# VATTIKUTI Foundation

# Humans at the Cutting Edge of Robotic Surgery



# International Innovation Awards 2022

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19 November 2022 JW Marriott Marquis Miami Miami, Florida USA

## Introduction

Dear Friends, Colleagues and Innovators,

It gives us great pleasure to welcome you to this audience of global innovators of robotic surgery. We are thrilled to celebrate the thought leadership shown in the Vattikuti Foundation KS International Innovation Awards 2022.

The KS International Innovation Awards by the Vattikuti Foundation is the culminating event of competitive programs that inspire robotic surgical innovation at the world-wide level. This year's contest attracted registrants from 79 countries. Award winners were vetted by a prestigious international jury. The winners of the KS Innovation Awards and the winner of the Vattikuti Foundation-sponsored best paper in robotic surgery published in *European Urology* in 2021.

With Miami, Florida emerging as a hub of healthcare advancements, we have congregated here with the world's preeminent robotic surgeons. Its rigorous academic symposium, *Humans at the Cutting Edge of Robotic Surgery*, allowed invited high-ranking submissions to be presented and the selected surgeons to defend their work before a gathering of the founding champions of robotic surgery. This intimate forum was designed to ignite in-depth discussion among a select group of accomplished peers for possible acceptance as new standards of patient care.

The Vattikuti Foundation is a catalyst for robotic surgical advancements, combining promotion of cutting edge technology and surgeon education. The transference of knowledge that takes place from the invited participants provides newly initiated robotic surgeons to be face-to-face and learn from the experience of giants in their field so that they may offer state of art surgical care to the patients in their part of the world.

We at the Vattikuti Foundation promote the ongoing remarkable breakthroughs being made by the extraordinary humans at the cutting edge of robotic surgery and make a formidable combination of technological and human excellence.

Thank you for your participation and inspired contributions.



Raj B. Vattikuti President, Vattikuti Foundation Executive Chairman Altimetrik

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Mahendra Bhandari CEO, Vattikuti Foundation



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# International Innovation Awards 2022

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The KS International Innovation Award was instituted to honor the late Shri Krishnaswamy Subrahmaniam, aka "KS", the former CEO of Vattikuti Technologies.

KS is known for his outstanding contributions to the establishment and progress of robotic surgery in India. He is remembered for his tireless efforts in expanding robotic surgery programs throughout India before his untimely demise.

The KS International Robotic Surgery Award is a video-based competition with the goal to recognize surgical talent from around the globe, and create a platform to share new, cutting-edge robotic surgery videos to educate and benefit the world.

The Vattikuti Foundation has been focused on driving and supporting the field of robotic surgery for over two decades. The Foundation continuously conducts international training activities and forums, leads the adoption of robotic surgery and partners across hospitals in four continents to teach, contribute surgical data, share surgical techniques and collaborate through professional organizations.

The Vattikuti Foundation prides itself as a vital interface between emerging technologies and applications on human subjects to improve lives.



# INNOVATION COMPETITION Global Entries from Exceptional Surgical Talent

What had begun as a competition primarily for urologists using the Da Vinci robotic surgical systems for prostate surgeries in India, the KS International Robotic Surgery Innovation competition has now expanded to become a reputed global, multi-disciplinary, multi-national event, utilizing numerous new robotic instruments.

Hosted by the Michigan-based robotic surgery ambassador, the Vattikuti Foundation, the 2022 competition attracted prize-winning robotic surgeons from the United States, India and Spain. These three winners were chosen from 92 global participants from multiple disciplines.

Participants using new robotic surgical platforms were strongly considered.

## Multi-disciplinary Submissions

- Urology
- Gynecology
- Head and Neck
- Thoracic
- Kidney Transplantation
- Joint Replacement
- Colorectal
- Hepatobiliary-Pancreatic
- Gastroenterology
- Pediatrics
- New robotic platforms

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# 358 registrants from 79 countries92 submissions accepted from 18 Countries

# **EVALUATION & JUDGING PROCESS**

Selection for the best submissions was a multi-step process, overseen by set up by a highly regarded panel of judges and international jury.

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Initially the videos were screened for the overall technical quality. Thereafter the entries were distributed to a panel of 20 domain experts (robotic surgeons) from the United States, Europe, Nepal and India. The third level of voting came from a public crowd-voting poll with 2,000+ viewers.

The videos were divided by domain and reviewed by an incredible team of specialists from institutions around the globe who are advancing robotic surgery.



## **ESTEEMED PANEL OF JUDGES**

The Vattikuti Foundation expresses sincere gratitude to all the judges for their focus and thoroughness in assessing the submissions.

SPECIALIST	INSTITUTION	LOCATION
Ananthakrishnan Sivaraman	CURI Hospital	Chennai, India
Anil Mandhani	Escorts Hospital	Gurugram, India
Arun Prasad	Indraprastha Apollo Hospital	New Delhi, India
Gautam Choudhary	All India Institute	Jodhpur, India
Hemang Bakshi	HCG Cancer Center	Ahmedabad, India
Nikhil Vasdev	Lister Hospital	Stevenage, Hertfordshire, UK
Pankaj Wadhwa	Medanta Medicenter	Gurugram, India
Piyush Agarwal	MD Anderson Hospital	Houston, Texas, USA
Pratik Man Singh Gurung	OM Hospital	Kathmandu,Nepal
Rajesh Taneja	Indraprastha Apollo	New Delhi, India
Ramantharan Maniknandan	JIPMER Hospital	Puducherry, India
Sabyasachi Bal	Sir Gangaram Hospital	New Delhi, India
Sanjay Gogoi	Manipal Institute	New Delhi, India
Suhas Masilamani	Sunshine Vattikuti Institute	Hyderabad, India
Thadi Mohan	Amrita Institute of Medical Sciences	Kochi, India
Vivek Bindal	Max Super Specialty Hospital	New Delhi, India

## **INTERNATIONAL JURY**

This extensive vetting process by the judges preceded the final selection made with extensive deliberation by the final international jury of three who selected the top three awardees.





Rajeev Kumar is Professor of Urology and Associate Dean (Academics) at the All-India Institute of Medical Sciences, New Delhi. Dr. Kumar's clinical interests include: laparoscopic and robotic urology, surgery of the adrenal gland and microsurgery for male infertility. Dr. Kumar's major appointments three of which include Chief Editor India Journal of Urology, Vice President, Société Internationale d'Urologie, Adjunct Secretary General, Urological Association of Asia and Faculty in Charge, Andrology and Male Infertility Clinic. Additionally, Dr. Kumar has received prestigious awards for his outstanding contributions to the progress of Urology including Fellow, National Academy of Medical Sciences, 2020 and Pinnamaneni Venkateswara Rao Oration, Urological Society of India.

#### Sherry M. Wren MD, FACS, FCS (ECSA), FISS

Professor of Surgery at Stanford University School of Medicine Paolo Alto, CA. Professor of Surgery (General Surgery) at the Stanford University School of Medicine, Paolo Alto CA. Professor Wren is a certified general surgeon who specializes in the surgical treatment of gastrointestinal cancers including stomach, pancreas, intestinal colon and rectal cancers. In addition to being very much involved in humanitarian surgery and global surgery, she is faculty fellow of Stanford Center for Innovation and Global Health and her current clinical focus is gastrointestinal malignancy and surgical robotics.

## **Innovation Award Winners**

# 1<sup>st</sup> Prize

Single port robot assisted kidney transplantation extraperitoneal approach (First Prize) Jihad Kaouk, MD FACS FRCS Professor of Surgery Zagarac Pollock Endowed Chair in Robotic Surgery Director, Center for Robotic and Image Guided Surgery Vice Chair, Enterprise Surgical Operations Cleveland Clinic Cleveland, Ohio



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In this innovation Dr. Kaouk and his team modified the technique of robotic kidney transplant developed at the Vattikuti Urology Institute and Medanta Medicity. Kaouk used a da Vinci single-port robot for truly minimally invasive surgery. The early results of patients who had undergone robotic kidney transplants through this technique could go home in only two days. This technique transforms such a major surgery almost into an outpatient procedure rather than lengthy hospitalization and recovery.

Dr. Jihad Kaouk is an American Board certified Urologist has performed numerous groundbreaking surgical procedures, including the first robotic single port surgery through the belly button and the first completely transvaginal kidney removal. These procedures, executed by Dr. Kaouk and his team, proved minimally invasive enough that the hospital discharged the patient within a day of the operation. Dr. Kaouk has one of the largest experiences in robotic surgery in the country with more than 2,500 robotic radical prostatectomy and about 900 robotic partial nephrectomy that he performed through the last 20 years. An MD with professional responsibilities beyond direct patient care, Dr. Kaouk presently works with a number of committee and the International Medical Education Committee. Presently, Dr. Kaouk holds membership with the American Urological Association, the Endourological Society, the Society of Robotic Surgery, and the Lebanese Order of Physicians. He possesses active medical licenses to practice in the states of Ohio, Utah and Indiana.

## **Innovation Award Winners**

# 2<sup>nd</sup> Prize

Robotic infraclaviclar approach minimally invasive neck dissection (RIA-MIND) in head and neck cancers.

The second award goes to Sandeep Nayak for his innovation of a robotic technique to perform major cancer surgery of the head neck to clear the lymph nodes in the neck with quick patient recovery and minimal discomfort.



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#### Sandeep Nayak

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MBBS | MRCS (Edin) | DNB (Gen Surg) | DNB (Surgical Oncology) MNAMS | Fellowship in Laparoscopic and Robotic Onco-Surgery Chief of Surgical Oncology, MACS Clinic, Jayanagar, Bangalore. Professor & HOD of Minimal Access Surgical Oncology (RGUHS). Director, Department of Surgical Oncology, Fortis Cancer Institute, Bangalore

Dr. Nayak is the Founder and Chief of Surgical Oncology at MACS Clinic, Bangalore, an exclusive specialty clinic for minimally invasive cancer surgery, including robotic, laparoscopic, and endoscopic surgery. Further, he is the Director of Surgical Oncology, Professor and HOD of Minimal Access Surgical Oncology at Fortis Cancer Institute, Bannerghatta Road, Bangalore. His major area of interest includes colorectal cancer, digestive tract cancer, head and neck cancer, breast cancer, urinary tract cancer, gynecologic cancer, and abdominal organ cancers. His passion and dedication to his profession inspire him to introduce revolutionary surgical approaches that give patients a fighting chance to overcome cancer. Dr. Nayak and his team of highly experienced cancer specialists in Bangalore offer their patients the best evidence-based, cost-effective treatment options. His top objective is to provide ethical and dependable care that meets the highest standards.

## **Innovation Award Winners**

# 3<sup>rd</sup> Prize

3D augmented reality guided robotic assisted kidney transplant (Third Prize)

Alberto Piana, Clinical Research Fellow, Fundació Puigvert, Barcelona, Spain

Division of Urology, Department of Oncology University of Turin San Luigi Gonzaga Hospital Orbassano, Turin, Italy Clinical research fellow at Fundació Puigvert, Barcelona, Spain.

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Receiving the award on behalf of 3rd place team is Alberto Piana. This team of specialists includes Alberto Piana, Paolo Verri, and Alberto Breda of Oncology Urology Unit and Kidney Transplant Surgical Team Urology Department, Fundació Puigvert, Barcelona, Spain.

The team demonstrated a novel technique for attaching the artery of kidney during robotic kidney transplant to avoid atherosclerotic plaques in the blood vessel by application of artificial intelligence based algorithms. The innovative prize-winning kidney transplant technique showcased is an improvement, building on the technique developed by the Vattikuti Urology Institute. For most of the major surgeries done in India the surgeons have taken robotic surgery to the next level making it as simple as an outpatient procedure in contrast to an open surgery.

# European Urology Best Paper Winner

In addition to the KS International Innovation Awards, the Vattikuti Foundation also sponsors the "Best robotic surgery paper" in partnership with the peer-reviewed journal, European Urology.

In this paper, the objective was to confirm the utility and safety profile of the DROP-IN gamma probe and to perform a comparison with the traditional laparoscopic gamma probe and fluorescence guidance. Research showed the DROP-IN gamma probe was introduced to overcome the restricted manoeuvrability of traditional laparoscopic gamma probes. Through enhanced manoeuvrability and surgical autonomy, the DROP-IN promotes the implementation of radio-guided surgery in the robotic setting.

A DROP-IN Gamma Probe for Robot-assisted Radioguided Surgery of Lymph Nodes During Radical Prostatectomy

Paolo Dell' Oglio, Philippa Meershoek, Tobias Maurer, Esther M.K.Wit, Pim J. van Leeuwen, Henk G. van der Poel, Fijs W.B.van Leeuwen, Matthias N.van Oosterom

Accepting the award for the team of authors is Paolo Dell' Oglio, Division of Oncology/Unit of Urology, Milan, Italy



# Humans at the Cutting Edge of Robotic Surgery Symposium

In response to the excellence of the submissions, a full day academic session entitled Humans at the Cutting Edge of Robotic Surgery held for idea exchange. Chosen from the highest-ranking entries and grouped by domain, this rigorous academic symposium is designed as an optimal environment for the robotic surgeons to present and defend their work before the gathering of the world's finest key opinion leaders. This intimate setting allows the reputation of the innovators to grow and share their findings, instil inspiration and foster the learnings and exchange of knowledge and technique so that their procedures have a greater likelihood to be replicated, become standard of care, and exponentially improve patient outcomes to people living around the world.

#### The topics studied in-depth at the symposium include:

1. What is New in Robotic Kidney Transplantation?

- 2. Surgery on the Inferior Vena Cava
- 3. Recent Advances in Intraoperative Detection of Lymph Nodal Metastases
- 4. Radical Cystectomy and Intracorporeal Neobladder
- 5. Hepatobiliary- Pancreatic and Colorectal robotic surgery
- 6. Surgical Precision Improves Patient Outcomes
- 7. Robotic Joint Replacement Surgery
- 8. Partial Nephrectomy in Anomalous Kidneys
- 9. Gynaecologic Surgery
- 10. Robotic Inguinal Lymphadenectomy

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## Vattikuti Robotic Surgery Symposium Humans at the Cutting Edge of Robotic Surgery

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#### **Surgical Precision Improves Patient Outcomes**

#### **Moderators:**

Alex Mottrie MD, Ph.D Head of the Urological Department OLV Hospital, Aalst, Belgium

CEO of ORSI Academy, Melle, Belgium

Ash Tewari MD

Professor and Chairman of Urology Mount Sinai Hospital, New York, NY

#### Mani Menon MD

Chief of Strategy and Innovation Department of Urology Mount Sinai Health System New York, NY

#### **Theme Presentations:**

#69. Confocal microscopy for surgical margins during radical robotic prostatectomy, Paolo Verri Resident Urologist S. Luigi Gonzaga - Orbassano Fellow Urologist - Fundació Puigvert - Barcelona

**#115. SAFE (Saline-Assisted Fascial Exposure) for nerve-sparing during robotic-assisted radical prostatectomy (RARP)** Ash Tewari Professor and Chairman of Urology Mount Sinai Hospital, New York, NY

**#10.** Description of surgical technique, and oncologic and functional outcomes of the precision prostatectomy procedure (IDEAL stage 1-2b study) Akshay Sood The University of Texas MD Anderson Cancer Center Houston, TX

#### **Hepatobiliary Robotic Surgery**

#### **Moderators:**

Pier Cristoforo Giulianotti, MD, FACS Distinguished Lloyd M Nyhus Chair in Surgery Professor and Chief

Division of General, Minimally Invasive and Robotic Surgery University of Illinois at Chicago Chicago, IL

#### Atsushi Yoshida

Division Head, Transplant and Hepatobiliary Surgery, Henry Ford Hospital, Detroit, MI

#### **Theme Presentations:**

India, Puducherry, India

**#62. Robotic-assisted left hepatectomy for HCC** Srinivasan Ramachandran Senior Consultant, Department of Surgical Gastroenterology Meenakshi Mission Hoapital & Research Centre, Madurai, Tamilnadu, India

#121. Robotic fluorescence – guided bile duct preserving pancreatic head resection with splanchnic neurectomy for chronic pancreatitis
Kalayarasan Raja, MBBS, MS, DNB, MCh (Gastrointestinal Surgery)
Additional Professor
Department of Surgical Gastroenterology,
Jawaharlal Institute of Post Graduate Medical Education and Research (JIPMER),
An Institution of National Importance, Government of

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## **Colorectal Robotic Surgery**

#### **Moderators:**

#### I. Emre Gorgun, MD, FACS, FASCRS

Colorectal Surgery Section Head, Surgical Colorectal Oncology Krause-Lieberman Chair in Laparoscopic Colorectal Surgery Director of EndoLuminal Surgery Center, Lower Gl

Cleveland Clinic Cleveland, OH

#### Surya Nalamati

Colon and Rectal Surgery Henry Ford Hospital Detroit, MI

#### **Theme Presentations:**

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#### #94. Robotic bladder preserving exenteration

discussion Avanish Saklani Professor Robotic Colorectal Tata Memorial Hospital Mumbai, India

#### #67. First Robotic CME in Europe with Augmented Reality Tools

Thalia Petropoulou, MD, PHD, FRCS, EARCS Robotic Consultant & MIS Colorectal Surgeon Aretaieio University Hospital/Euroclinic Athens, Greece

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**Robotic Joint Replacement Surgery** 

#### **Moderators:**

A.V Gurava Reddy Managing Director and Chief Joint Replacement Surgeon Sunshine Vattikuti Center of Excellence in the Robotic Joint Replacement Surgery, Hyderabad India

#### Mohan Thadi, FRCS, MS, DNB

Consultant Centre for Robotic Orthopaedics & Adult Reconstruction Amrita Institute of Medical Sciences Kochi, India

#### **Theme Presentations:**

**#123. Robotic arm assisted THA in developmental hip dysplasia** Ashley Gall, BS Medical Student West Virgina University Morgantown, WV

#### **Gynecologic Surgery**

#### **Moderators:**

Arnold P. Advincula, MD, FACOG, FACS Richard U. Levine Professor of Women's Health

Vice-Chair, Department of Obstetrics & Gynecology

- Chief of Gynecologic Specialty Surgery, Sloane Hospital for Women
- Medical Director, Mary & Michael Jaharis Simulation Center

Columbia University Irving Medical Center New York-Presbyterian Hospital

#### **Theme Presentations:**

**#95. Total robotic uretero-sigmoid-coloneovaginoplasty** Elroy Saldanha Fellow, Manipal Hospital Bengluru, India

#### #71. 3D-digital model for precise pre surgical planning in robotic myomectomy

Rooma Sinha, MD, DNB, MNAMS,FICOG Laparoscopic & Robotic Surgeon | Apollo Health City, Hyderabad, India Fellowship Director-Minimal Access & Robotic Surgery Gynecology

Robotic Surgery Center for Fibroids & Endometriosis-Apollo Health City, Hyderabad

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## Recent Advances in Intraoperative Detection of Lymph Nodal Metastases

#### **Moderators:**

#### Raju Thomas, MD, FACS, FRCS, MHA President of AUA (2021-22) Professor &Chair, Department of

Urology Tulane University School of Medicine New Orleans, LA

#### James O. Peabody MD

Vice-Chair Academics and Research Vattikuti Urology Institute Henry Ford Hospital, Detroit, MI

#### **Theme Presentations:**

#1. Vattikuti Foundation Lecture: Robot-assisted radio guided radio guided surgery using surgery using a DROP-IN gamma probe

#14. PSMA Radio-guided surgery to detect nodal metastases in prostate cancer patients undergoing robot-assisted radical prostatectomy

Giorgio Gandaglia, Department of Urology, Vita-Salute San Raffaele University, Milan Vattikuti European Urology Lecture

#### Speaker

Paolo Dell' Oglio Department of Urology, ASST Grande Ospedale Metroplitana Nigurada, Milan Italy

(Winner of the European Urology best published paper in robotic surgery 2021, sponsored by the Vattikuti Foundation)

#### **Robotic Inguinal Lymphadenectomy**

#### **Moderators:**

Ashok Hemal, MD, MCh, FACS, FRCS (GI) Professor, Department of Urology and Chief of Uro-oncology, Atrium Wake Forest Comprehensive Cancer Center & Wake Forest School of Medicine Winston-Salem, NC

#### Theme Presentations:

**#31. Robotic inguinal lymph node dissection by lateral approach** Tarun Jindal Uro-Oncologist Nayarana Hospital Howrah, India

#56. Robotic infraclaviclar approach minimally invasive neck dissection (RIA-MIND) in head and neck cancers

Sandeep Nayak, Chief of Surgical Oncology, MACS Clinic, Jayanagar, Bengluru, India

Professor & HOD of Minimal Access Surgical Oncology, Rajiv Gandhi University of Health Sciences, Karnataka, India

#### What is New in Robotic Kidney Transplantation?

#### Moderators:

#### Pier Cristoforo Giulianotti, MD, FACS

Distinguished Lloyd M Nyhus Chair in Surgery Professor and Chief Division of General, Minimally Invasive

and Robotic Surgery University of Illinois at Chicago Chicago, IL

#### Atsushi Yoshida, MD, FACS

Division Head, Transplant and Hepatobiliary Surgery Henry Ford Health Detroit, MI

#### **Theme Presentations:**

**#60. Single port robot assisted kidney transplantation extraperitoneal approach** (First Prize) Jihad Kaouk, MD, FACS, FRCS Professor of Surgery Zagarac Pollock Endowed Chair in Robotic Surgery Director, Center for Robotic and Image Guided Surgery Vice Chair, Enterprise Surgical Operations

#68. 3D augmented reality guided robotic assisted kidney transplant (Third Prize)

Alberto Piana Department of Urology, University of Turin, S. Luigi Gonzaga Hospital of Orbassano, Italy Clinical Research Fellow at Fundació Puigvert of Barcelona, Spain

## #99. Renal allograft with multiple vessels-the robotic rebuttal

Prof. () Anant Kumar Chairman, Department of Urology, Uro-oncology, Robotics & Renal Transplant, Max Group of Hospital Delhi& NCR

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# Session 9

## Partial Nephrectomy in Anomalous Kidneys

#### **Moderators:**

Akshay Bhandari, MD

Co-Chief Columbia University Division of Urology Director of Robotic Surgery Mount Sinai Medical Center Miami, FL

#### Ketan Badani MD

Vice Chair of Urology Director, Comprehensive Kidney Cancer Professor of Urology Mount Sinai Health System

#### **Theme Presentations:**

**#126. Robot-assisted partial nephrectomy in ectopic pelvic kidney** Diana Lopatigui, Department of Urology, Mt. Sinai Medical Center, Miami, FL

#### #61. RAPM in a horseshoe kidney

Prof. Alessandro Volpe, M.D. Chaiman Division of Urology University of Eastern Piedmont Maggiore della Carità Hospital Corso Mazzini 18 - 28100 - Novara, Italy

#88. Double Trouble! Robot-assisted adrenalectomy for VHL associated bilateral pheochromocytoma Dr Ashwin Mallya MBBS, MS, MRCS Ed, MCh Urology, Fellowship , Minimally invasive and Robotic Urology Consultant, Urology and Robotic Surgery Urology Unit III Sir Ganga Ram Hospital, New Delhi

#### Radical Cystectomy and Intracorporeal Neobladder

#### **Moderators:**

## Peter Wiklund, MD, PhD

Director Bladder Cancer Program Department of Urology Mount Sinai Health System New York, NY

#### Mohan S. Gundeti, MD, MCh, FEBU, FRCS (Urol) FEAPU

Professor – Pediatric Urology (Surgery) Professor – MFM (Ob/Gyn) and Pediatrics The University of Chicago Medicine & Biological Sciences Director Pediatric Urology, Comer Children's Hospital Chicago, IL

#### **Theme Presentations:**

**#89. Nerve-sparing hood cystectomy with totally intracorporeal neobladder** Alberto Martini, MD La Croix du Sud Hospital Toulouse, France

**#107. Ten commandments of intracorporeal ileal conduit during robot-assisted radical cystectomy** Girdhar S Bora Associate Professor Department of Urology Postgraduate Institute of Medical Education and Research Chandigarh India

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## Surgery on the Inferior Vena Cava

#### **Moderators:**

#### Inderbir Singh Gill MD

Chair and Distinguished Professor of Urology Shirley and Donald Skinner Chair in

Urologic Cancer Surgery Executive Director, USC Institute of

Urology

Associate Dean for Clinical Innovation

#### Alessandro Volpe, M.D.

Chaiman Division of Urology University of Eastern Piedmont Maggiore della Carità Hospital Corso Mazzini 18 - 28100 Novara, Italy

#### **Theme Presentations:**

**#45. 3D augmented reality guidance during robotic ven cava thrombectomy** Daniele Amparore Department of Urology University of Turin San Luigi Gonzaga Hospital Orbassano, Turin, Italy

## #19. Complete minimally invasive surgery for level IV renal cancer

Antonio Galfano, Department of Urology, ASST, Grande Osepedal Metropolitano Nigurada, Milan Italy

**#30.** A step-by-step approach to robotic assisted level 2 robot assisted level 2 IVC thrombectomy Santoshi Nagaonkar Director of Urology and Robotic Surgery Sir H N Reliance Foundation Hospital Mumbai, India

## Announcing

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## Humans at the Cutting Edge of Robotic Surgery

Now is the time to start envisioning submission for 2023 competition. All KS International Innovation Awards 2023 submissions will be eligible for consideration for presentation in the *Humans at the Cutting Edge of Robotic Surgery* 2023 academic symposium.

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## See the following timeline for key dates.

January 15, 2023: Submissions portal opens May 15, 2023: Submissions portal closes August 31, 2023: Award winners selected

October (TBD) 2023: Academic Symposium & Awards Ceremony



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