Liu, Yo-Tsen

PERSONAL DETAILS

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CURRENT APPOINTMENTS

Feb 2024 – present	Division of Epilepsy, Department of Neurology, Neurological Institute, Taipei Veterans General Hospital, Taiwan • Chief
Dec 2013 – present	Division of Epilepsy, Department of Neurology, Neurological Institute, Taipei Veterans General Hospital, Taiwan • Attending physician
Aug 2020 – present	Faculty of Medicine, National Yang-Ming University School of Medicine, Taiwan • Associate Professor
Sep 2019 – present	Taiwan Society of Neurological Rare Diseases (SNeRD-T) • President

EDUCATION

Sep 2010 – Dec 2014	PhD Department of Molecular Neurosciences, UCL Institute of Neurology, Queen Square, London, U.K.
Oct 1994 – Jun 2001	M.D. Department of Medicine, College of Medicine, National Taiwan University, Taipei, Taiwan.

HONORS/AWARDS/SCHOLARSHIPS

2023	Award of the best paper of Annual meeting of Taiwan Epilepsy Society, Taipei. (The second)
2021	The Best Oral presentation and Poster Masterpiece of the 17th Asian Oceanian Congress of Neurology (2021 AOCN), Taipei, Taiwan
2020	Award of the best attending physician elected by subinterns and clerks, Taipei Veterans General Hospital, Taiwan
2018	Award of the masterpiece poster of the 4th Taiwan International Congress of Parkinson Disease and Movement Disorders (TIC-PDMD), Taipei, Taiwan
2017	Award of the best paper of 2017 Annual meeting of the Taiwan Movement Disorder Society, Taipei, Taiwan

2017	Award of the best paper of 14th Annual meeting of Taiwan Epilepsy Society, Taipei, Taiwan.
2016	Award of the best paper of 21th Taiwan Neurology Society Congress, Taichung, Taiwan.
2014	Award of the best paper of 19th Taiwan Neurology Society Congress, Taipei, Taiwan.
2011	Member of Wellcome Trust Advanced Course "Exome Sequencing, Genotyping and ArrayCGH", Wellcome Trust Sanger Institute (WTSI), Hinxton, Cambridgeshire, U.K.
2010	Winner of Studying Abroad Scholarship, Ministry of Education, Executive Yuan, Taiwan.

RESEARCH INTERESTS

My research interests are focused on genetics and pathogenesis of a range of neurogenetic diseases with particular interests in epilepsy and paroxysmal movement disorders and neurodegenerative diseases. In the attempt to pursue patient's genetic diagnosis, I employed a comprehensive approach which diverse techniques of the next-generation sequencing (NGS), including whole genome sequencing, whole exome sequencing and RNA sequencing. I am also dictated in multiomic studies which including the genomics, radiomics, and deep phenotypes, of specific neurogenetic diseases. For example, epilepsy, TTR amyloidosis, and Fabry disease.

PUBLICATIONS (Selected)

*Corresponding author, # equal contribution

1. **Improvement in Executive Function and Dual-task Cost in People With Parkinson Disease: A Randomized Controlled Trial.** Zhou JH, Wang RY, **Liu YT**, Cheng SJ, Liu HH, Yang YR*. J Neurol Phys Ther, Accepted on 2024 May 12.(SCI)
2. **Magnetic resonance radiomics-derived sphericity correlates with seizure in brain arteriovenous malformations**. Lin JY, Lu CF, Hu YS, Yang HC, **Liu YT**, Loo JK, Lee KL, Liao CY, Chang FC, Liou KD, Lin CJ*. Eur Radiol. 2024 Jan;34(1):588-599.(SCI)
3. **Monogenic causes in familial stroke across intracerebral hemorrhage and ischemic stroke subtypes identified by whole exome sequencing.** Chang LH, Chi NF, Chen CY, Lin YS, Hsu SL, Ysai JY, Hunag HC, Lin CJ, Chung CP, Tung CY, Jeng CJ, Lee YC, **Liu YT**$^{*\#}$, Lee IH$^{*\#}$. Cell Mol Neurobiol. 2023 Aug;43(6):2769-2783.(SCI)
4. **Plasma Matrix Metalloproeteinase-9 Is Associated with Seizure and Angioarchitecture Changes in Brain Arteriovenous Malformations**. **Liu YT**, Lee CC, Chang FC, Liou KD, Lin CC*. Mol Neurobiol. 2022 Oct;59(10):5925-5934.(SCI)
5. **Clinical characteristics and long-term outcome of cerebral cavernous malformations-related epilepsy.** Shih YC, Chou CC, Peng SJ, Yu HY, Hsu SPC, Lin CF, Lee CC, Yang HC, Chen YC, Kwan SY, Chen C, Wang SJ, Lin CJ, Lirng JF, Shih YH, Yen DJ, Liu YT*. Epilepsia. 2022 Aug;63(8):2056-2067.(SCI)
6. **Novel Lissencephaly-Associated DCX Variants in the C-terminal DCX Domain Affect Microtubule Binding and Dynamics**. Lin JR$^{\#}$, Cheng JF$^{\#}$, Liu YT, Hsu TR, Lin KM, Chen C, Lin CL, Tsai MH, Tsai JW*. Epilepsia. 2022 May;63(5):1253-1265.(SCI)
7. **The clinical and imaging features of FLNA positive and negative periventricular nodular heterotopia.** Lu YT, Hsu CY, Liu YT, Chang CK, Chuang YC, Lin CJ, Chang KP, Ho CJ, Ng CC, Lim KS, Tsai MH*. Biomed J. 2022 Jun;45(3):542-548.(SCI)
8. **Acute withdrawal of new-generation antiepileptic drugs in epilepsy monitoring units: Safety and efficacy.** Chou CC, Lin PT, Yen DJ, Yu HY, Kwan SY, Chen C, Liu YT, Shih YC, Lin SY*. Epilepsy Behav. 2021 Apr;117:107846.(SCI)

9. **Cellular secretion and cytotoxicity of transthyretin mutant proteins underlie late onset amyloidosis and neurodegeneration.** R B Ibrahim, SY Yeh, KP Lin, F Ricardo, TY Yu, CC Chan, JW Tsai*#, YT Liu*#. Cell Mol Life Sci. 2020 Apr;77(7):1421-1434. (SCI)
10. **Gamma Knife radiosurgery for cerebral cavernous malformation.** Lee CC, Wang WH, Yang HC, Lin CJ, Wu HM, Lin YY, Hu YS, Chen CJ, Chen YW, Chou CC, Liu YT, Chung WY, Shiau CY, Guo WY, Hung-Chi Pan D, Hsu SPC. Sci Rep. 2019 Dec 24;9(1):19743. (SCI)
11. **Biophysical characterization and pharmacological modulation of Transthyretin Ala97Ser mutant**. YT Liu, YJ Yen, F Ricardo, Y Chang, PH Wu, SJ Huang, KP Lin*, TY Yu*. Ann Clin Transl Neurol. 2019 Oct;6(10):1961-1970.(SCI)
12. **Novel SCA19/22-associated KCND3 mutations disrupt human KV4.3 protein biosynthesis and channel gating.** Hsiao CT, Fu SJ, Liu YT, Liao YC, Lu YH, Huang JJ, Chien YC, Zhong CY, Tsai PC, Tang CY, Lee YC, Soong BW*, Jeng CJ*. Hum Mutat. 2019 Nov;40(11):2088-2107.
13. **PDXK mutations cause polyneuropathy responsive to PLP supplementation.** Chelban V, Wilson MP, Warman Chardon J, Vandrovcova J, Zanetti MN, Zamba-Papanicolaou E, Efthymiou S, Pope S, Conte MR, Abis G, Liu YT, Tribollet E, Haridy NA, Botía JA, Ryten M, Nicolaou P, Minaidou A, Christodoulou K, Kernohan KD, Eaton A, Osmond M, Ito Y, Bourque P, Jepson JEC, Bello O, Bremner F, Cordivari C, Reilly MM, Foiani M, Heslegrave A, Zetterberg H, Heales SJR, Wood NW, Rothman JE, Boycott KM, Mills PB, Clayton PT, Houlden H*; Care4Rare Canada Consortium; SYNaPS Study Group. Ann Neurol. 2019 Aug;86(2):225-240.
14. **Clinical and genetic profiles of hereditary transthyretin amyloidosis in Taiwan.** Chao HC, Liao YC, Liu YT, Guo YC, Chang FP, Lee YC*, Lin KP*. Ann Clin Transl Neurol. 2019 Apr 9;6(5):913-922.
15. **PRRT2 Missense Mutations Cluster near C-terminus and Frequently Lead to Protein Mislocalization.** Tsai MH, Nian FS, Hsu MH, Liu WS, Liu YT, Liu C, Lin PH, Hwang DY, Chuang YC, Tsai JW*. Epilepsia. 2019 May;60(5):807-817. (SCI)
16. **Contributions of Animal Models to the Mechanisms and Therapies of Transthyretin Amyloidosis.** Ibrahim RB, Liu YT, Yeh SY, Tsai JW. Front Physiol. 2019 Apr 2;10:338. doi: 10.3389/fphys.2019.00338. eCollection 2019. Review. (SCI)
17. **Aberrant sensory gating of the primary somatosensory cortex contributes to the motor circuit dysfunction in paroxysmal kinesigenic dyskinesia**. Liu YT, Chen YC, Kwan SY, Chou CC, Yu HY, Yen DJ, Liao KK, Chen WT, Lin YY, Chen RS, Jih KY, Lu SF, Wu YT, Wang PS, Hsiao FJ*. Front Neurol. 2018 Oct 15;9:831. (SCI)
18. **Transthyretin Ala97Ser in Chinese-Taiwanese patients with familial amyloid polyneuropathy: genetic studies and phenotype expression.** Liu YT, Lee YC, Yang CC, Chen ML, Lin KP. J Neurol Sci. 2008 Apr 15;267(1-2):91-9. (SCI)