



KSUM 2023

The 54th Annual Congress of Korean Society of Ultrasound in Medicine

May 11 (Thu) – 13 (Sat), 2023 | Coex, Seoul, Korea

KSUM 2023 Invited Speaker's CV

All fields marked with an asterisk (*) should be completed.

Name*	Chih-Chung Huang	
EDUCATIONAL BACKGROUND		
Country*	Taiwan	
Current Affiliation*	National Cheng Kung University	
Specialty*	Medical ultrasound imaging and medical device design	
Education* (100 words)	2003~2006: Ph.D., Biomedical Engineering, Chung Yuan Christian University, Taiwan 2002~2003: M.S., Biomedical Engineering, Chung Yuan Christian University, Taiwan 1998~2002: B.S., Biomedical Engineering, Chung Yuan Christian University, Taiwan	
Post-Graduate Education* (100 words)	2006-2007: Research Fellow, Biomedical Engineering, University of Southern California, USA	
Academic Appointments* (200 words)	2018~present Professor, Department of Biomedical Engineering, National Cheng Kung University, Taiwan 2015~2018: Associate Professor, Department of Biomedical Engineering, National Cheng Kung University, Taiwan 2013~2015: Assistant Professor, Department of Biomedical Engineering, National Cheng Kung University, Taiwan 2012~2013: Associate Professor, Department of Electrical Engineering, Fu Jen Catholic University, Taiwan 2008-2012: Assistant Professor, Department of Electrical Engineering, Fu Jen Catholic University, Taiwan	



Scientific Publications*

(200 words)

1. Hsin Huang, Wei-Ting Chang, and **Chih-Chung Huang***, “High-Spatiotemporal-Resolution Visualization of Myocardial Strains Through Vector Doppler Estimation: A Small-Animal Study” *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, Vol. 69, No.6, pp. 1859-1870, 2022.
2. Wei-Yu Tsai, Yuan-Yu Hsueh, Pei-Yu Chen, Kuo-Shu Hung, and **Chih-Chung Huang***, “High-Frequency Ultrasound Elastography for Assessing Elastic Properties of Skin and Scars” *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, Vol. 69, No.6, pp. 1871-1880, 2022.
3. Xi-Rui Qiu, Mu-Ting Wang, Li-Chieh Kuo, Hsiu-Yu Hsu, Tai-Hua Yang, Fong-Chin Su, and **Chih-Chung Huang***, “Estimating the neovascularity of human finger tendon through high-resolution ultrasound micro-Doppler imaging” *IEEE Transactions on Biomedical Engineering*, Vol. 69, No.8, pp. 2667-2678, 2022. (selected as a feature article)
4. Guo-Xuan Xu, Pei-Yu Chen, Xiaoning Jiang, and **Chih-Chung Huang***, “Visualization of Human Skeletal Muscle Anisotropy by Using Dual-Direction Shear Wave Imaging” *IEEE Transactions on Biomedical Engineering*, Vol. 69, No.9, pp. 2745-2754, 2022. (selected as a feature article)
5. Jui-Ying Lu, Po-Yang Lee, and **Chih-Chung Huang***, “Improving Image Quality for Single-Angle Plane Wave Ultrasound Imaging With Convolutional Neural Network Beamformer” *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, Vol. 69, No. 4, pp.1326-1336, 2022.
6. I-Chieh Wang, Hsin Huang, Wei-Ting Chang, and **Chih-Chung Huang***, “Wall Shear Stress Mapping for Human Femoral Artery Based on Ultrafast Ultrasound Vector Doppler Estimations” *Medical Physics*, Vol. 48, pp. 6755-6764, 2021.
7. Pei-Yu Chen, Tai-Hua Yang, Li-Chieh Kuo, Hsiu-Yu Hsu, Fong-Chin Su, and **Chih-Chung Huang***, “Evaluation of hand tendon elastic properties during rehabilitation through high frequency ultrasound shear elastography” *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, Vol. 68, No.8, pp. 2716-2726, 2021.
8. Chien-Chang Weng, Pei-Yu Chen, Dean Chou, Cho-Chiang Shih, and **Chih-Chung Huang***, “High Frequency Ultrasound Elastography for Estimating the Viscoelastic Properties of the Cornea Using Lamb Wave Model”, *IEEE Transactions on Biomedical Engineering*, Vol. 68, No.9, pp. 2637-2644, 2021.
9. Yi-Chen Li, Thau-Yun Shen, Chien-Cheng Chen, Wei-Ting Chang, Po-Yang Lee, and **Chih-Chung Huang***, “Automatic Detection of Atherosclerotic Plaque and Calcification from Intravascular Ultrasound Images by Using Deep Convolutional Neural Networks” *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, Vol. 68, No.5, pp. 1762-1777, 2021.
10. Pei-Yu Chen, Tai-Hua Yang, Li-Chieh Kuo, Cho-Chiang Shih, and **Chih-Chung Huang***, “Characterization of hand tendons through high-frequency ultrasound elastography” *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, Vol. 67, No.1, pp. 37-48, 2020(SCI).
11. Fang-Yi Lay, Pei-Yu Chen, Hsiang-Fan Cheng, Yu-Min Kuo, and **Chih-Chung Huang***, “Ex Vivo Evaluation of Mouse Brain Elasticity Using High-Resolution Ultrasound Elastography” *IEEE Transactions on Biomedical Engineering*, Vol. 66, No. 12, pp. 3426-3435, 2019(SCI).
12. Hsin-Che Li, Pei-Yu Chen, Hsiang-Fan Cheng, Yu-Min Kuo, and **Chih-Chung Huang***, “In vivo Visualization of Brain Vasculature in Alzheimer’s Disease Mice by High-Frequency Micro-Doppler Imaging” *IEEE Transactions on Biomedical Engineering*, Vol. 66, No. 12, pp. 3393-3401, 2019(SCI), 2019. (selected as a feature article)
13. Chao-Chuan Chang, Pei-Yu Chen, Hsin Huang, and **Chih-Chung Huang***, “In vivo visualization of vasculature in adult zebrafish by using high-frequency ultrafast ultrasound imaging”, *IEEE Transactions on Biomedical Engineering*, Vol. 66, No. 6, pp. 1742-1751, 2019(SCI). (selected as a feature article)