



San Luigi Gonzaga Hospital, Orbassano, Torino, Italy Candiolo Cancer Insitute - IRCCS, Candiolo, Torino, Italy Department of Oncology - University of Turin, Orbassano, Tutin, Italy Chairmen:

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DEPARTMENT OF ONCCLOGY OF TUR

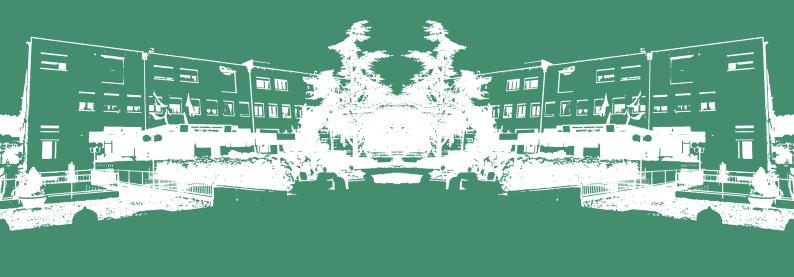
Alex Mottrie Department of Urology O.L.V. Clinic Aalst, Belgium

**Riccardo Autorino** Division of Urology, VCU Health, Richmond, VA, USA

# **9<sup>TH</sup> INTERNATIONAL TECHNO-UROLOGY MEETING (TUM)** THE ADVENT OF ARTIFICIAL INTELLIGENCE

28th - 29th January 2021

# **VIRTUAL EDITION**



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Associazione Italiana di Endourologia







## INTRODUCTION

Dear Friends,

TUM is once again approaching with its 9th edition, on January 28-29th 2021, despite the recent COVID pandemic, which deeply impacted our personal and work life.

Over the past few years, we have been working to improve and sharpen the technologies for minimally invasive urologic surgery.

Starting from Hyper-Accuracy 3D reconstructions (HA3D<sup>™</sup>) from standard imaging, we explored the fields of augmented reality and mixed reality surgery, with the aim to virtually plan and intraoperatively enhance the real anatomy, maximizing the information at the disposal of the surgeon performing the intervention.

In the past editions of TUM, these two technologies, performed in a semi-automatic setting, have been widely investigated and experienced by the surgeons.

The upcoming edition of the meeting will be the stage for presenting, live and for the first time, our last great innovation: the new augmented reality platform entirely driven by artificial intelligence technology.

Indeed, with the aid given by artificial intelligence in refining precision details of the augmented reality procedures, it is nowadays possible to perform many steps of such image-guided surgery automatically, without needing any hand-assistance.

A dedicated online platform will be available, to allow people to follow the event virtually.

Indeed, the congress has evolved into a hybrid format, with some live surgeries performed on site alongside virtual contents that the participants can enjoy from home, during and after the meeting.

Together with the novelties of artificial intelligence guidance, many other technologies will be presented during the meeting.

Moreover, some broadcasted surgeries will also be performed by expert surgeons abroad: for them, the advantages given by the 3D virtual guidance will be available by remote control!

Last but not least, in order to mantain the technological and innovation standards of our congress at the highest levels, we decided to include a part of the faculty in an unattempted experience, an absolute novelty in the field of virtual meetings.

Indeed, through the use of cardboard technology, all participants from home will be given the opportunity to view their intraoperative surgical videos in 3D, as in a surgical console!

We believe that this innovative technological format of the meeting gives the attendees the possibility to overcome the distance barrier imposed by virtual meetings, maximizing the potential to enjoy a conference from home and at the same time offering quality contents in a never experienced before form.

We would like to welcome those who have decided to come back after joining us during the previous editions, and those who are new to the TUM.

Kindest regards.



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Francesco Porpiglia



Jihad H. Kaouk

LAUNA



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Alex Mottrie

Riccardo Autorino

Dario Fontana Professor of Urology University of Turin, Italy

#### **Roberto Mario Scarpa** Campus Biomedico University Hospital Rome, Italy

## **INVITED SURGEONS**



Alessandro Antonelli Chairman, Department of Urology A.O.U.I. Verona University, Italy



Nicolò Maria Buffi Department of Urology, Humanitas Research Hospital, Rozzano, Milan, Italy



**Riccardo Autorino** Director of Urologic Oncology Division of Urology Virginia Commonwealth University Richomd, VA, USA



**Prokar Dasgupta** Professor and Chair of Urology at King's College London, Guy's Hospital, King's Health Partners London, UK



Alberto Breda Chief of the Uro-Oncology Division and Director of the Kidney Transplant Unit Fundació Puigvert Barcelona, Spain



Ithaar H. Derweesh

Professor of Urology and Radiology Program Director, Urologic Oncology Fellowship UC San Diego School of Medicine, San Diego, USA

## **INVITED SURGEONS**



Lance J. Hampton Chairman of Urology Director of Robotic Surgery Virginia Commonwealth University Richmond, VA, USA



Alex Mottrie Department of Urology Orsi Academy and OLV Clinic, Aalst, Belgium



Jihad H. Kaouk Director, Center for Robotic and Image Guided Surgery Cleveland Clinic Cleveland, USA



Vito Pansadoro

Director of the Laparoscopy Center Vincenzo Pansadoro Foundation Rome, Italy 



Aly Abdel Karim Professor of Urology, Alexandria University, Egypt



Rocco Papalia Professor of urology University Campus Bio-Medico Rome, Italy



Evangelos Liatsikos Professor of Urology and Head of

Patras, Greece

Unit at the University of Patras



Vipul Patel

Medical Director, AdventHealth Global Robotics Institute Medical Director, AdventHealth Urologic Oncology Program Professor of Urology, University of Central Florida, USA 



Wang Linhui Professor of Urology Shanghai Changzheng Hospital China



Francesco Porpiglia

Professor and Chairman Department of Urology S. Luigi Hospital, Orbassano University of Turin Turin, Italy 



Andrea Minervini Department of Urology Careggi University Hospital, Florence, Italy



James Porter Director, Robotic Surgery Swedish Medical Center Seattle, Washington, USA



## **INVITED SURGEONS**



Koon Ho Rha

Assistant Professor of Urology and Robotic and Minimally Invasive Surgery Center, Yonsei University Seoul, South Korea



Ashutosh Tewari Professor of Urology The Mount Sinai Hospital New York, USA



Maria Ribal Head of the Uro-Oncology Unit Hospital Clinic University of Barcelona, Spain



Peter Wiklund Professor of Urol

Professor of Urology Department of Urology Karolinska University Hospital Stockholm, Sweden



**Bernardo Rocco** Department of Urology, University of Modena, Italy



Bo Yang

Director Kidney cancer program Department of Urology Changhai Hospital Shanghai, China



Jens-Uwe Stolzenburg Director of Department of Urology Chairman of International Urological Training Centre of Laparoscopy and Robotic-assisted Surgery, University of Leipzig Leipzig, Germany



**Homayoun Zargar** Department of Urology Royal Melbourne Hospital Melbourne, Australia

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Nazareno Suardi Associate Professor of Urology University of Genova Ospedale Policlinico San Martino Genova, Italy



**Wu Zhenjie** Associate Professor of Urology Shanghai Changzheng Hospital China



**Carlo Terrone** Chief Department of Urology San Martino Hospital Genova, Italy



**Chao Zhang** Department of Urology Changhai Hospital Shanghai, China



## **OUR INSTITUTION**



## **DIVISION OF UROLOGY - DEPARTMENT OF ONCOLOGY UNIVERSITY OF TURIN**

The Department of Oncology at University of Turin, is composed by professionals, from preclinical to translational research and clinic assistance for oncological diseases. It is sited in San Luigi Hospital and IRCC Candiolo Institute.

The Urology team, that takes part into the Department of Oncology, manages all uro-oncological and all others genito-urinary diseases. The most recent and modern technologies are available for diagnosis and treatment of such of them.

Robotic and laparoscopic surgery have been developed in the last years, being San Luigi Hospital's Urology Division a pioneer Centre for many techniques, especially in the setting of translational surgery.

Together with the clinical activity, also the teaching activity has a primary role, being our Department the Center for the Urology Residency Program.

Our Staff is continuously involved and invited to attend the most prestigious International and National Meetings.

Our intensive scientific and research activity is widely recognized as demonstrated by the publications in the most famous international peer-reviewed journals.



• January 28<sup>th</sup> 2021 •

### LIVE SURGERY EXPERIENCE

Welcome & Day Opening: Francesco Porpiglia

Provokers: Vito Pansadoro, Nazareno Suardi

	SCREEN #1	SCREEN #2
8.30 - 10.00	Cognitive 3D guided Laparoscopic Radical Nephrectomy	Indocyanine-green Augmented Reality Robot-assisted Partial Nephrectomy
	Carlo Terrone	Andrea Minervini
10.00 - 11.00	Augmented Reality Robot-assisted Radical Nephroureterectomy with Proximie technology (Semi-live from UK)	<b>Retroperitoneal Robot-assisted</b> <b>Partial Nephrectomy</b> (Broadcasted from China)
	Prokar Dasgupta 🛛 🖁 😹	Wang Linhui 🛛 🕅 🎬
11.00 - 12.30	Cognitive 3D guided Robot-assisted Partial Nephrectomy (Broadcasted from Spain)	Artificial Intelligence automatic Augmented Reality Robot-assisted Radical Prostatectomy
	Alberto Breda 🛛 🕅 🚾	Francesco Porpiglia
12.30 - 13.00	Lunch Break	
13.00 - 15-00	Single Port Robot-assisted Radical Prostatectomy (Broadcasted from US *Connection time 12.30)	Augmented Reality Robot-assisted Partial Nephrectomy
	Vipul Patel 🛛 🕅 🕅	Francesco Porpiglia

## CARDBOARD EXPERIENCE



- 1 Radical Prostatectomy in cadaver with Avatera robot Jens-Uwe Stolzenburg
- 2 RARP retzius sparing (Focus on: REV-I) Koon Ho Rha
- 3 RARP (Focus on SINGLE PORT) Jihad H. Kaouk
- 4 RARP (Focus on: confocal endomicroscopy) Bernardo Rocco
- 5 Ureteral substitution (Focus on: buccal mucosa) Vito Pansadoro
- 6 RPLND (Focus on: anatomical details of retroperitoneum) James Porter
- 7 RAPN (focus on: surgery in transplanted kidney) Lance J. Hampton
- 8 RAPN (focus on: nephron sparing for cT3 tumors) Ithaar H.Derweesh

• January 29th 2021 •

## LIVE SURGERY EXPERIENCE

Welcome & Day Opening: Francesco Porpiglia

Provokers: Vito Pansadoro, Nazareno Suardi

	SCREEN #1	SCREEN #2
8.30 - 10.00	Cognitive 3D guided Laparoscopic Partial Nephrectomy	Augmented Reality Robot-assisted Partial Nephrectomy
	Francesco Porpiglia	Alessandro Antonelli
10.00 - 11.00	Robotic radical Nephro-ureterectomy with PRESS technique (Broadcasted from China)	Laparoscopic Partial Nephrectomy (Broadcasted from China)
	Wu Zhenjie 🛛 🕿 🎦	Bo Yang 🛛 🖀 🎬
11.00 - 12.30	Cognitive 3D guided Robot-assisted Partial Nephrectomy (Broadcasted from Belgium)	Artificial Intelligence automatic Augmented Reality Robot-assisted Radical Prostatectomy
	Alex Mottrie	Niccolò Buffi
12.30 - 13.00	Lunc	h Break
13.00 - 15-00	<b>Robot-assisted</b> <b>Radical Prostatectomy</b> (Broadcasted from US *Connection time 14.00)	Indocyanine-green Augmented Reality-Robot-assisted Partial Nephrectomy
	Ashutosh Tewari	Francesco Porpiglia

### CARDBOARD EXPERIENCE

- 9 RARC (Focus on: ileal neobladder) Peter Wiklund
- 10 Robotic surgery for the bladder (Focus on: diverticulectomy and ureteral reimplantation) RiccardoAutorino
- 11 Laparoscopic radical nephrectomy (Focus on: tips and tricks in laparoscopy) Evangelos Liatsikos
- 12 Laparoscopic partial nephrectomy (Focus on: enucleative technique) Aly Abdel Karim
- 13 ICG guided laparoscopic partial nephrectomy (Focus on: clampless technique) Rocco Papalia
- 14 Laparoscopic partial nephrectomy (Focus on: 3D vision assisted technology) Maria Ribal
- 15 RARP (Focus on: vescico-urethral anastomosis) Homayoun Zargar



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## **SCIENTIFIC SECRETARIAT**

#### Daniele Amparore

Department of Urology, San Luigi Gonzaga Hospital, School of Medicine, University of Turin Orbassano, Italy

#### **Riccardo Autorino**

Division of Urology, Virginia Commonwealth University, Richmond, VA, USA

#### **Cristian Fiori**

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Jihad H. Kaouk Department of Urology, Cleveland Clinic, Cleveland, OH, Usa

Alex Mottrie Department of Urology O.L.V. Clinic Aalst, Belgium

#### Francesco Porpiglia

Department of Urology, San Luigi Gonzaga Hospital, School of Medicine, University of Turin, Orbassano, Italy

### ORGANIZING COMMITTEE FOR LIVE SURGERY

Staff of the hosting Department of Urology San Luigi Gonzaga Hospital, School of Medicine, University of Turin, Orbassano, Italy

**Daniele Amparore** 

Enrico Checcucci

Marco Cossu

Stefano De Luca

**Cristian Fiori** 

Diletta Garrou

Matteo Manfredi

Massimiliano Poggio

Francesco Porpiglia

Francesca Ragni

# WITH THE UNCONDITIONAL SUPPORT OF



### **MEETING PLANNER**



#### FEDRA Congressi

Provider ECM n° 3376 Viale dei SS. Pietro e Paolo, 21 00144 Rome, Italy Ph. +39 06 52247328 Fax +39 06 5205625 info@fedracongressi.com www.fedracongressi.com

### **OFFICIAL LANGUAGE**

The official language of the Congress is English.

## **REGISTRATION FEE**

Web Delegates: Between September 30th, 2020 and December 15th, 2020€. 350,00 After December 15th, 2020€. 420,00	
Web Trainee/Residents: Between September 30th, 2020 and December 15th, 2020€. 100,00 After December 15th, 2020€. 150,00	

## **ITALIAN ECM ACCREDITATION**

The  $9^{\rm TH}$  INTERNATIONAL TECHNO-UROLOGY MEETING has been accredited by the Italian Ministry of Health.

The Italian Ministry of Health assigned n. 15 ECM Credits.

The Congress has been accredited for the following specialties:

- Oncology
- Radiotherapy
- Urology
- Pathological anatomy
- Radiodiagnostics

In order to receive Italian credits participants must attend 90% of the event and pass the final test.

### WEBSITE

Visit our website at: www.technourologymeeting.com



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