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Dr. Li-Wei Kuo received his B.S., M.S., and Ph.D. degrees in Electrical Engineering from National Taiwan University in 2001, 2003, and 2008, respectively. He conducted his postdoctoral researches in the Center for Optoelectronic Biomedicine at National Taiwan University College of Medicine and the Advanced MRI section at the Laboratory of Functional and Molecular Imaging in National Institute of Neurological Disorders and Stroke at the National Institutes of Health in USA. Since September 2011, he has joined the National Health Research Institutes in Taiwan and led the MR Neurolmaging Lab (MRNIL). His research interests include the MR neuroimaging techniques, brain network analysis, and development of imaging methodology and MR system hardware.

Selected publications

- 1. Ezequiel Farrher, Farida Grinberg, <u>Li-Wei Kuo</u>, Kuan-Hung Cho, Richard Buschbeck, Ming-Jye Chen, Hsuan-Han Chiang, Chang-Hoon Choi, N. Jon Shah. "Dedicated diffusion phantoms for the investigation of free water elimination and mapping: insights into the influence of T2 relaxation properties," *NMR in Biomedicine*, 2019. (Accepted)
- 2. <u>Li-Wei Kuo</u>, Pei-Sheng Lin, Shih-Yen Lin, Ming-Fang Liu, Hengtai Jan, Hsin-Chien Lee and Sheng-Chang Wang*. "Functional Correlates of Resting-state Connectivity in the Default Mode Network of Heroin Users on Methadone Treatment and Medication-free Therapeutic Community Program," *Frontiers in Psychiatry*, 10:381, 6 June 2019, doi: 10.3389/fpsyt.2019.00381.
- 3. Kuan-Hung Cho, Sheng-Min Huang, Chang-Hoon Choi, Ming-Jye Chen, Hsuan-Han Chiang, Richard P. Buschbeck, Ezequiel Farrher, N. Jon Shah, Ruslan Garipov, Ching-Ping Chang, Hsu Chang and <u>Li-Wei Kuo</u>. "Development, integration and use of an ultra-high-strength gradient system on a human-size 3 T magnet for small animal MRI," *PLoS One*, 14(6):e0217916, 3 Jun 2019, doi: 10.1371/journal.pone.0217916.
- Shih-Yen Lin, Chi-Chun Lee, Yong-Sheng Chen, <u>Li-Wei Kuo</u>. "Investigation of functional brain network reconfiguration during vocal emotional processing using graph-theoretical analysis," *Social Cognitive and Affective Neuroscience*, 14(5):529-538, 31 May 2019, doi: 10.1093/scan/nsz025.
- 5. Chia-Wen Chiang, Shih-Yen Lin, Kuan-Hung Cho, Kou-Jen Wu, Yun Wang and

- <u>Li-Wei Kuo</u>. "Effects of signal averaging, gradient encoding scheme, and spatial resolution on diffusion kurtosis imaging: An empirical study using 7T MRI," *Journal of Magnetic Resonance Imaging*, 50(5):1593-1603, November 2019, doi: 10.1002/jmri.26755.
- Shih-Yen Lin, Chen-Pei Lin, Tsung-Jen Hsieh, Chung-Fen Lin, Sih-Huei Chen, Yi-Ping Chao, Yong-Sheng Chen, Chih-Cheng Hsu and <u>Li-Wei Kuo</u>. "Multiparametric Graph Theoretical Analysis Reveals Altered Structural and Functional Network Topology in Alzheimer's Disease," *Neuroimage: Clinical*, 22:101680, 2019, doi: 10.1016/j.nicl.2019.101680.
- 7. <u>Li-Wei Kuo</u>, Li-Chen Chiu, Win-Lin Lin, Jiun-Jung Chen, Guo-Chung Dong, Sheng-Fu Chen and Gin-Shin Chen. "Development of a MRI-compatible high-intensity focused ultrasound phased array transducer dedicated for breast tumor treatment," *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, 65(8):1423-1432, August 2018, doi: 10.1109/TUFFC.2018.2841418.
- 8. G. Russell Glenn, <u>Li-Wei Kuo</u>, Yi-Ping Chao, Chu-Yu Lee, Joseph A. Helpern and Jens H. Jensen. "Mapping the Orientation of White Matter Fiber Bundles: A Comparative Study between Diffusion Tensor Imaging (DTI), Diffusional Kurtosis Imaging (DKI), and Diffusion Spectrum Imaging (DSI)," *American Journal of Neuroradiology*, March 3 2016, doi: 10.3174/ajnr.A4714.
- Kou-Jen Wu, Seong-Jin Yu, Chia-Wen Chiang, Kuan-Hung Cho, Yu-Wei Lee, B. Linju Yen, <u>Li-Wei Kuo</u> and Yun Wang. "Transplantation of human placenta-derived multipotent stem cells reduces ischemic brain injury in adult rats," *Cell Transplantation*, 24(3):459-70, 2015, doi: 10.3727/096368915X686922.
- 10. <u>Li-Wei Kuo</u>, Wen-Yang Chiang, Fang-Cheng Yeh, Van J. Wedeen, Wen-Yih I. Tseng. "Diffusion Spectrum MRI Using Body-centered-cubic and Half-sphere Sampling Schemes," *Journal of Neuroscience Methods*, 212(1) p143-155, 2013, doi: 10.1016/j.jneumeth.2012.09.028.