

Seminar Series on Artificial Intelligence Applications in Health Science and Dental Science

Date: 29 May 2026

Venue: Hall 2, Hong Kong Chu Hai College

Signal processing and machine learning for non-invasive blood glucose estimation

Time: 10:30 - 11:30

Prof. Bingo Wing-Kuen Ling received his BEng and MPhil degrees from the HKUST at 1997 and 2000, respectively, and the PhD degree from the HK PolyU at 2003. Then, he joined the King's College London as a Lecturer at 2004. Next, he got the Principal Lectureship and the Readership from the University of Lincoln at 2010 and 2011, respectively. Finally, he got the Hundred-People Plan Distinguished Professorship from the Guangdong University of Technology and the Tenured Professorship from the Tsientang Institute for Advanced Study at 2012 and 2025, respectively. He is an IET Fellow, a China Young Thousand People Plan Distinguished Professor and a Guangdong Province Pearl Scholar. His research interests include the optimization theory, the time frequency analysis, the machine learning, the nonlinear digital signal processing systems and the human signal processing.



Prof. LING Wing-Kuen Bingo
Tenured Professor,
Tsientang Institute of Advanced Study

Exploring the Applications of Artificial Intelligence in Biology

Time: 11:30 - 12:00

This talk introduces applications of AI in biology, focusing on B-cell epitope prediction and RNA-protein binding prediction/design. It highlights how deep learning integrates sequence and structural information to improve biological target identification and support downstream molecular design.



Dr. ZHU Yulin

Assistant Professor,
Department of Computer Science,
Hong Kong Chu Hai College

Towards Accurate Drug-Target Affinity Prediction: A Graph Foundation Model Perspective

Time: 13:45 - 14:15

This talk introduces drug-target interaction (DTI) prediction underpins computational drug discovery to the accurate estimation of the drug-protein binding affinity. Despite advances from deep learning, current methods suffer from limited molecular topology capture, simplistic multimodal fusion, and missing end-to-end deployment pipelines. This work proposes a graph foundation model based DTI prediction framework with a full processing-to-deployment workflow, which outperforms baseline models on three standard benchmarks and delivers a stable, usable Gradio prediction platform.



Mr. XU Yitao

Ph.D. Student,
Department of Statistics and Data Science,
The Chinese University of Hong Kong



Mr. FU Jiangyun

Master Graduate,
Master of Science in Applied Artificial Intelligence,
Hong Kong Chu Hai College

Building a Multimodal VLM Agent for Intelligent Oral Health Image Analysis

Time: 14:15 - 14:45

Dr. Harris Sik-Ho Tsang is an Assistant Professor at Hong Kong Chu Hai College, specializing in Computer Vision and Deep Learning. His research focuses on advanced image and video processing, including quality assessment and enhancement. By integrating Vision-Language Models (VLM), Dr. Tsang is dedicated to applying multimodal architectures to real-world challenges. He is currently focused on enhancing the precision and automation of intelligent medical and oral health image analysis through innovative AI frameworks.



Dr. TSANG Sik Ho, Harris

Master Graduate, Master of Science in
Applied Artificial Intelligence,
Hong Kong Chu Hai College

Microwave Technologies in Healthcare: Detection and Monitoring Applications

Time: 14:45 - 15:15

Andy Chi Ho Chan received the M.Sc. degree in Electronic Information Engineering from the Hong Kong Polytechnic University (PolyU) in 2012 and is currently pursuing the Ph.D. degree in Biomedical Engineering (BME) at PolyU. He was a Satellite and Transmission Engineer with PCCW Global Ltd. from 2011 to 2020. His research interests focus on the Internet of things, Wireless Biosensors, Artificial Intelligence, Machine Learning, Big Data Analytics, and Channel Coding.



Mr. CHAN Chi Ho Andy

Ph.D. Student,
Department of Biomedical Engineering,
Hong Kong Polytechnic University