



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

#### Francesco Porpiglia

Jihad H. Kaouk

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

Center for Robotic and Image-guided Surgery, Cleveland Clinic, Cleveland, OH, USA

DEPARTMENT OF ONCOLOGY UNIVERSITY OF TURIN 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

Centro Congressi Lingotto - Aula 500 Turin, Italy



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## INTRODUCTION

#### Dear Friends,

TUM is once again approaching, on January 28-29th 2021, with its 9<sup>th</sup> edition, despite the recent COVID pandemic, which very much 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 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 for 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 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.

In this scenario, many Italian and European expert surgeons, have been invited to experience such new technologies during the live surgery sessions from our operative rooms.

At the same time, eminent overseas surgeons will be involved in the meeting with broadcasted surgeries, to show their latest improvements of different robotic and laparoscopic procedures.

The event will be under the auspices of the most prestigious international societies of minimally invasive surgery, in light of the high quality level gained by the TUM over the years.

Another new location was also chosen for the meeting; the "Sala 500" at Lingotto Meeting Center in Turin will be set for the event to guarantee the highest health safety standard for the attendees.

In addition, a dedicated online platform will be available to allow people to follow the event virtually.

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.

We look forward to seeing you in Turin!

Kindest regards.



Francesco Porpiglia



LADUR

Jihad H. Kaouk



APK



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



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



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



lthaar H. Derweesh

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



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



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

## **INVITED SURGEONS**



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



#### Vipul Patel

Medical Director of Urologic Oncology, Florida Hospital Medical Director of Global Robotics Institute Associate Professor of Urology,

University of Central Florida Florida, USA



**Evangelos Liatsikos** Professor of Urology and Head of the Endourology and Laparoscopic Unit at the University of Patras Patras, Greece



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



**Wang Linhui** Professor of Urology Shanghai Changzheng Hospital China



#### James Porter

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



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



#### Koon Ho Rha

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



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



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





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



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



## Peter Wiklund

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



### Bo Yang

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



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





**Wu Zhenije** Associate Professor of Urology Shanghai Changzheng Hospital 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.



## PROGRAM

## • January 28th 2021 •

#### Day 1

#### 8.00 - 8.30 Welcome

Stefano Geuna (Rector of University of Turin), Roberto Mario Scarpa (President Italian Society of Urology-SIU), Francesco Porpiglia

#### 8.30 - 8.50 Lecture: Artificial Intelligence in urology: from big data to radiomics G. Balestra

8.50 - 9.00 - Live cases presentation

#### 9.15 - 13.00 Mixed&Augmented Reality live and broadcasted surgery day1

#### From O.R.1

3D Mixed&Augmented Reality RARP Jens Uwe Stolzenburg 3D Mixed&Augmented Reality RAPN Alexandre Mottrie

From O.R.2

3D Mixed&Augmented Reality RAPN Andrea Minervini 3D Mixed&Augmented Reality RAPN Alberto Breda

#### From O.R.3

**3D Mixed&Augmented Reality RARP** Francesco Porpiglia**RNU (PRESS technique)** Wu Zhenije - Broadcasted from China (local time 5.30 pm)**PN Wang Linhui -** Broadcasted from China (local time 5.30 pm)**PN Wang Linhui -** Broadcasted from China (local time 5.30 pm)

#### 13.00 - 14.00 Lunch

14:00 - 14:15 Lecture: Telemedicine in post-Covid19 era J. Gomez Rivas

#### 14.15 - 18.00 Mixed&Augmented Reality live and broadcasted surgery day1

#### From O.R.1

14.15 – 15.45 RARP Ashutosh Tewari - Broadcasted from US (local time 8.15 am)	(ጫ
15.45 – 17.30 RARP Vipul Patel - Broadcasted from US (local time 9.45 am)	በ
From O.R.2 14.15 – 16.30 Robotic-assisted totally intracorporeal neobladder Peter Wiklund 16.30 – 18.00 RAPN Ithaar H. Derweesh - Broadcasted from US (local time 7.30 am)	ጮ

**BPH Lecture** Cristian Fiori

## PROGRAM

• January 29<sup>th</sup> 2021 •

### Day 2

8.15 - 8.30 Welcome and morning report on surgeries from day 1

8.30 - 8.50 Lecture: Artificial Intelligence for the Operative Room 4.0 Pietro Piazzolla

8.50 - 9.00 Live cases presentation

9.15 - 13.00 Mixed&Augmented Reality live and broadcasted surgery day2

#### From O.R.1

09.00 - 10.15 RAPN Homayoun Zargar - Broadcasted from Australia (local time 5.00 pm)(P)10.15 - 11.30 RARP REV-I Koon Rha - Broadcasted from Korea(local time 5.15 pm)(P)11.30 - 13.00 RAPN surgery Bo Yang - Broadcasted from China (local time 5.30 pm)(P)From O.R.209.00 - 11.00 3D Mixed&Augmented Reality RARP Prokar. Dasgupta

11.00 - 13.00 3D Mixed&Augmented Reality RAPN Alessandro Antonelli

#### From O.R.3

09.00 - 11.00 3D Mixed&Augmented Reality RAPN Francesco Porpiglia10:30 - 11.30 LPN Aly Abdel Karim - Broadcasted from Egypt (local time 10.30 am)11.00 - 13.00 Robotic Urethral sparing adenomectomyVito Pansadoro

13.00 - 14.00 Lunch

14.00 - 17.30 Mixed&Augmented Reality live and broadcasted surgery day2

From O.R.1

3D Mixed&Augmented Reality LRN Evangelos Liatsikos 3D Mixed&Augmented Reality LPN Maria Ribal

From O.R.2

14.00 - 15.15 SP RARP (Semilive) Jihad H. Kaouk - Broadcasted from US (local time 8.00 am) 15.15 - 16.45 Robotic Partial Nephrectomy Lance Hampton - Broadcasted from US (local time 9.15 am) (P)

16.45 - 18.00 R-RAPN or RPLND James Porter - Broadcasted from US (local time 7.45 am)

## **SCIENTIFIC SECRETARIAT**

#### Riccardo Autorino

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

#### **Cristian Fiori**

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

#### 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** 

Marco Cossu

Stefano De Luca

**Cristian Fiori** 

Diletta Garrou

Matteo Manfredi

Ivano Morra

Massimiliano Poggio

Francesco Porpiglia

Francesca Ragni

## **GENERAL INFORMATION**



### **CONGRESS VENUE**

Centro Congressi Lingotto - Aula 500 Via Nizza, 280 10126 Turin, Italy

Live Surgery will be performed at San Luigi Gonzaga Hospital and Candiolo Hospital.

### **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

#### **TRAVEL INFORMATION**

For travel and hotel information please contact the Organising Secretariat.

### **OFFICIAL LANGUAGE**

The official language of the Congress is English.

### **EXHIBITION AREA**

The Exhibition Area will be available in the foyer of the congress venue.

## **REGISTRATION FEE**

 Delegates:

 Before September 30th, 2020:
 €.350,00

 Between September 30th, 2020 and December

 15th, 2020:
 €. 400,00

 After December 15th, 2020:
 €. 500,00

Trainee /Residents:	
Before September 30th, 2020:	€.100,00
Between September 30th, 2020 an	d December
15th, 2020:	€.150,00
After December 15th, 2020:	€.200,00
Web Delegates:	
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Before September 30th, 2020:€.270,00Between September 30th, 2020 and December15th, 2020:After December 15th, 2020:€. 420,00

Web Trainee/Residents:

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#### **WEBSITE**

Visit our website at: www.technourologymeeting.com

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