

## **AI Application in Psychiatry**

The global prevalence of psychiatric disorders is increasing at an alarming rate. Adding to it, there has been an increase in mental health problems during covid-19 pandemic with a rise in suicide, loneliness and substance use. Artificial intelligence (AI) can act as a potential solution to help identify and even diagnose the disorders. The use of AI is increasingly being employed in various fields of mental health, and especially with the benefits of low costs and a broader reach of individuals. In this session we have 4 experts who will bring us innovative talks about the most updated studies in the field of AI and Psychiatry. Professor Albert Yang will talk about how to apply AI to electroencephalography (EEG) and brain magnetic resonance imaging (MRI) imaging big data to establish precision psychiatry. Then Professor Chih-Sung Liang will speak about the comparison between the differential diagnoses made by Chat GPT-4, Bard, Llama-2 and multi-center psychiatrists in Taiwan Psychiatric Licensing Examination. Professor Hsin-An Chang will discuss about how AI and machine learning can play a role in the diagnosis of depression. Lastly, Professor Taishiro Kishimoto will share with us his study on developing a software as a medical device (SaMD) for psychiatric disorders, with the involvement of AI, machine learning and several physiological biomarkers in depression.