



Speaker Bio



Dr. Hung-Hsin Chen serves as an Assistant Research Fellow at the Institute of Biomedical Sciences, Academia Sinica, focusing on the development and application of statistical and computational methods in human genomics. His research is dedicated to enhancing the understanding of the genetic mechanisms underlying human diseases, with particular emphasis on large-scale biobank analyses. Utilizing genomic and multi-omic approaches, Dr. Chen explores genetic risk factors associated with a range of rare and complex diseases, including cardiovascular issues like dyslipidemia, arrhythmia, and cardiomyopathy; metabolic disorders such as diabetes and obesity; neurodegenerative diseases like Alzheimer's; and infectious diseases including pneumonia and COVID-19. His research interests extend to methodologies that leverage genetic relatedness, shared genomic segments (identical-by-descent, IBD), and longitudinal data from large biobanks linked to electronic health records. He is actively involved in several significant initiatives, including the Taiwan Precision Medicine Initiative (TPMI), Taiwan Biobank, Vanderbilt University Medical Center's biobank (BioVU), All of Us, and the UK Biobank. Additionally, Dr. Chen is particularly interested in utilizing longitudinal multi-omic profiles, such as DNA methylation, transcriptome, and metabolome, to uncover the genetic and molecular signatures associated with disease development and progression.

