

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

**Date: 28 May 2026**

**Venue: Hall 2, Hong Kong Chu Hai College**



**Prof. LAM, Walter Yu Hang**  
Clinical Associate Professor in  
Prosthodontics,  
The University of Hong Kong

## The use of Artificial Intelligence in Dentistry

Time: 09:45 - 10:45

Prof. Walter Lam is a Tenured Clinical Associate Professor and prosthodontist. He holds UK, Australian, and Hong Kong fellowships. With over 100 publications and international awards, he advances dental education, advises FDI and ISO committees, and edits premier dental journals. His expertise centers on artificial intelligence, CAD/CAM systems, digital dentistry, and mobile health. His award-winning team develops innovative digital health solutions to optimize workflows, enhance patient outcomes, and promote equitable oral healthcare globally.



**Prof. YANG Teddy Weifa**

Clinical Assistant Professor,  
Oral and Maxillofacial Surgery, Faculty of Dentistry,  
The University of Hong Kong

## Clinical Applications of Artificial Intelligence in Oral Surgery

Time: 11:00 - 11:30

Dr. Teddy Yang is a Clinical Assistant Professor at Faculty of Dentistry, The University of Hong Kong. With clinical expertise in oral and maxillofacial surgery and a deep focus on digital innovation, he bridges the gap between surgical practice and artificial intelligence. Dr. Yang has published and lectured extensively on AI-driven imaging, virtual surgical planning, and imaged-guided procedures. Today, he will explore the real-world clinical applications of AI that are reshaping oral surgery.



**Dr. CHEUNG Chung Wai,  
James**

Research Assistant Professor, Department of  
Biomedical Engineering,  
The Hong Kong Polytechnic University

## Intelligent Sensing in Biomedical Engineering Applications

Time: 11:30 - 12:00

Dr. James Chung-Wai Cheung is an Assistant Professor of Biomedical Engineering at The Hong Kong Polytechnic University. His research integrates 3D ultrasound, wearable technologies, and AI to transform healthcare for the ageing population. With over 70 peer-reviewed papers and 15 global patents across six jurisdictions, Dr. Cheung is a recognized leader in his field. To date, his inventions and academic contributions have been honored with 28 international and local awards.



**Dr. CHAU Chun Wang,  
Reinhard**

Co-Founder and CEO,  
Dentomi Limited

## Applied AI in Action: Transforming Community Health with Smartphone-Powered Oral Health Detection

Time: 12:00 - 12:30

Dr. Chun Wang (Reinhard) Chau, Founder and CEO of Dentomi Limited. A visionary in AI-driven preventive dentistry, Reinhard translated his award-winning PhD research into GumAI — an innovative mHealth platform now empowering community oral health screening and aging-in-place across Hong Kong and beyond.



**Prof. TSOI Ah Chung**

Emeritus Professor,  
University of Wollongong

## Deep Reinforcement Learning Technologies for Human Machine Interactions - Opportunities in Healthcare and Dentistry

Time: 14:00 - 15:00

Human Machine Interactions (HMI) have been applied to Healthcare in easing administrative burden, enhancing patient education, and 24/7 symptom screening, while in Dentistry it is more on the diagnostics, and treatment planning. Current and future developments in deep reinforcement learning would empower much further applications of HMI to both Healthcare and Dentistry, but these must conform to regulatory requirements before their widespread deployments.



**Prof. HUANG Bingding**

Distinguished Professor,  
School of Artificial Intelligence,  
Shenzhen Technology University

## Artificial Intelligence, Medical Big Data, and Precision Medicine

Time: 15:15 - 15:45

Prof. Bingding Huang is a Distinguished Professor at School of Artificial Intelligence, Shenzhen Technology University. He got his PhD from Dresden Technical University Germany. His research mainly focuses on Medical Artificial Intelligence, Bioinformatics, Embodied AI surgery robot etc. He has published over 90 papers and have 35 patents.



**Prof. SHAN Zhiyi**

Clinical Assistant Professor in Orthodontics,  
Faculty of Dentistry,  
The University of Hong Kong

## Digital Innovations in Orthodontics: Leveraging the power of AI

Time: 15:45 - 16:15

Prof. Shan holds the position of Clinical Assistant Professor at the Faculty of Dentistry, The University of Hong Kong and serves as Deputy Postgraduate Program Director in Orthodontics. Prof. Shan's research interests centre on digital orthodontics, artificial intelligence in dentistry, and bioengineering in orthodontics. She has secured 2 GRFs and multiple internal grants as PI and contributed to the field through publications in high-impact journals.



**Prof. ZHANG Xiaolei**

Chair, Professor,  
Department of Stomatology,  
The Eighth Affiliated Hospital  
of Sun Yat-sen University

## AI in Operative Dentistry and Endodontics

Time: 16:15 - 16:45

Prof. Xiaolei Zhang, Chair of the Department of Stomatology, The Eighth Affiliated Hospital of Sun Yat-sen University; Chief Physician, Dual PhDs from Wuhan University and KU Leuven (Belgium); recruited via SYSU's "100 Talents Program"; Visiting scholar of Harvard University. Specializing in microscopic endodontics and aesthetic restorations. Research on endodontics and cranial-facial regeneration with 5 NSFC grants and over 50 peer-reviewed publications.