## Chih-Kuang Yeh, Ph.D. (葉秩光)



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Dr. Chih-Kuang Yeh received his B.S., M.S. and Ph.D. degrees in biomedical engineering from Chung-Yuan Christian University, Chung-Li, Taiwan, in 1995 and National Cheng-Kung University, Tainan, Taiwan, in 1997, and in electrical engineering from National Taiwan University, Taipei, Taiwan in 2004, respectively. He joined Professor Katherine Ferrara's research group in the University of California at Davis as a visiting researcher from 2003 to 2004. In 2005, he joined Department of Biomedical Engineering and Environmental Sciences in National Tsing Hua University from 2005 as faculty member. He is a distinguished professor at National Tsing Hua University since 2015. His current research interests include ultrasound molecular theranostics and ultrasound physics. Dr. Yeh collaborated with researchers in the areas of biology, genes, and cancer and assessed tumor theranostics using self-designed ultrasound imaging system and contrast agents. Dr. Yeh proposed the concept of smart, multifunctional ultrasound contrast agents capable of facilitating focus ultrasound while serving as drug carrying vehicles and protecting drugs from rapid degradation for tumor treatment. In 2011, Dr. Yeh and his graduated students won the National Innovation Award from institute for biotechnology and medicine industry of Taiwan and promoted his research outcomes (ultrasound contrast agents) into clinical applications. In 2013, Dr. Yeh and his graduated students started up a biotech company (Trust Bio-sonics Inc.) focusing on ultrasound contrast agents at Innovation Incubation Center of National Tsing Hua University. Now, he is a senior member of IEEE, technical program committee of IEEE International Ultrasonics Symposium (IUS) and served as convener of Biomedical Engineering of Taiwan Ministry of Science and Technology since 2019.

## **Representative Publications:**

- 1. Y. J. Ho, J. P. Li, C. H. Fan, H. L. Liu\*, and C. K. Yeh\* (2020, Jul). Ultrasound in Tumor Immunotherapy: Current Status and Future Developments. Journal of Controlled Release, 323(10), 12-23.
- Y. S. Huang, C. H. Fan, N. Hsu, N. H. Chiu, C. Y. Wu, C. Y. Chang, B. H. Wu, S. R. Hong, Y. C. Chang, Anthony Y. T. Wu, Vanessa Guo, Y. C. Chiang, W. C. Hsu, L. Y. Chen, Charles P. K. Lai, C. K. Yeh\*, and Y. C. Lin\* (2020, Feb). Sonogenetic

Modulation of Cellular Activities Using an Engineered Auditory-sensing Protein. Nano Letters, 20(2), 1089-1100.

- E. L. Chang, C. Y. Ting, P. H. Hsu, Y. C. Lin, E. C. Liao, C. Y. Huang, Y. C. Chang, H. L. Chan, C. S. Chiang, H. L. Liu, K. C. Wei, C. H. Fan and C. K. Yeh (2017, Jun). Angiogenesis-targeting Microbubbles Combined with Ultrasound-Mediated Gene Therapy in Brain Tumors. Journal of Controlled Release, vol. 255, pp. 164-175.
- C. H. Fan, E. L. Chang, C. Y. Ting, Y. C. Lin, E. C. Liao, C. Y. Huang, Y. C. Chang, H. L. Chan, K. C. Wei, and C. K. Yeh (2016, Nov). Folate-Conjugated Gene-Carrying Microbubbles with Focused Ultrasound for Concurrent Blood-Brain Barrier Opening and Local Gene Delivery. Biomaterials, vol. 106, pp. 46-57.
- Y. Y. Liao, W. N. Lee, M. J. Lee, W. S. Chen, H. J. Chiou, T. T. Kuo, and C. K. Yeh (2015, Apr). Carpal Tunnel Syndrome: US Strain Imaging for Diagnosis. Radiology, vol. 275, no. 1, pp. 205-214.