Mr. Jia Liu Successfully Defends Ph.D. Thesis on "Molecular Mechanisms of CAPON-Mediated Tau Pathology Induced by TFE3 Deficiency and the Therapeutic Potential of Chinese Medicine Compounds for Alzheimer's Disease"

Prof. Li Min's research postgraduate student, Mr. Jia Liu, from the Mr. & Mrs. Ko Chi Ming Centre for Parkinson's Disease Research in the School of Chinese Medicine, successfully passed his Ph.D. thesis oral examination on July 29th, 2025. His research provides solid evidence that TFE3 deficiency leads to impaired learning and memory depending on the CAPON-mediated Tau pathology, and that the Chinese medicine compound Corynoxine could activate TFE3, thus decreasing the accumulated CAPON, leading to the alleviation of Tauopathy and eventually rescuing the memory deficits in Alzheimer's Disease (AD) Tau mice. The research team is keen to develop further pharmacological interventions targeting CAPON and TFE3, which may provide promising therapy for the treatment of Tauopathy-related dementia, including AD.

Mr. Jia Liu and the oral examination board members.

(From left to right): Prof. Jin Liu, Associate Professor, School of Chinese Medicine, Hong Kong Baptist University; Prof. Hiu-Yee Kwan, Associate Professor, School of Chinese Medicine, Director of Teaching and Research Division, Hong Kong Baptist University; Prof. Min Li, Principal Supervisor of Mr. Sam Chun Sum Yuen, Chair Professor, Dean (School of Chinese Medicine), Ma Pak Leung Endowed Professor in Innovative Neuromedicine, School

of Chinese Medicine, Hong Kong Baptist University; Mr. Jia Liu; Prof. Ke-Qiang Ye, Endowed Professor and Dean, Department of Biology, Faculty of Life & Health Sciences,Advanced Technology, Shenzhen Institute of Advanced Technology; Prof. Wei-Xing Zong, Chair Professor, Department of Chemical Biology, Rutgers University; Prof. Wai-Po Chong, Associate Professor, School of Chinese Medicine, Hong Kong Baptist University.