



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

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 Vice-President of **University of Kang Ning**, and 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 best 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 was also contributing to the ***Asia-Silicon Valley Project*** for Taiwan.

Major Performances (include Social Impacts & Public Services)

- ② 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.
- ② 2013: Dr. Chiang passed the board certification of the “***Grandparent Somnologist***” 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.

- ④ 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 in front of the government officers from the 21 economies of APEC in the Senior Officer Meeting (SOM) in August 2017.

- ④ **Major Coordinator, ISSTA Consortium** for Horizon 2020 under European Commission.
For sleep technology research and development, Dr. Chiang co-ordinated 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*.

- ④ **Vice-CEO, Center of Sleep Medicine, Taipei Veterans General Hospital, Taiwan**

- ④ **Invited Editor-in-Chief, “Health and Wellness Industry Handbook Series”, Springer, the Netherlands, 2017-2019.**

- ④ 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.
 - ⊙ **Guest Editor** (2018) **and editorial board** (2016 till now), *Frontiers in Human Neuroscience* (*SCI IF* = 3.634) a prestigious academic journal on neuroscience based in U.K..
 - ⊙ **Editorial board** of official journal of American Academy of Sleep Medicine (AASM), the *Journal of Clinical Sleep Medicine* (*SCI IF* = 3.71)
 - ⊙ 2011/06 – 2015/08, 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)*

Honors and Awards



- 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

Published Papers

1. Chiang PY, Hsu SD, Chou YY. Epithelial-Myoepithelial Carcinoma of the Parotid Gland - Case Report. J Taiwan Otolaryngol Head Neck Surg 2000; 35(5): 340-43.
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]
13. Kuang-Cheng Chang, M.D., Yih-Jeng Tsai, M.D., Yu-Chi Lin, M.D., Rayleigh Ping-Ying Chiang, M.D., M.M.S. Transnasal Endoscopic Dacryocystorhinostomy. J Taiwan Otolaryngol Head Neck Surg, 2011; Oct. 46(5):10 -17.
14. Yih-Jeng Tsai, Yu-Chi Lin, Dor-Ji Harnd, 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)
16. Yi-Ju Tsai, Ph.D., Kannan Ramar, M.D., Yau-Jen Liang, Ph.D., Chao-Yun Chi, M.D., Tzu-Chen Lung, MSc, Po-Jung Tseng, Ming-Ying Wu, Kuan-Chiao Chien, Nelson Powell, M.D., D.D.S., Edward Weaver, M.D., Fei-Peng Lee, M.D., Chia-Mo Lin, M.D., Rayleigh Ping-Ying Chiang, M.D., M.M.S. . Peripheral Neuropathology of the Upper Airway in Obstructive Sleep Apnea. Sleep Medicine Review 2013 Apr. 17(2):161-8. (SCI, IF = 9.141, CLINICAL NEUROLOGY R/C=4/79, NEUROSCIENCES R/C=15/251). 2012 Aug 16. [Epub ahead of print]
PubMed online publication:
<http://www.ncbi.nlm.nih.gov/pubmed/22902356>
17. Rayleigh Ping-Ying Chiang, Chia-Mo Lin, Nelson Powell, Yuh-Chyun Chiang, Yih- Jeng Tsai. Systematic Analysis of Cephalometry in Asian Children with Obstructive Sleep Apnea Syndrome. Laryngoscope 2012 Aug. 122(8):1867–1872.(SCI, IF=2.032. OTORHINOLARYNGOLOGY R/C=7/43) [Epub ahead of print]
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.
19. Chiang, R. P.-Y., Huang, C.-T. and Tsai, Y.-J.. Melatonin reduces median nerve injury-induced mechanical hypersensitivity via inhibition of microglial p38 mitogen-activated protein kinase activation in rat cuneate nucleus. JOURNAL OF PINEAL RESEARCH 2013 Mar; 54(2):232-44. (SCI = 7.812, PHYSIOLOGY R/C=4/79, ENDOCRINOLOGY & METABOLISM

- R/C=9/121, NEUROSCIENCES R/C=21/251,) [Epub ahead of print, 2012 Nov. 12.]
20. P.-H. Chiu, K. Ramar, K.-C. Chen, Y.-J. Tsai, C.-M. Lin, Y.-C. Chiang, C.-Y. Lu, & R. P.-Y. Chiang. Can Pillar Suturing Promote Efficacy of Adenotonsillectomy for Pediatric OSAS? - a Prospective Randomized Controlled Trial. *Laryngoscope*. 2013 Oct;123(10):2573-7 [Epub ahead of print]. (SCI, IF=2.032, OTORHINOLARYNGOLOGY R/C=7/43)
 21. Yu-Ting Hsu, Po-Han Chiu, Yen-Kung Chen, Rayleigh Ping-Ying Chiang. Mucosa-Associated Lymphoid Tissue Lymphoma in Mouth Floor Presenting with Sjögren's Syndrome and Giant Cell Tumor of Spinal Tendon. *Kaohsiung Journal of Medical Sciences*. 2014 June:30(5), 316-8, Letter to editor. (SCI IF=0.805. MEDICINE, RESEARCH & EXPERIMENTAL R/C=104/121)
 22. Pohan Chiu, Shih Chun-Wen, Tsai Yih-Jeng, Chiang Rayleigh Ping-Ying. Laryngeal Ultrasound for Assessment of Supraglottic Laryngitis with Abscess. *International Journal of Phonosurgery and Laryngology*. 2014;3(1): 24-7.
 23. Chun-Ta Huang, Rayleigh Ping-Ying Chiang, Chih-Li Chen, Yi-Ju Tsai. Sleep Deprivation Aggravates Median Nerve Injury-Induced Neuropathic Pain and Enhances Microglial Activation by Suppressing Melatonin Secretion, *Sleep*. 2014 Sep 1;37(9). (SCI, IF = 5.051)
 24. Chi JC, Chiang RP, Chou TY, Shu CH, Shiao AS, Lin CM. The role of lateral pharyngoplasty in obstructive sleep apnea syndrome. *European Archive of Otorhinolaryngology Head and Neck Surgery* 2015 Feb;272(2):489-96. (SCI IF = 1.608)
 25. Lipford MC, Ramar K, Liang YJ, Lin CW, Chao YT, An J, Chiu CH, Tsai YJ, Shu CH, Lee FP, Chiang RP. **Serotonin as a possible biomarker in obstructive sleep apnea**. *Sleep Medicine Review*, 2016 Aug;28:125-32. (SCI, IF = 9.141, CLINICAL NEUROLOGY R/C=7/192=3.65%, NEUROSCIENCES R/C=17/252).

26. Chang TS, Chiang RP. Total Analysis of Clinical Factors for Surgical Success of Adenotonsillectomy in Pediatric OSAS. European Archive of Otorhinolaryngology Head and Neck Surgery, 2017 Jan; 274(1):561-566. (SCI IF = 1.608)
27. Editorial Invitation. Enliven: Surgery and Transplantation. Computational Upper Airway Aerodynamics. July 2017.
28. Sun, Ming-Hui ; Liao, Yaping Joyce ; Lin, Che-Chen; Chiang, Rayleigh; Chen, Kuan-Jen ; Kao, Ling-Yuh; Liu, Chun-Hsiu; Wei, James Cheng-Chung Wei. Association between obstructive sleep apnea and optic neuropathy: A Taiwanese Population-Based bidirectional cohort Study. Eye - Nature (SCI IF = 2.213, 19/56 Ophthalmology), 2017 April. under consideration.