

# 1<sup>st</sup> Frontiers in Orthopaedic Research and Translation Symposium (FORTs): Innovations and Advancements in Orthopaedics – Integrating AI, Precision, Regeneration and Longevity

Orthopaedic Learning Centre, Department of Orthopaedics & Traumatology, CUHK

Date: September 20<sup>th</sup>, 2025

Day 1	Topic	Speaker
Saturday Inter-hospital Meeting (8:30-10:00 am)		
Chairman: Prof Patrick Shu Hang YUNG (Professor and Chairman, Dept of O&T, CUHK)		
Moderators: <ul style="list-style-type: none"><li>- Dr. Ronald Man Yeung WONG (Clinical Associate Professor and Director of Orthopaedic Learning Centre, Dept of O&amp;T, CUHK)</li><li>- Dr. Samuel Ka Kin LING (Clinical Assistant Professor, Dept of O&amp;T, CUHK)</li></ul>		
8:30 am	How Artificial Intelligence Will Change the Landscape in Orthopaedic Patient Treatment?	Prof Job DOORNBERG (Professor of Orthopaedics and Chairman of AI Think Tank UMCG; University of Groningen)
8:50 am	Bringing Augmented Reality to the OR	Prof Greg OSGOOD (Associate Professor and Chief of Orthopaedic Trauma, Department of Orthopaedic Surgery, Johns Hopkins University)
9:10 am	Computer Vision and AI for Holistic Modelling of Next-Gen Operating Rooms	Prof Nassir NAVAB (Professor and Director of Laboratories for Computer Aided Medical Procedures & Augmented Reality, Technical University of Munich; Member of Academia Europaea)
9:30 am	Discussion	
Registration and Coffee Break (10:00 am – 10:20 am)		

<b>Moderators:</b> <ul style="list-style-type: none"><li>- <b>Dr Ronald Man Yeung WONG</b> (Clinical Associate Professor and Director of Orthopaedic Learning Centre, Dept of O&amp;T, CUHK)</li><li>- <b>Prof Wing Hoi CHEUNG</b> (Professor, Dept of O&amp;T, CUHK)</li></ul>		
10:20 am	<b>Opening Ceremony and Welcome Speech</b>	<b>Prof Patrick Shu Hang YUNG</b> (Professor and Chairman, Dept of O&T, CUHK)
<b>Theme 1: Precision Orthopaedics and Innovative Technologies (POINT)</b>		
10:30 am	<b>Artificial Intelligence and Foundation Models in Orthopaedic Surgery</b>	<b>Prof Mathias UNBERATH</b> (John C. Malone Associate Professor, Department of Computer Science, Johns Hopkins University)
10:50 am	<b>From Basic Science to Clinical Translation with Magnesium Implants in Orthopaedic Surgery</b>	<b>Prof Ling QIN</b> (Choh-Ming Li Professor of Orthopaedics & Traumatology, Dept of O&T, CUHK; Member of Academia Europaea)
11:10 am	<b>Beyond Sight: AI-Enhanced AR, Acoustic Sensing &amp; Sonification for Precise Orthopaedic Surgery</b>	<b>Prof Nassir NAVAB</b> (Professor and Director of Laboratories for Computer Aided Medical Procedures & Augmented Reality, Technical University of Munich; Member of Academia Europaea)
11:30 am	<b>Developing New Software to Aid Orthopaedic Surgeons in Pre-operative Planning</b>	<b>Dr. Chun Sing CHUI</b> (Assistant Professor, Dept of O&T, CUHK)
11:45 am	<b>Discussion</b>	
<b>PHOTO SESSION (11:55 am – 12:05 pm)</b>		
<b>Lunch (12:05pm – 1:30pm) **Provided to All Registered Participants**</b>		
<b>Moderators:</b> <ul style="list-style-type: none"><li>- <b>Dr Ning ZHANG</b> (Assistant Professor, Dept of O&amp;T, CUHK)</li><li>- <b>Dr Wayne Yuk Wai LEE</b> (Assistant Professor, Dept of O&amp;T, CUHK)</li></ul>		
<b>Theme 2: Musculoskeletal Development, Health and Ageing Research (MDHAR)</b>		
1:30 pm	<b>Innovative Techniques in Orthopaedic Trauma</b>	<b>Prof Greg OSGOOD</b> (Associate Professor and Chief of Orthopaedic Trauma, Department of Orthopaedic Surgery, Johns Hopkins University)

1:50 pm	Research Advancements to Treat Sarcopenia in Fragility Fracture Patients	Dr. Ronald Man Yeung WONG (Clinical Associate Professor and Director of Orthopaedic Learning Centre, Dept of O&T, CUHK)
2:05 pm	What is Next for Robotics in Orthopaedic Surgery	Prof Mathias UNBERATH (John C. Malone Associate Professor, Department of Computer Science, Johns Hopkins University)
2:25 pm	Artificial Intelligence in Adolescent Idiopathic Scoliosis Research and Management	Dr Sheung Wai LAW (Clinical Professional Consultant, Dept of O&T, CUHK)
2:40 pm	Discussion	
Coffee Break (2:50 pm – 3:20 pm)		
Moderators: - Dr. Michael Tim Yun ONG (Clinical Assistant Professor, Dept of O&T, CUHK) - Dr. Pauline Po Yee LUI (Associate Professor, Dept of O&T, CUHK)		
Theme 3: Sports Medicine and Regenerative Therapy (SMART)		
3:20 pm	Novelties in Sports Medicine and Regenerative Therapy – From Basic to Clinical Translation	Prof Patrick Shu Hang YUNG (Chairman and S.H. Ho Professor of Orthopaedics & Sports Medicine, Dept of O&T, CUHK)
3:40 pm	Machine Learning in the Prediction of Rotator Cuff Repair Outcomes	Prof Job DOORNBERG (Professor of Orthopaedics and Chairman of AI Think Tank UMCG; University of Groningen)
4:00 pm	Innovative Use of 3D Printing in Foot & Ankle Surgery	Dr. Samuel Ka Kin LING (Clinical Assistant Professor, Dept of O&T, CUHK)
4:15 pm	Robotics in Knee Replacement Surgery and Post-op Rehabilitation to Provide Optimal Recovery	Dr. Michael Tim Yun ONG (Clinical Assistant Professor, Dept of O&T, CUHK)
4:30 pm	Discussion	
4:40 pm	Closing Speech	

**\*\*this is a tentative program and may be subject to changes\*\***