intelligent Home and Living Technology (INSIGHT) in **National Taiwan University** in Taipei, Taiwan. He is the current president of International Sleep Science and Technology Association (*ISSTA, www.isstasleep.org*) in Berlin Headquarter after the 4-year-turn of secretary general during which he launched the “*Global Sleep Technology Industry Standards Establishment*” and “*APEC(Asia-Pacific Economic Cooperation) Sleep Technology Agenda Proposal*”. After the official endorsement of this proposal to APEC, he was invited to write a Letter-to-Editor by Sleep Medicine Review in 2018 due to the widely impacts among the 21 economies of APEC. In June 2010, he received the Investigator Award by American Academy of Sleep Medicine (**AASM**) on the depth research of upper airway neuropathy in sleep apnea patients. In 2019, his team got the nomination of Strategic Research Award (SRA) by **AASM** on the very advanced research of “**Outcome Management Model** in sleep apnea patients by utilizing Artificial Intelligence”. In addition to the invitation as a visiting professor of department of Otolaryngology Head and Neck Surgery of **University of Washington**, Seattle, and Sleep Center of **Mayo Clinic**, Rochester, MN in 2011, and Sleep Research Center of **University of Colorado** at Boulder, CO, U.S.A. in 2019, Dr. Chiang also serves as the editorial board member for dozens of academic journals in the field of

otolaryngology and sleep medicine. He 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 as the first textbook in this field. Till now, Dr. Chiang is the only Asian scholar who got the honor of 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 exclusive 2-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 under the facilitation of Dr. Chiang and colleagues. He 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 was invited to be the Deputy Superintendent of ***Kang-Ning General Hospital*** in Taipei between 2016-18 after stepping down the vice-CEO of Center of Sleep Medicine and Department of Otolaryngology Head and Neck Surgery 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, <http://sleeptechconsortium.org>)*** under Ministry of Science and Technology (MOST), Taiwan government. Based on his previous experiences as the governor general of a national project – “***International Smart Wellness Park***” under National Development Council starting from 2013, he co-directed the National Demo Site of Long-Term Care under Taipei Veterans General Hospital. Being an alumnus of Stanford University, Prof. Chiang has been the member of board of directors, and is now the supervisor of ***Stanford-Taiwan***

Club and has also been contributing to the **Asia-Silicon Valley Project** for Taiwan by launching the Asia-Pacific Branch of British **Innovative Medicine and Health Technology Center (IMHTC, www.imhtc.co.uk)** in Taipei (Taiwan). He was invited to be the Chief Medical Officer of TradeVan Co. Ltd., a government shared IPO company in Taiwan starting from 2018, because of several projects, including the “**Medical IoT and Health Blockchain**” which was co-sponsored by Ministry of Health and Welfare as the Infrastructure of Medical New Southbound Policy in 2018. He is currently the CEO of **IMHTC Asia-Pacific Branch**, and the Hospital-Level Expert and Chairman of Sleep Center, **TEDA (Tianjin Economic Technology Development Area) Hospital**, Tianjin, China. Due to the urgent needs to upgrade the medical policies in Taiwan and for the international connections on above “Health Blockchain” project, Dr. Chiang has devoted himself to the health policies and is enrolled in the DrPH program in Department of **Health Policy Management** of **Johns-Hopkins University** in Baltimore, U.S.A.

Major Performances (include Social Impacts & Public Services)

- ① 2012: In order to define the brand new field of “sleep technology”, Dr. Chiang chief-edited the first textbook in this field - “**Introduction to Modern Sleep Technology**” which was published by Springer in the Netherlands in 2012.
- ① 2013: Dr. Chiang passed the board certification of the “**Grandparent Somnologist**” (<https://www.esrs.eu/education-career/esrs-examination-in-sleep-medicine/certified-expert-somnologists-2013.html>) from European Sleep Research Society (ESRS). He is the only physician who got the special honor from Asia.

This was the second and last examination directed exclusively at “grandfathers” and “grandmothers”. “Grandparenting” was a procedure which applied to professionals with wide experience in sleep medicine and research. It is envisioned by the ESRS that the “grandparents” in this context may take the lead in future European and National activities to promote sleep medicine professionals.

- ☉ In the same year (2013), Dr. Chiang was elected as the secretary general of International Sleep Science and Technology Association (ISSTA) based in Berlin, Germany. According to his grand scheme, ISSTA have made a proposal “*Sleep Science and Technology Research and Education Infrastructure*” to the European Commission Research Infrastructure with ESRS. Ministry of Health and Welfare (MOHW), Ministry of Foreign Affairs (MOFA) of Taiwan government and Taiwan Institute of Economy Research (TIER) officially support ISSTA Taiwan Chapter in “*Global Sleep Technology Standard Establishment*” and also the proposal of sleep technology in **APEC** starting from the year of 2017.
- ☉ Dr. Chiang was invited to present “APEC Sleep Technology Agenda” in front of the government officers from the 21 economies of **APEC** in the Senior Officer Meeting (SOM III) in Ho-Chi-Minh City, Vietnam in August 2017.
- ☉ **Major Coordinator, ISSTA Consortium** for Horizon 2020 under European Commission.
For sleep technology research and development, Dr. Chiang coordinated 12 institutions, including European Union Geriatric Medicine Society (EUGMS), European Medical Association, Sintef in Norway, IT University of Copenhagen and Poli-Tecnico di Milano,..., etc. to build up “**ISSTA Consortium**” which put the eye on the sleep

technology field for *Horizon 2020 under European Commission*.

- ⊙ *Vice-CEO*, Center of Sleep Medicine; Attending, Department of Otolaryngology Head and Neck Surgery, *Taipei Veterans General Hospital*, Taiwan
- ⊙ *Invited Editor-in-Chief*, “*Health and Wellness Industry Handbook Series*”, Springer, the Netherlands, 2017-2020.
- ⊙ 2016-2021 *Director, Sleep Technology Academia-Industry Consortium* (<http://sleeptechconsortium.org>), Ministry of Science and Technology (MOST), Taiwan government.
- ⊙ *Potential Editor-in-Chief*, academic *Journal of “Sleep Science, Medicine, Technology & Services”*, proposal accepted by Elsevier.
- ⊙ *Editorial board* (2016 till now), *Frontiers in Human Neuroscience* (*SCI IF = 3.634*) a prestigious academic journal on neuroscience based in U.K.. Invited to be *Guest Editor* on Sleep Neuroscience in 2018.
- ⊙ *Editorial board* of official journal of American Academy of Sleep Medicine (AASM), the *Journal of Clinical Sleep Medicine* (*SCI IF = 3.71*)
- ⊙ 2011, Visiting Professor, School of Medicine, *University of Washington, Seattle*, U.S.A.
- ⊙ 2011 - 2014, Committee Member of *Taiwan Board of Sleep Medicine* (TBSM), Taiwan Society of Sleep Medicine
- ⊙ 2014 – till now Committee member, *International Affair*

Committee, Taiwan Otolaryngology Society.

- 2011 Nominee for “Sleep Related Breathing Disorders Section” Chair, *American Academy of Sleep Medicine*, U.S.A.
- 2015 - till now Committee member, *World Sleep Day Committee*, *World Sleep Society (WSS)*, (<http://worldsleepday.org/about-us/committee>)

Honors and Awards

- 2019/04 Prof. Chiang’s team got nominated as the **Strategic Research Award (SRA)** by American Academy of Sleep Medicine (AASM).
- 2017/03/10-12, ISSTA and World Sleep Society (WSS) co-sponsored the World Sleep Day activities in Kuala Lumpur, Malaysia. We were also awarded the *Honorary Mention* in the Annual Congress of World Sleep Society in Prague in October, 2017. (<http://worldsleepday.org/malaysia-2017-international-sleep-science-and-technology-association>)
- 2012/03/16 *Cross-Domain Creative Value-Added Project Award*, **National Science Council**, Taiwan.
- 2011 Best Clinical Teacher, School of Medicine, Fu Jen Catholic University, Taipei, Taiwan.
- 2010/06 *Investigator Award*, *American Academy of Sleep Medicine (AASM)*, St. Antonio, TX, U.S.A.
- 2005 – 2009 Best Clinical Teacher, School of Medicine, Fu Jen Catholic University, Taipei, Taiwan.

U.S. PATENT Issued

- Rayleigh Ping-Ying Chiang, Shih-Chung Kang, Chia-Hsuan Chiang and Zai-Ting Yeh, *"Individual Reminding Device,"* US Patent



Publication Number US 2011/0096637 A1, 2011.

U.S. PATENT Pending & Published

- Shih-Chung Kang, Rayleigh Ping-Ying Chiang and Peter Liu, *"Sleep Assistant System, Method, and Non-Transitory Computer-Readable Medium for Assisting Easing Hardship of Falling Asleep"*, US Patent Publication Number: US 2015/0217082 A1, Publication Date: August 6, 2015.
- Shih-Chung Kang, Rayleigh Ping-Ying Chiang and Peter Liu, *"Sleep Assistant System and Method Thereof,"* US Patent Publication Number US 2010/0041966 A1, 2010.
- Shih-Chung Kang, Rayleigh Ping-Ying Chiang, Peter Liu, Zai-Ting Yeh, Chia-Hsuan Chiang, Hung Lin Chi, Yu Ting Yeh and I-Ling Chen, *"Handheld Sleep Assistant Device and Method,"* US Patent Publication Number US 2010/0041965 A1, 2010

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2. Chiang PY, Liang JG, Hsu SD. Clinical Analysis of Sudden Deafness. J Taiwan Otolaryngol Head Neck Surg 2002; 37(3):190-197.
3. Rayleigh Ping-Ying Chiang, M.D, M.M.S., Chia-Long Li, M.D., Shin-May Wu, M.D., Liang-Kuang Chen, M.D. Aberrant Internal Carotid Artery in the Middle Ear: a case report. Chinese Journal of Radiology 2006; 31(6): 303-307.
4. Rayleigh Ping-Ying Chiang, Christian Guilleminault. Upper Airway

- Resistance Syndrome (Review article). *Indian J Sleep Med* 2006;1(4), 175-182.
5. Meng-Je Reed, Rayleigh Ping-Ying Chiang, Hsing-Mei Wu, Ching-Hsin Hsieh, Jia-Guang Liang. The bacteriology of glue ear. *Journal of Taiwan Otolaryngology-Head and Neck Surgery* 2006;41(5);153-157.
 6. Nelson B. Powell, DDS, MD, Kenneth B. Schechtman, PhD, Robert W. Riley, DDS, MD, Christian Guilleminault, MD, Rayleigh Ping-Ying Chiang, M.D, M.M.S., Edward M. Weaver, MD, MPH. Sleepy Driver Near-Misses May Predict Accident Risks. *Sleep* 2007; 30(3): 331-342. (SCI, IF= 5.12)
 7. Yen-Kung Chen, MD, PhD, Rayleigh Ping-Ying Chiang, MD, MMS, Chung-Huei Hsu, MD. Unusually Intense FDG Uptake in a Hypertrophied Adenoid. *Clin Nucl Med* 2007; 32: 260–261. (SCI, IF=2.96. Radiology, Nuclear Medicine, and Medical Imaging R/C=26/120)
 8. Chia-Jung Lee, M.D., Rayleigh Ping-Ying Chiang, M.D, M.M.S. Lymphoepithelioma-like carcinoma of submandibular gland – case report. *Tzu-Chi Medical Journal* 2007;19(1):40-42.
 9. Chia-Jung Lee, M.D., Chia-Mo Lin, M.D., Kasey K. Li, M.D., D.D.S., Rayleigh Ping-Ying Chiang, M.D, M.M.S. Tonsillectomy with Pillars Suture and Endoscopic Adenoidectomy for Pediatric Obstructive Sleep Apnea. *Journal of Taiwan Otolaryngology-Head and Neck Surgery* 2007; 42: 215-220.
 10. Rayleigh Ping-Ying Chiang, MD, MMS. Introduction of Contemporary Sleep Surgery. *Journal of Taipei Medical Association*. 2008; 52(8): 31-35.
 11. JJ Chen; JH Lue; LH Lin; CT Huang; Rayleigh PY Chiang; CL Chen; YJ Tsai. Effects of Pre-emptive Drug Treatment on Astrocyte Activation in the Cuneate Nucleus following Rat Median Nerve Injury. *Pain* 2010 Jan; 148(1):158-66. Epub 2009 Dec 1. (SCI, IF=6.35. ANESTHESIOLOGY R/C=1/29, CLINICAL NEUROLOGY R/C=12/191, NEUROSCIENCES R/C=31/251).
 12. Yih-Jeng Tsai, Liang JG, Wu WB, Ding YF, Rayleigh Ping-Ying Chiang, Wu

- SM. Intratympanic Injection with Dexamethasone for Sudden Sensorineural Hearing Loss. *Journal of Laryngology & Otology*. 2011 Feb; 125(2):133-7. (SCI, IF=0.681. OTORHINOLARYNGOLOGY R/C=36/43) [Epub ahead of print]
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 14. Yih-Jeng Tsai, Yu-Chi Lin, Dor-Ji Harnnd, Rayleigh Ping-Ying Chiang, Hsing-Mei Wu. A Lemierre syndrome variant caused by *Klebsiella pneumoniae*. *J Formos Med Assoc*. 2012 Jul;111(7):403-5. Epub 2012 Apr 8. (SCI, IF = 1.000. MEDICINE, GENERAL & INTERNAL R/C=78/151)
 15. Zai-Ting Yeh, Rayleigh Ping-Ying Chiang, Shih-Chung Kang, Chia-Hsuan Chiang. Development of the Insomnia Screening Scale Based on ICSD-II. *Int J Psychiatry Clin Pract*. 2012,Oct; 16(4):259-67. (SCI, IF=0.448. PSYCHIATRY R/C=124/135)
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<http://www.ncbi.nlm.nih.gov/pubmed/22902356>
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18. Rayleigh Ping-Ying Chiang, M.D, M.M.S, Yuh-Chyun Chiang, M.D., M.Sc., Kai-Nan Lin, M.D. Ph.D. Intratympanic Dexamethasone on Cochlear Blood Flow in Guinea Pigs. Indian Journal of Otolaryngology Head and Neck Surgery. 2013 Dec;65(Suppl 3):650-3 (SCI IF=0.054, OTORHINOLARYNGOLOGY R/C=43/43) DOI: 10.1007/s12070-012-0552-3.
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29. Chiang RP, Lin CF, Li YJ, Hsu MH. Editorial Invitation. Letter to Editor. The Importance of Sleep for Governmental Sectors, General Population and Industry – **Asia-Pacific Economic Cooperation (APEC) Sleep Technology Agenda**. ([https://www.smr-v-journal.com/article/S1087-0792\(18\)30168-0/fulltext](https://www.smr-v-journal.com/article/S1087-0792(18)30168-0/fulltext), <https://www.ncbi.nlm.nih.gov/pubmed/30528061>) *Sleep Med Rev*. 2019 Feb;43:135-136. (SCI, **IF = 10.602**, CLINICAL NEUROLOGY R/C=4/79, NEUROSCIENCES R/C=15/251).
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