

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

Date: 27 May 2026

Venue: Saint Francis University



**Prof. XIAO Qian**

Professor, School of Nursing,  
Capital Medical University

## Artificial Intelligence Applications in Nursing

Time: 09:45 - 10:45

Qian Xiao is a professor specializing in nursing informatics, with a focus on intelligent clinical nursing and digital nursing education reform. She is a Fellow of both the American Academy of Nursing and the Hong Kong Academy of Nursing and Midwifery. As PI, she has undertaken 19 national and municipal research projects, published over 200 papers, served as journal editorial board members/reviewers, and holds more than 20 patents and software copyrights. She has also received numerous academic awards.

## Generative AI at the Bedside: Implications for Clinical Nursing Practice

Time: 11:00 - 11:30

Professor Graeme D. Smith is currently a Professor of Nursing in the S. K. Yee School of Health Sciences, St. Francis University, Hong Kong. He has been a Fellow of the European Academy of Nursing Science since 2003. He graduated from Queen Margaret University in Edinburgh with a BA in Nursing Studies in 1989. His Doctoral studies at University of Edinburgh arose from an interest in psychological healthcare, where he is a Honorary Professor. He is also an Adjunct Professor at La Trobe University and Griffith University in Australia. Other research interests include health literacy, chronic illness, loneliness in older people, stress/resilience in nursing and academic resilience. He was an editor of the Journal of Clinical Nursing (2012-2022), prior to joining Journal of Advanced Nursing in 2022. Professor Smith has published textbooks on nurse education and gastrointestinal nursing.

## Leveraging LLM for healthcare education, research and practice

Time: 11:30 - 12:00

Prof. Vivian Hui is currently an assistant professor at the School of Nursing, the Hong Kong Polytechnic University, and an adjunct faculty at the School of Nursing, University of Pittsburgh, USA. Her research interests intersect health technology innovation, domestic violence, cancer survivorship, and nursing informatics. She is one of the pioneers in the application of AI in nursing and develops Large Language Model (LLM)-driven interventions for traumatic populations in the world. Prof. Hui mainly focuses on trauma survivorship research by computational methods on digital text-based data. She employed LLMs to design and evaluate a series of domain-specific chatbots in collaboration with clinical experts, targeting diverse healthcare applications.

## Applications of Artificial Intelligence in Dentistry

Time: 12:00 - 12:30

Dr. Hsung earned his B.Eng. (Hons.) and Ph.D. in electronic and information engineering from Hong Kong Polytechnic University in 1998. He joined PolyU as a Research Fellow (1999), later became a postdoc fellow in Biomedical and tissue engineering at HKU Dentistry (2012), and then a Professor at Guangdong University of Technology (2018). Now, he is an Associate Professor at HKCHC and an Honorary Associate Professor at HKU. His work focuses on both the theory and applications of digital signal processing. Dr. Hsung will share how artificial intelligence is being applied to dentistry.

## Beyond the Clinic: Empowering Personalized Healthcare with Multi-Modal AI and Pervasive Sensing

Time: 14:00 - 15:00

Prof. Guoliang Xing, a CUHK Information Engineering professor, researches systems and Embedded AI, focusing on IoT, cyber-physical systems, sensor networks, and wireless communications. His work enables transformative applications in healthcare (early Alzheimer's diagnosis), autonomous driving (infrastructure-assisted navigation), and environmental sustainability (volcano monitoring). By integrating theory with large-scale deployments, his group develops intelligent, connected technologies adopted by industry to address societal challenges through robust, real-time embedded intelligence.

## Virtual Patient Simulation System

Time: 15:15 - 15:45

Prof. Lawrence Wing Chi CHAN, Department of Health Technology and Informatics, PolyU, and his research team developed a "Virtual Patient Simulation System" that facilitates clinical decision-making through simulated cases and predictive analytics, enabling early detection and personalized treatment. The system adapts to changing conditions, surpassing static diagnostics and bringing unprecedented precision and efficiency, especially in costly cancer care.

## A Vision-Language Foundation Model for Comprehensive Brain Tumor Diagnosis from Preoperative Multimodal Data

Time: 15:45 - 16:15

Dr. Liangqiong Qu is an Assistant Professor at the School of Computing and Data Science, The University of Hong Kong. She leads the HKU-HealthAI Lab, where her team focuses on medical AI and medical image computing, developing advanced computational methods to support healthcare applications and improve clinical decision-making.

## Multimodal AI and its application in Health Analytics

Time: 16:15 - 16:45

Billy Chiu received his PhD in the Language Technology Laboratory, University of Cambridge, UK. He is currently an Assistant Professor in the Division of AI, Lingnan University. His research spans across representation learning and lexical semantics in biomedical literature and their applications to downstream tasks. His work has been published in Journal of BMC bioinformatics, Journal of biomedical semantics, as well as the IEEE Transactions on Knowledge and Data Engineering (TKDE).



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**Prof. XING Guoliang**

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