

# 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
<b>Saturday Inter-hospital Meeting (8:30-10:00 am)</b>		
<p><b>Chairman: Prof Patrick Shu Hang YUNG</b> (Professor and Chairman, Dept of O&amp;T, CUHK)</p> <p><b>Moderators:</b></p> <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>Dr. Samuel Ka Kin LING</b> (Clinical Assistant Professor, Dept of O&amp;T, CUHK)</li> </ul>		
8:30 am	<b>How Artificial Intelligence Will Change the Landscape in Orthopaedic Patient Treatment?</b>	<b>Prof Job DOORNBERG</b> (Professor of Orthopaedics and Chairman of AI Think Tank UMCG; University of Groningen)
8:50 am	<b>Bringing Augmented Reality to the OR</b>	<b>Prof Greg OSGOOD</b> (Associate Professor and Chief of Orthopaedic Trauma, Department of Orthopaedic Surgery, Johns Hopkins University)
9:10 am	<b>Computer Vision and AI for Holistic Modelling of Next-Gen Operating Rooms</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)
9:30 am	<b>Discussion</b>	
<b>Registration and Coffee Break (10:00 am – 10:20 am)</b>		

<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	<b>Research Advancements to Treat Sarcopenia in Fragility Fracture Patients</b>	<b>Dr. Ronald Man Yeung WONG</b> (Clinical Associate Professor and Director of Orthopaedic Learning Centre, Dept of O&T, CUHK)
2:05 pm	<b>What is Next for Robotics in Orthopaedic Surgery</b>	<b>Prof Mathias UNBERATH</b> (John C. Malone Associate Professor, Department of Computer Science, Johns Hopkins University)
2:25 pm	<b>Artificial Intelligence in Adolescent Idiopathic Scoliosis Research and Management</b>	<b>Dr Sheung Wai LAW</b> (Clinical Professional Consultant, Dept of O&T, CUHK)
2:40 pm	<b>Discussion</b>	
<b>Coffee Break (2:50 pm – 3:20 pm)</b>		
<b>Moderators:</b>		
<ul style="list-style-type: none"> <li>- <b>Dr. Michael Tim Yun ONG</b> (Clinical Assistant Professor, Dept of O&amp;T, CUHK)</li> <li>- <b>Dr. Pauline Po Yee LUI</b> (Associate Professor, Dept of O&amp;T, CUHK)</li> </ul>		
<b>Theme 3: Sports Medicine and Regenerative Therapy (SMART)</b>		
3:20 pm	<b>Novelties in Sports Medicine and Regenerative Therapy – From Basic to Clinical Translation</b>	<b>Prof Patrick Shu Hang YUNG</b> (Chairman and S.H. Ho Professor of Orthopaedics & Sports Medicine, Dept of O&T, CUHK)
3:40 pm	<b>Machine Learning in the Prediction of Rotator Cuff Repair Outcomes</b>	<b>Prof Job DOORNBERG</b> (Professor of Orthopaedics and Chairman of AI Think Tank UMCG; University of Groningen)
4:00 pm	<b>Innovative Use of 3D Printing in Foot &amp; Ankle Surgery</b>	<b>Dr. Samuel Ka Kin LING</b> (Clinical Assistant Professor, Dept of O&T, CUHK)
4:15 pm	<b>Robotics in Knee Replacement Surgery and Post-op Rehabilitation to Provide Optimal Recovery</b>	<b>Dr. Michael Tim Yun ONG</b> (Clinical Assistant Professor, Dept of O&T, CUHK)
4:30 pm	<b>Discussion</b>	
4:40 pm	<b>Closing Speech</b>	

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