Date: September 20, 2025

Venue: Charles K. Kao Auditorium, Hong Kong Science Park

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:** - **Dr. Ronald Man Yeung WONG** (Clinical Associate Professor and Director of Orthopaedic Learning Centre, Dept of O&T, CUHK) - **Dr. Samuel Ka Kin LING** (Clinical Assistant Professor, Dept of O&T, CUHK)		
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)		
Moderators: - **Dr Ronald Man Yeung WONG** (Clinical Associate Professor and Director of Orthopaedic Learning Centre, Dept of O&T, CUHK) - **Prof Wing Hoi CHEUNG** (Professor, Dept of O&T, CUHK)		
10:20 am	**Opening Ceremony and Welcome Speech**	**Prof Patrick Shu Hang YUNG** (Professor and Chairman, Dept of O&T, CUHK)
Theme 1: Precision Orthopaedics and Innovative Technologies (POINT)		
10:30 am	**Artificial Intelligence and Foundation Models in Orthopaedic Surgery**	**Prof Mathias UNBERATH** (John C. Malone Associate Professor, Department of Computer Science, Johns Hopkins University)
10:50 am	**From Basic Science to Clinical Translation with Magnesium Implants in Orthopaedic Surgery**	**Prof Ling QIN** (Choh-Ming Li Professor of Orthopaedics & Traumatology, Dept of O&T, CUHK; Member of Academia Europaea)
11:10 am	**Beyond Sight: AI-Enhanced AR, Acoustic Sensing & Sonification for Precise Orthopaedic Surgery**	**Prof Nassir NAVAB** (Professor and Director of Laboratories for Computer Aided Medical Procedures & Augmented Reality, Technical University of Munich; Member of Academia Europaea)
11:30 am	**Developing New Software to Aid Orthopaedic Surgeons in Pre-operative Planning**	**Dr. Chun Sing CHUI** (Assistant Professor, Dept of O&T, CUHK)
11:45 am	**Discussion**	
PHOTO SESSION (11:55 am – 12:05 pm)		
Lunch (12:05pm – 1:30pm) **Provided to All Registered Participants**		
Moderators: - **Dr Ning ZHANG** (Assistant Professor, Dept of O&T, CUHK) - **Dr Wayne Yuk Wai LEE** (Assistant Professor, Dept of O&T, CUHK)		
Theme 2: Musculoskeletal Development, Health and Ageing Research (MDHAR)		
1:30 pm	**Innovative Techniques in Orthopaedic Trauma**	**Prof Greg OSGOOD** (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****

Professor Nassir Navab

Professor and Director
Laboratories for Computer Aided Medical Procedures
Technical University of Munich (TUM)

Professor Nassir Navab is a full professor and director of the Laboratories for Computer Aided Medical Procedures at Technical University of Munich (TUM). He is also the director of Medical Augmented Reality summer school series. He is a Member of Academia Europaea and received the prestigious MICCAI Enduring Impact Award in 2021 and IEEE ISMAR Career Impact Award in October 2024. He received the IEEE ISMAR 10 Years Lasting Impact Award in 2015, the SMIT Technology Innovation Award in 2010, and the prestigious Siemens Inventor of the Year Award in 2001. He has been recently honored as Medical AR Pioneer in AWE XR hall of fame. He is also recognized for his pioneering work on digital surgical workflow modeling and representation starting in 2005 and on robotic imaging starting in 2012. He and his students have received many best paper awards including 16 awards at the prestigious MICCAI events. He is on the editorial board of many international journals, including IEEE TMI, MedIA and Medical Physics. Prof. Navab has authored hundreds of scientific publications and has filed over 60 international patents.

Professor Job Nicolaas Doornberg

Professor
Department of Orthopaedic Surgery and
Department of General Trauma Surgery
University Medical Center Groningen

Chairman of the AI Think Tank UMCG

Professor Job Doornberg, MD, PhD is an Orthopaedic Trauma Surgeon by trade, and he enjoys “Clinical Applications of Artificial Intelligence” as his scientific hobby. Working at both the Departments of Orthopaedic Surgery, as well as General Trauma, at the University Medical Centre Groningen (UMCG) in the Northern part of Holland, he specializes in fracture surgery: the full spectrum, from ‘simple’ wrist and ankle fractures to complex posttraumatic deformities with 3D planning in a Tertiary referral practice.

He is passionate about teaching new generations of surgeons the principles of fracture management as AO Chair of ‘the Basic Principles Course’, as well as serving as Chair at the AO Advanced ‘Tibial Plateau and Pilon’ Courses. As the Dutch AO Educational Officer, he has founded the brand-new AO Masters Course: ‘3D Osteotomies for Post-traumatic Deformities’. He was trained at the University of Amsterdam(UvA) Medical School and Orthopaedic Residency Program, including a3-year extra-curricular break for his “Academic Coming-of-Age”: a prestigious PhD Fulbright Fellowship at Harvard Medical School (HMS) &Massachusetts General Hospital (MGH), Boston USA. He was formalized in his Professorship “Clinical Applications of AI”: a quest to personalize fracture care based on data-driven risk stratification. This empowers our patients by facilitating true shared decision-making augmented with their personal probabilities of good outcomes. In this Academic setting, Job finds it a privilege to mentor students and PhDs to become critical surgeon-scientist.

Professor Greg Osgood

Associate Professor
Department of Orthopaedic Surgery
The Johns Hopkins Hospital

Dr. Greg Osgood is an assistant professor of orthopaedic surgery at the Johns Hopkins School of Medicine and Chief of Orthopaedic Trauma for the Department of Orthopaedic Surgery. His areas of expertise include orthopaedic trauma, with a special focus on fracture non-unions, pelvis and acetabular injuries, and fractures and surgical infections.

Dr. Osgood's undergraduate degree is from Harvard University. He completed medical school at Columbia University College of Physicians and Surgeons in New York. Dr. Osgood began his orthopaedic residency training with the United States Air Force and completed this training at New York Orthopaedic Hospital at the Columbia Presbyterian Medical Center. In 2005, he completed an Orthopaedic Trauma Fellowship at Harborview Medical Center in Seattle. He joined the Johns Hopkins faculty in 2010 as the organization"s first orthopaedic trauma faculty member.

Dr. Osgood's interests in orthopaedic trauma care include fracture non-unions, pelvis and acetabular injuries, routine fractures and surgical infections.

Dr. Osgood is a former major in the United States Air Force. He completed several combat deployments, providing orthopaedic trauma care to our military. Dr. Osgood is actively involved in numerous professional organizations, including being the associate editor of the Journal of Orthopaedic Trauma, a member of the AO North America Teaching Faculty, a member of the Education Committee of the Osteosynthesis and Trauma Care Foundation, Orthopaedic Trauma Association Military Committee, and the director of the Humanitarian Program of the Osteosynthesis and Trauma Care Foundation.

Professor Mathias Unberath

Associate Professor
Department of Computer Science
The Johns Hopkins University

Prof. Mathias Unberath is the John C. Malone Associate Professor in the Department of Computer Science with secondary appointments in the Departments of Ophthalmology and Otolaryngology—Head and Neck Surgery at the School of Medicine. He is also a core faculty member of the Laboratory for Computational Sensing and Robotics (LCSR) and the Malone Center for Engineering in Healthcare and an affiliate faculty member in the Institute for Assured Autonomy. Mathias is a member of the Data Science and AI Institute.

With his group, the Advanced Robotics and Computationally AugmenteD Environments (ARCADE) Lab, Unberath builds the future of computer-assisted medicine. Through synergistic research on imaging, computer vision, machine learning, and interaction design, he invents human-centered solutions that are embodied in emerging technologies such as mixed reality and robotics.

He has published more than 150 journal and conference articles and has received numerous awards, grants, and fellowships, including the National Institute of Biomedical Imaging and Bioengineering Trailblazer R21 Award, an NSF CAREER Award, a Google Research Scholar Award, a Johns Hopkins Career Impact Award, and an inaugural Johns Hopkins Data Science and AI Institute Junior Faculty Award.

While completing a bachelor's in physics and master's in optical technologies at the Friedrich-Alexander University of Erlangen-Nürnberg (FAU), Unberath also studied at the University of Eastern Finland as an Erasmus Mundus scholar in 2011 and joined Stanford University as a DLR-DAAD fellow in 2014. He received his PhD in computer science from FAU and graduated summa cum laude in 2017. Prior to joining as faculty, Unberath was an assistant research professor in the department and a postdoctoral fellow at LCSR.

Professor YUNG Shu-hang, Patrick

Professor and Chairman
Department of Orthopaedics and Traumatology
The Chinese University of Hong Kong

Director
Associate Dean (Mainland Affairs)
Faculty of Medicine
The Chinese University of Hong Kong

Recognised globally as a leader in Orthopaedic Sports Medicine, Professor YUNG Shu-Hang Patrick is the current Chairman of the Department of Orthopaedics and Traumatology, Associate Dean (Mainland Affairs), Faculty of Medicine, The Chinese University of Hong Kong, focused on Orthopaedics sport medicine and arthroscopy surgery. He serves as the leader of a lot of international & local centres of sports medicine & health science, including being the Past President of the Asian Federation of Sports Medicine (AFSM), Past President of the Hong Kong Association of Sports Medicine & Sports Science (HKASMSS), also as the Past President of the Hong Kong College of Orthopaedic Surgeons. He is also the Director of the Hong Kong Centre of Sports Medicine and Sports Science, The Hong Kong Jockey Club Sports Medicine and Health Sciences Centre, and the Centre of Neuromusculoskeletal Restorative Medicine (CNRM) of InnoHK cluster research centres.

Professor YUNG is a prominent researcher and educator at CUHK, leading a team focused on advancements in sports medicine and arthroscopy surgery. He has published over 180 scientific papers, establishing Hong Kong as a leader in the field. As head of the first Master Course in Sports Medicine & Health Science in Hong Kong and Asia, he has trained over 1,000 medical professionals since 2005 and conducted numerous training courses for both amateur sports enthusiasts and medical professionals.

In leadership roles, including Chairman of the Community Sports Committee, he advises the Hong Kong government on strategies to enhance sports participation and develop facilities. Professor YUNG's dedication has earned him numerous accolades. He was honored as "Justice of the Peace" and received the "Medal of Honour" in 2018 and 2021, respectively.

Professor QIN Ling

Professor
Department of Orthopaedics and Traumatology
The Chinese University of Hong Kong

Director
CUHU SZ-HK Innovation Technology Research Institute (Futian)

Professor Qin is Professor and Director of Musculoskeletal Research Laboratory in the Department of Orthopaedics & Traumatology, the Chinese University of Hong Kong. Professor Qin also holds joint professorship in Shenzhen Institutes of Advance Technology (SIAT) of Chinese Academy of Sciences (CAS) and serves Director of the Translational Medicine Research & Development Center of Institute of Biomedical & Health Engineering of SIAT. He received his BA and M.Phil. in basic medical and life sciences in physical education at the Beijing Sports University in China, and his PhD from German Sports University, Cologne, Germany and postdoctoral training in AO-Research Institute, Davos, Switzerland. Professor Qin was research scientist in the Department of Trauma & Reconstructive Surgery, University Clinic Rudolf Virchow, Charite Medical University in Germany before joining CUHK in late 1994.

Professor Qin is the past President of the International Chinese Musculoskeletal Research Society (ICMRS) (http://www.icmrs.net) and member of a number of journal editorial boards, including Editor-in-chief of Journal of Orthopaedic Translation and editorial board member of International Journal of Sports Medicine. He holds memberships in several international and national orthopaedic and related research organizations, including member of Academy of Europe (MAE) and fellow of American Institute of Medical and Biological Engineering (AIMBE). He has received over 40 Research Awards and holds over 30 innovation or new utility patents from PR China and USA.

Professor Qin published 10 monographs as editor or associate editor, 5 conference proceedings, 80 book chapters, and over 480 journal papers in English, German, and Chinese, including around 420 SCI articles published in Nat Med, Nat Comm, ARD, JBMR, Osteoporosis Int, Bone, A&R, Biomaterials, Acta Biomaterialia, Am J Sports Med, Int J Sports Med, etc. with a H-index 70 and listed as World's Best Medicine Scientists in Research.com

Dr WONG Ronald Man Yeung

Clinical Associate Professor
Department of Orthopaedics and Traumatology
The Chinese University of Hong Kong

Dr. Wong is a Clinical Associate Professor in the Department of Orthopaedics & Traumatology, CUHK, in which he was promoted with early tenure. He obtained his Bachelor of Computing (Honors; SSP Biomedical Computing) at Queen's University, Canada and Bachelor of Medicine and Bachelor of Surgery at CUHK. He further obtained a Doctor of Philosophy in Orthopaedics & Traumatology at CUHK. He is currently a Fellow of the Royal College of Surgeons of Edinburgh. Upon obtaining his Fellowship, he was awarded the Sir Harry Fang Gold Medal for the HKCOS-RCSE Joint Specialty Fellowship Examination.

Dr. Wong has published over 80 international peer-reviewed journals including in Journal of Cachexia, Sarcopenia and Muscle, Acta Biomaterialia, Obesity Reviews, Journal of Orthopaedic Translation and Journal of Bone and Mineral Research. He has many invited presentations at conferences and has obtained numerous competitive grants as PI/Co-PI for innovative research including the Collaborative Research Fund, Research Impact Fund, General Research Fund, Health and Medical Research Fund, Innovation and Technology Fund, and Osteosynthesis & Trauma Care Foundation. Dr. Wong has won many research awards including the Gold Medal from International Exhibition of Inventions Geneva, and Gold Medal from the Hong Kong Academy of Medicine for BORT. He was also awarded as a Distinguished Young Fellow in the Hong Kong Academy of Medicine. His major research interests are in Fragility Fractures, Osteoporosis, and Sarcopenia.

Dr ONG Tim-yun, Michael

Clinical Assistant Professor
Department of Orthopaedics and Traumatology
The Chinese University of Hong Kong

Dr Ong, Michael Tim-Yun joined the Department of Orthopaedics and Traumatology as a Clinical Assistant Professor in October 2018. He obtained his MBChB degree with an Intercalated BSc degree in Genetics from The University of Leicester, United Kingdom. Dr Ong joined the Department of Orthopaedics and Traumatology of the New Territories East Cluster in 2010 and he received his training in Orthopaedics at the Prince of Wales Hospital and the Alice Ho Miu Ling Nethersole Hospital. He obtained his MSc of Sports Medicine and Health Science from The Chinese University of Hong Kong in 2012 and completed his specialist training in 2014.

Given his surgical expertise in ACL reconstruction and joint replacement, Dr Ong is interested in basic and clinical research related to the bone tendon junction healing of ACL graft and improving surgical outcomes for joint replacement patients. In addition, Dr Ong is interested in the application of artificial intelligence to the prevention, diagnosis, and management of knee osteoarthritis. Dr Ong also has an active interest in regenerative medicine research, including the use of biomaterials and tissue engineering approaches to optimize treatments and reduce recovery time. He has authored over 50 papers in numerous international journals and has been invited to present at numerous local and oversea conferences.

In addition to his clinical activities, Dr Ong is active in education and community outreach. He is the Deputy Director of MSc in Musculoskeletal Medicine, Rehabilitation and Geriatric Orthopaedics Programmes. He is committed to promoting sports medicine education and is an active speaker in many public outreach events.

Dr LING Ka-Kin, Samuel

Clinical Assistant Professor
Department of Orthopaedics and Traumatology
The Chinese University of Hong Kong

Dr Ling obtained his MBChB from CUHK and his ChM from the University of Edinburgh. He is a Fellow of the Hong Kong Academy of Medicine, Hong Kong College of Orthopaedic Surgeons and the Royal College of Surgeons of Edinburgh.

He works under Chairman Prof. Patrick Yung at the Department of Orthopaedics and Traumatology at CUHK. Dr. Ling specialises in Foot and Ankle Surgery and has been the head of the foot and ankle clinical team at Prince of Wales Hospital, CUHK's main teaching hospital, since 2018.

His research focuses on Achilles tendinopathy, Hallux Valgus, Ankle instability, and Regenerative medicine. He has delivered >100 papers/lectures at international conferences and published >50 articles and textbook chapters; his research team has won numerous local and regional awards.

Dr Ling was awarded the SH Ho visiting professorship to Stanford University in 2023 and was the travelling fellow of APKASS-SLARD (Mexico, Colombia, Chile, Argentina) in 2024. He has trained with Dr Lui at the North District Hospital (HK), Dr Ferkel at the Southern California Orthopedic Institute (Los Angeles, USA), Dr de Prado at the FIFA Medical Centre of Excellence (Murcia, Spain), Prof Hintermann at the Kantonsspital Baselland (Liestal, Switzerland), Dr Vega / Dr Rabat at the University of Barcelona / Hospital Quiron (Barcelona, Catalonia) and Jishuitan Hospital (Beijing, China).

He is the current President of the Hong Kong Foot and Ankle Society, President of the Hong Kong Orthopaedic Association Foot and Ankle Chapter, Editor-in-Chief of the Journal of Orthopaedics, Trauma and Rehabilitation (official journal of the HKCOS and HKOA).

Dr LAW Sheung Wai

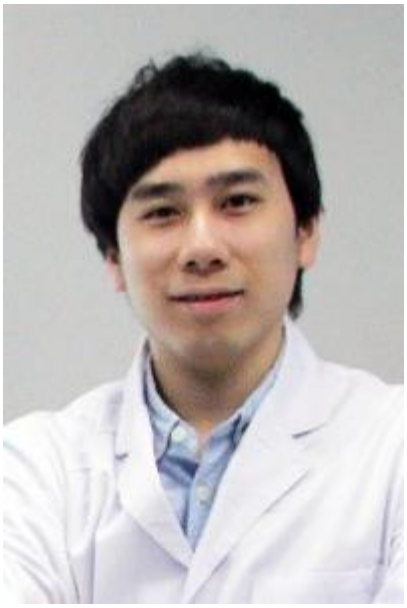
Clinical Professional Consultant
Department of Orthopaedics and Traumatology
The Chinese University of Hong Kong

Dr Law is currently a Clinical Professional Consultant and a Professor of Practice in Orthopaedics and Traumatology (by courtesy) within the Department of Orthopaedics and Traumatology at the Chinese University of Hong Kong. He also serves as the Assistant Dean of the Health System in the Faculty of Medicine. In addition, he has been appointed as the Honorary Chief of Service for the Department of Orthopaedics and Traumatology at Alice Ho Miu Ling Nethersole Hospital, as well as for the Department of Orthopaedic Rehabilitation at Tai Po Hospital. He is the Honorary Director of Orthopaedic and Traumatology for the New Territories East Cluster and holds the position of Chief Examiner and Past President of the Hong Kong Orthopaedic College of Surgeons.

Dr Law graduated from the Chinese University of Hong Kong, earning his MBChB in 1993. Following this, he completed his fellowship training in Orthopaedic Surgery and has since pursued postgraduate qualifications in several medical fields.

He holds a Master of Occupational Medicine, a Master of Science in Epidemiology and Bio-statistics, a Postgraduate Diploma in Clinical Gerontology, and a Master of Science in Health Services Management from the Chinese University of Hong Kong.

His professional interests encompass Spine Surgery, Orthopaedic Rehabilitation, coordination of care for the elderly with fragility fractures, management of osteoporosis, work rehabilitation, and return-to-work management for injured workers, as well as rehabilitation technology and spine surgery.



Dr CHUI Chun-sing, Elvis

Assistant Professor
Department of Orthopaedics and Traumatology
The Chinese University of Hong Kong

Dr. Chui Chun-Sing focuses on Computer-assisted surgical planning and development of novel technologies in the O&T department with 14 published peered-review manuscripts and 12 approved research grants and contracts as PI and Co-I. He is also the Honorary Advisor by the Hospital Authority to educate and train the entire 3D printing team and surgeons for surgery 3D planning, patient specific instrument design and 3D printing operations. He has assisted in surgery planning and provided intra-operative support for navigation guided surgeries for more than 10 years and more than 400 cases. Besides, he has been the manager of the Computer Aided Surgical Modeling (CASM) Laboratory since 2013. He has also been providing critical assistance for the department in 3D planning, 3D designing and 3D printing for more than 300 surgery cases. He was invited by the Hospital Authority NTEC to the “Working Group on 3D Printing” in 2021 March to help establishing the 3D printing service in NTEC utilizing his fruitful experience in medical 3D printing.

Dr. Chui is specialized in research translation. He has been granted for 4 competitive grants, 2 non-competitive grants and 3 research contracts. He has pursued 7 international and local patents derived from the funded projects including robotics system, prosthesis and innovative treatment methodology. He was also the winner of the Dr. Yeung Sai-Hung Trophy in the 39th Annual Congress of Hong Kong Orthopaedic Association, representing the Best Paper Award in the Adult Joint Replacement Chapter.