

CUHK-OLC Surgeon Education Program
2nd International Workshop on Mixed Reality in Orthopaedic Oncology
October 24-25, 2025

In orthopaedic oncology, errors in surgical planning and resection may increase the risk of tumor recurrence and compromise patients' survival. This practical workshop includes talks on CATS applications, interactive case discussions, and a main focus on the emerging Mixed Reality (MR) immersive technology in Orthopaedic Oncology. Participants (doctors and engineers) will learn the background of MR technology, its actual clinical applications, and its implementation in clinical settings. An MR hands-on training session is available to enhance participants' understanding of this immersive technology.

Date: Oct 24-25, 2025

Venue: Orthopaedic Learning Center, Prince of Wales Hospital, Hong Kong, China

Format: Lectures, case discussion, and Hands-on MR workshops

Organized by: Orthopaedic Oncology, Department of Orthopaedics and Traumatology, Prince of Wales Hospital, Hong Kong, China

Course Chairman:

- Dr Kwok Chuen WONG,
Orthopaedic Oncology, Department of Orthopaedics and Traumatology, Prince of Wales Hospital, Hong Kong, China

Faculties:

- Dr Solomon DADIA, Levin Center of Surgical Innovation & 3D Printings, Tel Aviv Sourasky Medical Center, Israel
- Dr Yujia GAO, Consultant surgeon at Division of Hepatobiliary & Pancreatic Surgery, Department of Surgery, National University Hospital (NUH), Singapore
- Dr Shintaro IWATA, Department of Musculoskeletal Oncology and Rehabilitation, National Cancer Center Hospital, Japan
- Prof. Hei Ming LAI, Clinical Assistant Professor, Department of Chemical Pathology, the Chinese University of Hong Kong, Hong Kong, China
- Mr. CK HUNG, Hospital Authority Head Office Information Technology & Health Informatics (HO IT&HI), Hong Kong, China
- Mr Louis SZE, CEO, Syngular Technology Limited, Hong Kong, China

Time		Title	Speaker
Oct 24, 2025			
08:00 – 08:25	20 mins	Registration	
08:25 – 08:30	5 mins	Welcome	KC Wong

08:30 – 09:00	30 mins	CATS overview & lessons learned	KC Wong
09:00 – 09:30	30 mins	Planned resection margin & custom reconstruction in the era of CATS	KC Wong
09:30 – 10:30	60 mins	Experience of The Levin Center for 3D Printing and Surgical Innovation	Solomon Dadia /Eran Golden (Israel)
10:30 – 10:45	15 mins	Tea break	
10:45 – 11:15	30 mins	Can we reconstruct any bone defects using 3D printing?	Solomon Dadia / Eran Golden
11:15 – 12:30	75 min	Case discussions (4-5 cases)	Participants & all speakers
12:30 – 12:35	5 mins	Group photo	All
12:35 – 13:30	55 mins	Lunch	
13:30 -14:00	30 mins	Spatial computing/design in MR for healthcare	Louis Sze
14:00 – 14:30	30 mins	Overview of Mixed Reality for Ortho Oncology Surgery	KC Wong
14:30 – 15:00	30 mins	Do Orthopaedic Oncologists Dream of Mixed Reality? Japanese Experience	Shintaro Iwata (Japan)
15:00 – 15:30	30 mins	Immersive technology in surgical application: Singapore experience	Dr Gao (Singapore)
15:30 – 16:00	30 mins	3D human microanatomy	HM Lai
16:00 – 16:30	30 mins	Hospital IT infrastructure for Mixed Reality application	CK Hung
16:30 -17:00	30 mins	Video Demo of preparing, building an MR case, and the features of the MR platform	KC Wong
17:00 – 17:05	5 mins	Roundup & feedback	
Oct 25, 2025			
08:30 – 09:00	30 mins	MR demo on bone-tumor 3D printed models	KC Wong
09:00 – 10:00	60 mins	Hands-on (case practice on physical models)	Participants
10:00 – 10:45	45 mins	Hands-on (case practice with IR track tools)	Participants
10:45 - 11:00	15 mins	Tea break	
11:00 – 11:30	30 mins	New headset / EM sensor tracking demo	KC Wong & Louis
11:30 – 12:00	30 mins	Demo of MR-guided screws placement of the sacrum / femoral neck	Solomon Dadia /Eran Golden
12:00– 12:05	5 mins	Roundup & feedback	

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