

Lan Huang, PhD: Dr. Lan Huang is Professor of Physiology & Biophysics in School of Medicine, University of California, Irvine. Her research focuses on developing novel, integrated mass spectrometry-based proteomic strategies to characterize dynamic proteomes of macromolecular protein complexes and understand their functions, particularly those in the ubiquitin-proteasome system. Through the years, the Huang lab has developed various novel methodologies to capture, purify and quantify protein-protein interactions of protein complexes in living cells. In addition, her lab has developed a new class of cross-linking reagents, i.e. sulfoxide-containing MS-cleavable cross-linkers (e.g. DSSO), and thus established a robust cross-linking mass spectrometry (XL-MS) platform enabling fast and accurate identification of cross-linked peptides. These XL-MS strategies have been successfully employed to define protein interaction landscapes and derive structural topologies of protein complexes in vitro and in vivo. The strategies developed by her group have proven highly effective as general proteomic tools for studying protein complexes. She has served on various committees for multiple professional societies including ASMS, ASBMB and US HUPO organizations. She serves as an Ad hoc reviewer for many journals and funding agencies. In addition, she has served as co-organizers for numerous international conferences including US HUPO annual meeting, ASMS Sanibel meeting and Gordon conferences. She has been an Editorial Board member of Molecular & Cellular Proteomics since 2007 and an Associate Editor of FASEB BioAdvances since 2019.