Speaker Bio

Dr. Zhong-Ru Xie received his Ph.D in Biomedical Informatics at National Yang-Ming University. He was a Ph.D student in Dr. Ming-Jing Hwang's lab at IBMS, Academia Sinica. He is now an accomplished computational biologist and an Assistant Professor at the School of Electrical and Computer Engineering at the University of Georgia. With over a decade of interdisciplinary research experience, Dr. Zhong-Ru Xie specializes in virtual drug discovery, structural bioinformatics, and the development of innovative machine learning methods for biomedical applications.

Dr. Zhong-Ru Xie has made significant contributions to the field of structure-based drug design, including the identification of EED as a target protein in chemo-resistant prostate cancer and the repurposing of the FDA-approved drug nicardipine for potential cancer treatment. Their pioneering work led to the development of DeepDISE, a deep-learning-based DNA-binding site prediction algorithm, and several graph-based and kinetic models to predict protein-protein association rates and small molecule binding site interactions.

Dr. Zhong-Ru Xie has published over 30 peer-reviewed papers and 3 book chapters and is an inventor on a patent for novel therapeutic compounds. Their work continues to push the boundaries of computational drug discovery and systems biology, making them a leading voice in the intersection of bioinformatics and pharmaceutical innovation.