List of Publications in 2022

WPI papers

(1) Original Articles

1. Ikeda Y, Morita E, Muroi K, Arai, Y, Ikeda, T, Takahashi T, Shiraki N, Doki S, Hori D, Oi Y, Sasahara S, Ishihara A, Matsumoto S, Yanagisawa M, Satoh M, Matsuzaki I (2022) Relationships between sleep efficiency and lifestyle evaluated by objective sleep assessment: Sleep Epidemiology Project at University of Tsukuba. *Nagoya J. Med. Sci.* **84**(3):554-569. doi:10.18999/nagjms.84.3.554

2. Fifel K, Deboer T (2022) Heterogenous electrophysiological responses of functionally distinct striatal subregions to circadian and sleep-related homeostatic processes. *Sleep* **45**(1). doi:10.1093/sleep/zsab230

3. Park I, Kokudo C, Seol J, Ishihara A, Zhang SM, Uchizawa A, Osumi H, Miyamoto R, Horie K, Suzuki C, Suzuki Y, Okura T, Diaz J, Vogt KE, Tokuyama K (2022) Instability of non-REM sleep in older women evaluated by sleep-stage transition and envelope analyses. *Front. Aging Neurosci.* **14**. doi:10.3389/fnagi.2022.1050648

4. Hori D, Arai Y, Morita E, Ikeda Y, Muroi K, Ishitsuka M, Ikeda T, Takahashi T, Doki S, Oi Y, Sasahara S, Ishihara A, Matsumoto S, Kanbayashi T, Yanagisawa M, Satoh M (2022) Morning preference is associated with subjective happiness among Japanese female workers: A moderation analysis by sleep characteristics from the SLEPT study. *Chronobiol. Int.* **39**(5):690-703. doi:10.1080/07420528.2022.2028801

5. Nemoto T, Irukayama-Tomobe Y, Hirose Y, Tanaka H, Takahashi G, Takahashi S, Yanagisawa M, Kanbayashi T (2022) Effect of sevoflurane preconditioning on sleep reintegration after alteration by lipopolysaccharide. *J. Sleep Res.* **31**(5). doi:10.1002/advs.202203170

6. Fifel K, Yanagisawa M, Deboer T (2022) Mechanisms of sleep/wake regulation under hypodopaminergic state: Insights from MitoPark mouse model of Parkinson's disease. *Adv. Sci.* **10**(5). doi:10.1002/advs.202203170

7. Fujiyama T, Takenaka H, Asano F, Miyanishi K, Hotta-Hirashima N, Ishikawa Y, Kanno S, Seoane-Collazo P, Miwa H, Hoshino M, Yanagisawa M, Funato H (2022) Mice lacking cerebellar cortex and related structures show a decrease in slow-wave activity with normal non-REM sleep amount and sleep homeostasis. *Front. Behav. Neurosci.* **16**. doi:10.3389/fnbeh.2022.910461

8. Fifel K, El Farissi A, Cherasse Y, Yanagisawa M (2022) Motivational and valence-related modulation of sleep/wake behavior are mediated by midbrain dopamine and uncoupled from the homeostatic and circadian processes. *Adv. Sci.* **9**(24). doi:10.1002/advs.202200640

9. Han G, Matsumoto S, Diaz J, Greene RW, Vogt KE (2022) Dihydropyridine calcium blockers do not interfere with non-rapid eye movement sleep. *Front. Neurosci.* **16**. doi:10.3389/fnins.2022.969712

10. Suzuki-Abe H, Sonomura K, Nakata S, Miyanishi K, Mahmoud A, Hotta-Hirashima N, Miyoshi C, Sato TA, Funato H, Yanagisawa M (2022) Metabolomic and pharmacologic analyses of brain substances associated with sleep pressure in mice. *Neurosci. Res.* **177**:16-24. doi:10.1016/j.neures.2021.11.008

11. Bjorness TE, Greene RW (2022) Arousal-mediated sleep disturbance persists during cocaine abstinence in male mice. *Front. Neurosci.* **16**. doi:10.3389/fnins.2022.868049

12. Xu JJ, Zhou R, Wang GD, Guo Y, Gao X, Zhou S, Ma CY, Chen L, Shi BH, Wang HY, Wang FC, Liu, Q (2022) Regulation of sleep quantity and intensity by long and short isoforms of SLEEPY kinas5. *Sleep* **45**(11). doi:10.1093/sleep/zsac198

13. Wang GD, Li Q, Xu JJ, Zhao S, Zhou R, Chen ZK, Jiang WT, Gao X, Zhou S, Chen ZY, Sun QZ, Ma

CY, Chen L, Shi BH, Guo Y, Wang HY, Wang X, Li HY, Cai T, Wang YB, Chen ZN, Wang FC, Liu QH (2022) Somatic genetics analysis of sleep in adult mice. *J. Neurosci.* **42**(28):5617-5640. doi:10.1523/JNEUROSCI.0089-22.2022

14. Adachi M, Nagaura Y, Eto H, Kondo H, Kato C (2022) The impact of sleep-wake problems on health-related quality of life among Japanese nursing college students: a cross sectional survey. *Health Qual. Life Outcomes* **20**(1). doi:10.1186/s12955-022-02063-0

15. Miyazaki S, Kawano T, Yanagisawa M, Hayashi Y (2022) Intracellular Ca2+ dynamics in the ALA neuron reflect sleep pressure and regulate sleep in Caenorhabditis elegans. *iScience* **25**(6). doi:10.1016/j.isci.2022.104452

16. Hasegawa E, Miyasaka A, Sakurai K, Cherasse Y, Li YL, Sakurai T (2022) Rapid eye movement sleep is initiated by basolateral amygdala dopamine signaling in mice. *Science* **375**(6584):994-1000. doi:10.1126/science.abl6618

17. Kim M, Seol J, Sato T, Fukamizu Y, Sakurai T, Okura T (2022) Effect of 12-week intake of nicotinamide mononucleotide on sleep quality, fatigue, and physical performance in older Japanese adults: A randomized, double-blind placebo-controlled study. *Nutrients* **14**(4). doi:10.3390/nu14040755

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19. Kim SJ, Hotta-Hirashima N, Asano F, Kitazono T, Iwasaki K, Nakata S, Komiya H, Asama N, Matsuoka T, Fujiyama T, Ikkyu A, Kakizaki M, Kanno S, Choi J, Kumar D, Tsukamoto T, Elhosainy A, Mizuno S, Miyazaki, S, Tsuneoka, Y, Sugiyama, F, Takahashi, S, Hayashi, Y, Muratani, M, Liu, Q, Miyoshi, C, Yanagisawa M, Funato H (2022) Kinase signalling in excitatory neurons regulates sleep quantity and depth. *Nature* **612** (7940):512-518. doi:10.1038/s41586-022-05450-1

20. Chen ZK, Dong H, Liu CW, Liu WY, Zhao YN, Xu W, Sun X, Xiong YY, Liu YY, Yuan XS, Wang B, Lazarus M, Cherasse Y, Li YD, Han F, Qu WM, Ding FF, Huang ZL (2022) A cluster of mesopontine GABAergic neurons suppresses REM sleep and curbs cataplexy. *Cell Discov.* **8**(1):115. doi:10.1038/s41421-022-00456-5

21. Tone D, Ode KL, Zhang QH, Fujishima H, Yamada RG, Nagashima Y, Matsumoto K, Wen ZQ, Yoshida SY, Mitani TT, Arisato Y, Ohno R, Ukai-Tadenuma M, Garcon JY, Kaneko M, Shi, S, Ukai H, Miyamichi K, Okada T, Sumiyama K, Kiyonari H, Ueda HR (2022) Distinct phosphorylation states of mammalian CaMKII beta control the induction and maintenance of sleep. *PLoS. Biol.* **20**(10). doi:10.1371/journal.pbio.3001813

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23. Ogawa T, Kajiyama Y, Ishido H, Chiba S, Revankar GS, Nakano T, Taniguchi S, Kanbayashi T, Ikenaka K, Mochizuki H (2022) Decreased cerebrospinal fluid orexin levels not associated with clinical sleep disturbance in Parkinson's disease: A retrospective study. *PLoS One* **17**(12). doi:10.1371/journal.pone.0279747

24. Yamamoto H, Nagumo Y, Ishikawa Y, Irukayama-Tomobe Y, Namekawa Y, Nemoto T, Tanaka H, Takahashi G, Tokuda A, Saitoh T, Nagase H, Funato H, Yanagisawa M (2022) OX2R-selective orexin agonism is sufficient to ameliorate cataplexy and sleep/wake fragmentation without inducing drug-seeking behavior in mouse model of narcolepsy. *PLoS One* **17**(7). doi:10.1371/journal.pone.0271901

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29. Nagayama M, Aritake T, Hino H, Kanda T, Miyazaki T, Yanagisawa M, Akah, S, Murata N (2022) Detecting cell assemblies by NMF-based clustering from calcium imaging data. *Neural Netw.* **149**:29-39. doi:10.1016/j.neunet.2022.01.023

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31. Miyagawa T, Tanaka S, Shimada M, Sakai N, Tanida K, Kotorii N, Kotorii T, Ariyoshi Y, Hashizume Y, Ogi K, Hiejima H, Kanbayashi T, Imanishi A, Ikegami A, Kamei Y, Hida A, Wada Y, Miyamoto M, Takami M, Kondo H, Tamura Y, Taniyama Y, Omata N, Mizuno T, Moriya S, Furuya H, Kato M, Kato K, Ishigooka J, Tsuruta K, Chiba S, Yamada N, Okawa M, Hirata K, Kuroda K, Kume K, Uchimura N, Kitada M, Kodama T, Inoue Y, Nishino S, Mishima K, Tokunaga K, Honda M (2022) A rare genetic variant in the cleavage site of prepro-orexin is associated with idiopathic hypersomnia. *npj Genom. Med.* **7**(1). doi:10.1038/s41525-022-00298-w

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33. Wianny F, Dzahini K, Fifel K, Wilson CRE, Bernat A, Dolmazon V, Misery P, Lamy C, Giroud P, Cooper HM, Knoblauch K, Procyk E, Kennedy H, Savatier P, Dehay C, Vezoli J (2022) Induced cognitive impairments reversed by grafts of neural precursors: A longitudinal study in a macaque model of Parkinson's disease. *Adv. Sci.* **9**(10). doi:10.1002/advs.202103827

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(3) Proceedings

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(4) Other English Articles

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