





ICRA 2024 Full Day Workshop on TRANSLATIONAL RESEARCH IN MEDICAL ROBOTICS

From Lab Bench to Clinical Use – How to?

supported by IEEE RAS TC for Surgical Robotics

DATE, TIME, AND PLACE

- Friday, May 17th 2024
- 8:45AM 17:10PM
- Pacific Convention Plaza Yokohama(PACIFICO Yokohama) 1-1-1, Minato Mirai, Nishiku, Yokohama 220-0012, JAPAN

WEBSITE

https://translational-medical-robotics.github.io/

REGISTRATION

All the speakers must be registered to the workshop via the ICRA website: <u>https://2024.ieee-icra.org/registration/</u>

Please note that the conference registration fee does not include the workshops. This is a separete registration.

INVITED SPEAKERS

Please check the programme in the next page, and prepare a presentation to fit the allocated slot – which should also include few minutes for the Q&A.

YOUNG RESEARCHERS SESSION

Authors of the accepted papers will present their work in person at the workshop. Please prepare a 7 minute presentation.

ORGANISERS

- Giulio Dagnino, Associate Professor, RaM Lab, University of Twente, NL
- **Dennis Kundrat**, Head of Department, Department Therapy, Fraunhofer Research Institution for Individualized and Cell-Based Medical Engineering (IMTE), Lübeck, DE
- Momen Abayazid, Associate Professor, RaM Lab, University of Twente, NL
- Luigi Manfredi, Senior Lecturer, University of Dundee, UK
- Helge Wurdemann, Professor, University College London, UK
- **Pedro Moreira**, Instructor, Brigham and Women's Hospital, Harvard Medical School, USA

PROGRAMME

Time	Program
08:45 - 09:00	Welcome and introduction to the WS [Giulio Dagnino, Dennis Kundrat]
	Session 1: Translational Stories 1 [Chair: Giulio Dagnino, Dennis Kundrat]
09:00 - 09:30	Prof Pietro Valdastri - University of Leeds, UK <i>"Intelligent magnetic colonoscopy: from bench to bed trials"</i>
09:30 - 10:00	Prof Kevin Cleary / Prof Reza Monfaredi – Children's National, USA <i>"MR-Compatible Robotics" [in person + virtual contribution]</i>
10:00 - 10:20	Coffee Break
10:20 - 10:50	Prof Sanja Dogramadzi - The University of Sheffield, UK "Robot-Assisted Fracture Surgery"
	Session 2: Commercialization [Chair: Dennis Kundrat; Pedro Moreira]
10:50 - 11:15	Dr Gernot Kronreif – Austrian Center for Medical Innovation and Technology, AT "The path from concept to certified robot – challenges and lessons learned"
11:15 - 11:40	Dr Rainer Konietschke – Medtronic GmbH, DE "Medtronic presenting on HugoTM robotic assisted surgery system"
11:40 - 12:05	Prof Dong-Soo Kwon / Dr Dong-Ho Lee - ROEN Surgical Inc., KR "Robotic Ureteroscopy System from Research to Commercialization"
12:05 – 12:30	Prof Thiusius R. Savarimuthu – SDU Robotics, DK "ARTHUR world's first CE-marked ultrasound robot for Arthritis"
12:30 - 13:20	Lunch Break
13:20 – 13:50	 Young Researchers Session [Chair: Pedro Moreira] Mr Mostafa Selim – Univerity of Twente, NL Ms Ana Cordón-Avila – Univerity of Twente, NL Mr Muhammad Wildan Gifari – University of Tsukuba, JP Ms Cristina Iacono – Università degli Studi di Napoli Federico II, IT
	Session 3 – Translational Stories 2 [Chair: Momen Abayazid, Giulio Dagnino]
13:50 - 14:15	Prof Michael Yip - University of California San Diego, USA "Achieving Contextual Understanding and Automation in Surgery with the daVinci Research Kit"
14:15 - 14:40	Dr Claudio Pacchierotti – CNRS, Inria, FR "The potential of haptic feedback for medical robotics: from robot-assisted surgery to microrobotics"
14:40 - 15:05	Prof Alan Kuntz – University of Utah, USA <i>"Automation on the Virtuoso system"</i>
	Session 4: Clinical Perspectives [Chair: Pedro Moreira, Momen Abayazid]
15:05 - 15:35	Prof Silvana Perretta - University of Strasbourg, IHU-Strasbourg, FR <i>Title tbc [virtual]</i>
15:35 - 16:00	Coffee Break
16:00 - 16:30	Prof Kiyokazu Nakajima - Osaka University, JP "Limitation of using flexible robot inside the abdomen" [virtual]
16:30 - 17:00	Prof Philip Chiu - The Chinese University of Hong Kong, HK "Development of Endoluminal Robotics for Colorectal ESD - From bench to clinical translation" [virtual]
17:00 - 17:10	Closing Remarks [Momen Abayazid, Pedro Moreira]