Speaker Bio

Dr. En-Yu Lai is a researcher specializing in bioinformatics, statistical genetics, and causal inference, with a focus on developing advanced computational and statistical methods for analyzing large-scale biomedical data. Her research integrates high-dimensional omics datasets with rigorous statistical frameworks to uncover meaningful biological insights, particularly in proteomics, genetic epidemiology, and mediation analysis.

Her recent work centers on causal inference in complex traits, including mediation analysis and pleiotropy detection, as demonstrated in her publications in Briefings in Bioinformatics (2024), Bioinformatics (2023), and Statistics in Medicine (2020). She has contributed to the development of composite tests for multimediator models and statistical frameworks for identifying genetic risk factors.

Dr. Lai has extensive experience analyzing large-scale health datasets, including the Taiwan Biobank and the Taiwan Precision Medicine Initiative (TPMI), applying novel statistical approaches to address key questions in genetic epidemiology and disease etiology. Her interdisciplinary research bridges bioinformatics, biostatistics, and computational biology, advancing methodologies that enhance the interpretation of genomic data and improve the understanding of complex disease mechanisms.