Biography:

Dr. Yuan joined the Department of Biomedical Engineering in the Chinese University of Hong Kong as an Assistant Professor in January 2020. He received the PhD degree in Electronic Engineering from the Chinese University of Hong Kong in December 2008. He was a research associate at the Department of Biomedical Engineering, Johns Hopkins University, with a joint appointment to the Department of Neurologic Surgery, Mayo Clinic.

His research focused on the high-resolution biomedical imaging and AI-assisted image processing technologies for translational applications. He has pioneered several innovative bio-photonics imaging probes/devices to enable translational applications of high-resolution optical endomicroscopy imaging, such as portable ultrahigh-resolution endoscopic OCT system, ultracompact OCT microprobe, multifunctional deep-brain microneedle and 3D volumetric airway balloon imaging technology etc. To date, he has published 40 peer-reviewed articles, including Nature Communications and Science Advances, with a total citation about 2000+ and an H-index 24 (according to Google Scholar).

He currently serves as vice-president of Hong Kong Optical Engineering Society (HKOES). He also serves on the editorial board of several international journals in the area of bioengineering and medicine.

Representative Publications

1. **Yuan W**, Chen D, Sarabia-Estrada R, Guerrero- Cázares H, Li D, Quiñones-Hinojosa A, Li XD, Theranostic OCT microneedle for fast ultrahigh-resolution deep-brain imaging and efficient laser ablation in vivo, *Science Advances*, 2020.

2. **Yuan W**, Brown R, Mitzner W, Yarmus L, Li XD, Super-achromatic monolithic microprobe for ultrahigh-resolution endoscopic optical coherence tomography at 800 nm, *Nature Communications*, 2017.

3. **Yuan W**, Kut C, Liang W, Li XD, Robust and fast characterization of OCT-based optical attenuation using a novel frequency-domain algorithm for brain cancer detection, *Scientific Reports*, 2017.

4. **Yuan W**, Mavadia-Shukla J, Xi J, Liang W, Yu X, Yu S, Li XD, Optimal operational conditions for supercontinuum-based ultrahigh-resolution endoscopic OCT imaging, *Optics Letters*, 2016.