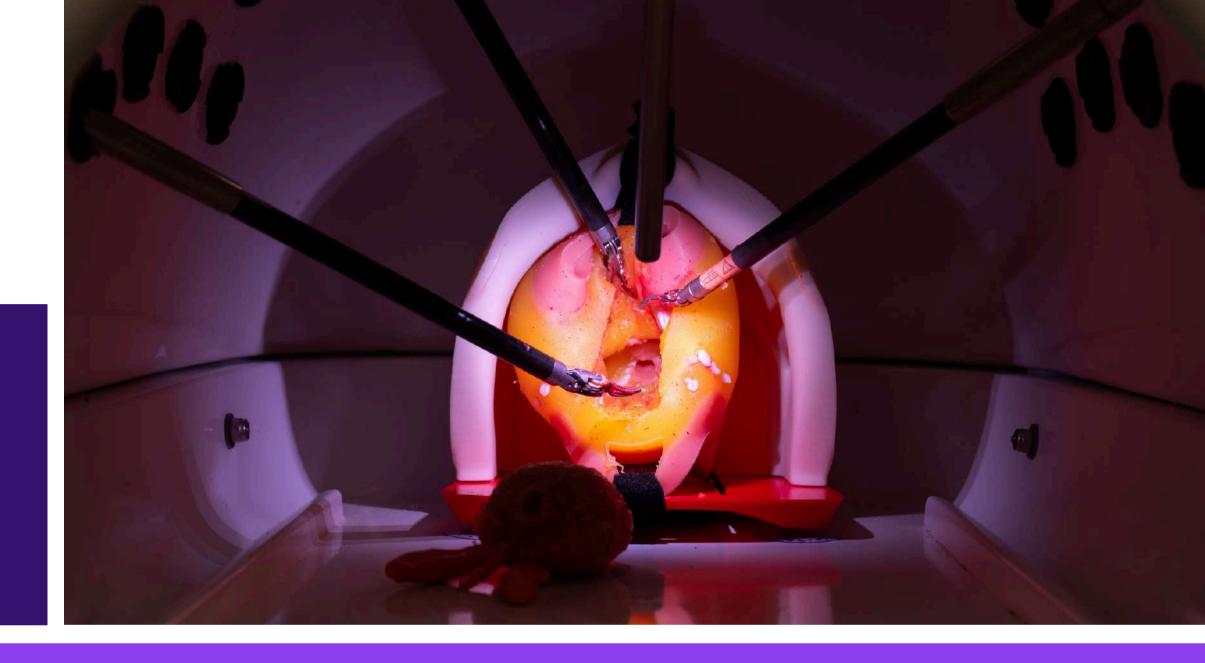
SIMULATION & TRAINING



ROBOTIC SURGERY

RADICAL PROSTATECTOMY PARTIAL NEPHRECTOMY HYSTERECTOMY & MYOMECTOMY LOBECTOMY



What we do?

Advanced synthetic models for surgical simulation



Partial Nephrectomy



Radical Prostatectomy



Perfused Models



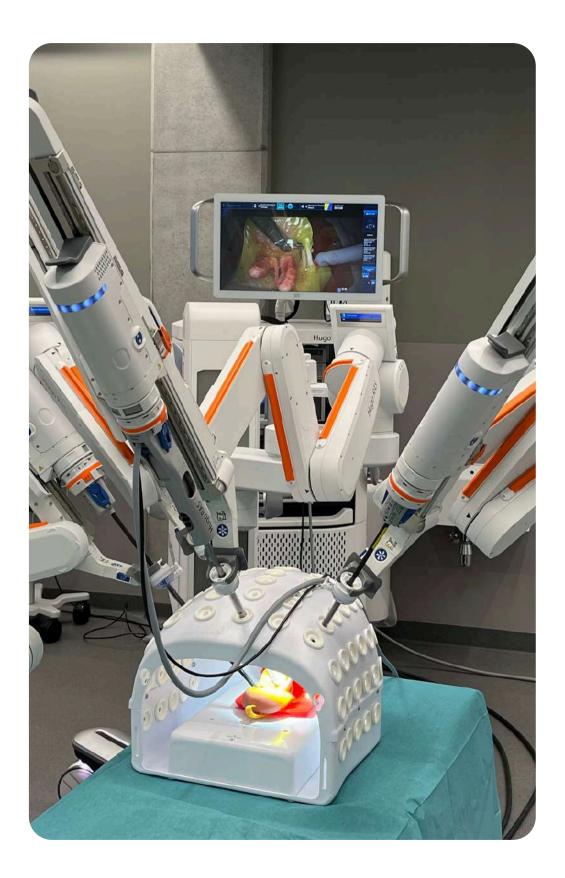
Histerectomy



Miomectoy

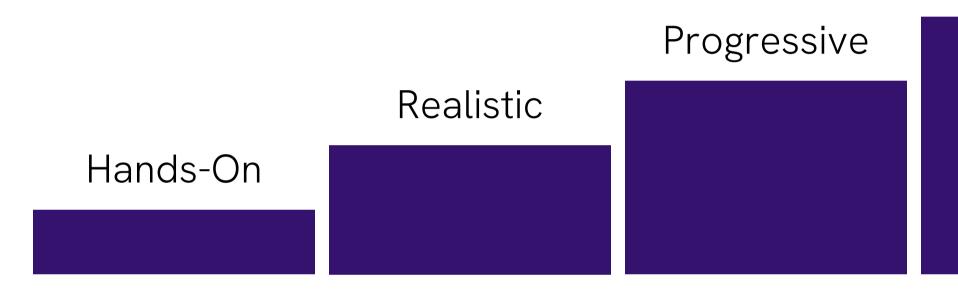


Lobectomy



Why we do it?

Need of better training tools



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Tasks modules

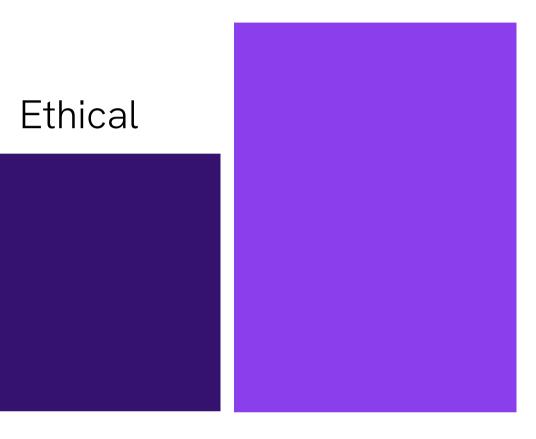


Animal models

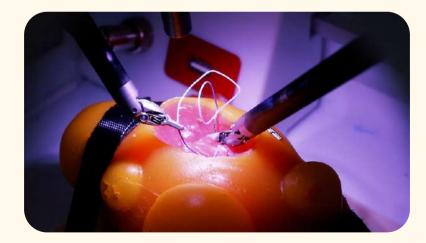


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Standardized, measurable, and reproducible practice.



3D models



Our journey...

2021: We started with the focus on laparoscopic surgery (LatAm demands).



Chile

Mexico

Spain

2024/25: We moved forward to solving robotic surgery training needs (worldwide).



IRCAD (France)



ORSI Academy (Belgium)





Guy's Hospital (UK)



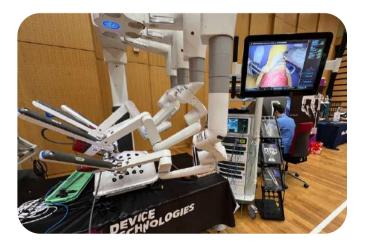
Panama



Costa Rica



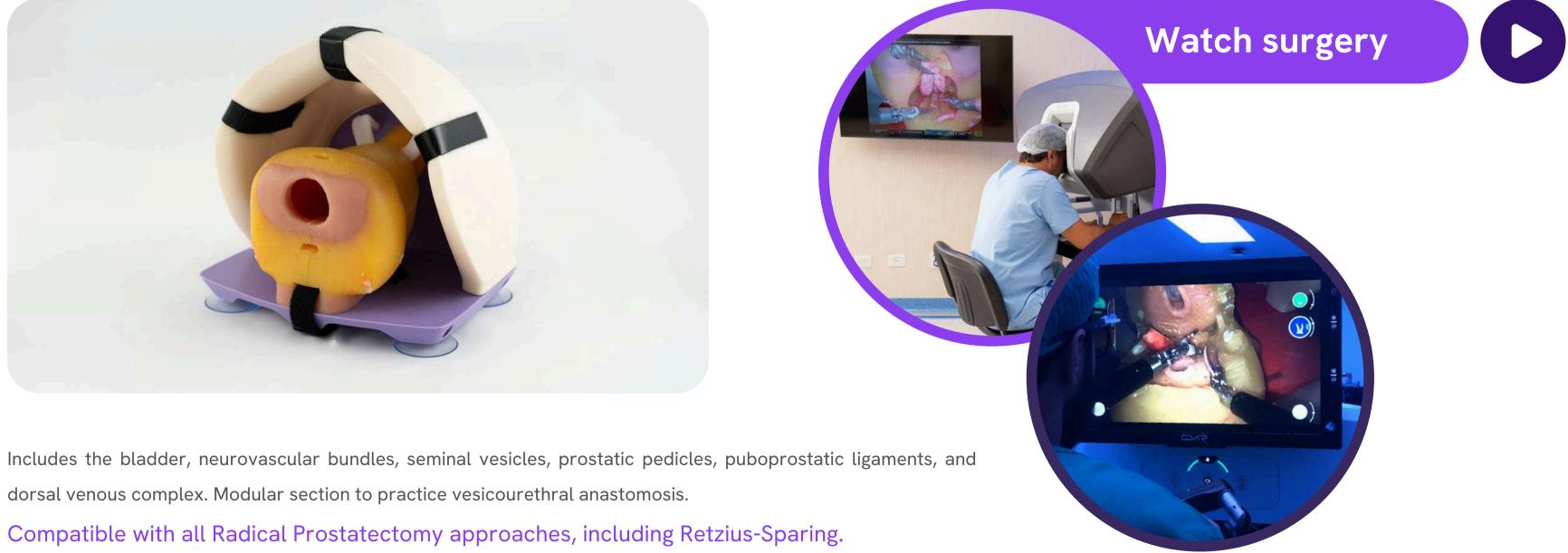
AAU Congress (Qatar)



SUA Workshop (Singapore)

Hands-on training models - URO

Prostate phantom for radical prostatectomy + radical cystectomy



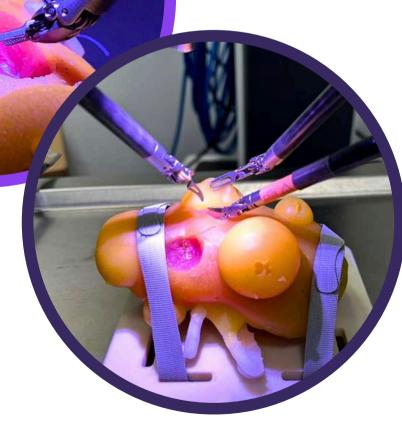
Hands-on training models - URO

Kidney phantom for partial nephrectomy - 11 tumors & 2 cysts



Contains 11 tumors and 2 cysts. Tumors RENAL scores are as follows: 15mm 4a | 20mm 10xh | 15mm 7xh 15mm 4a | 35mm 7x | 35mm 7a | 15mm 9x | 15mm 4p | 15 mm 5p | 16mm 7p | 15mm 4p The model is completely surrounded by a fat layer offering multiple surgical scenarios.

Watch surgery



Hands-on training models - URO

Hemi-Kidney model with perfusion for partial nephrectomy



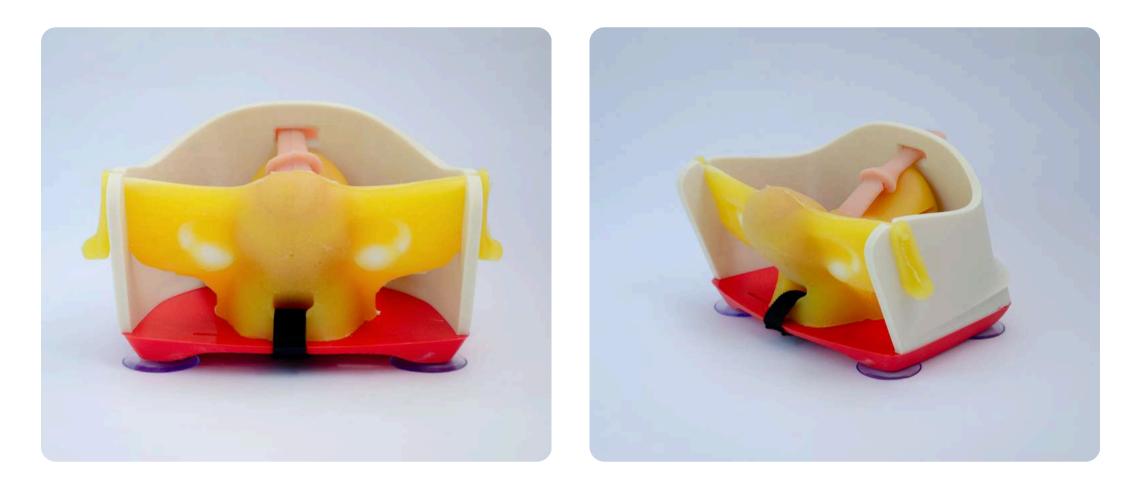
Includes 2x 25mm tumors RENAL score 7x and a connector for blood perfusion simulation. The model has a modular plug-and-play design to allow standardized training for multiple trainees.

Watch surgery



Hands-on training models - GYN

Uterus phantom for hysterectomy

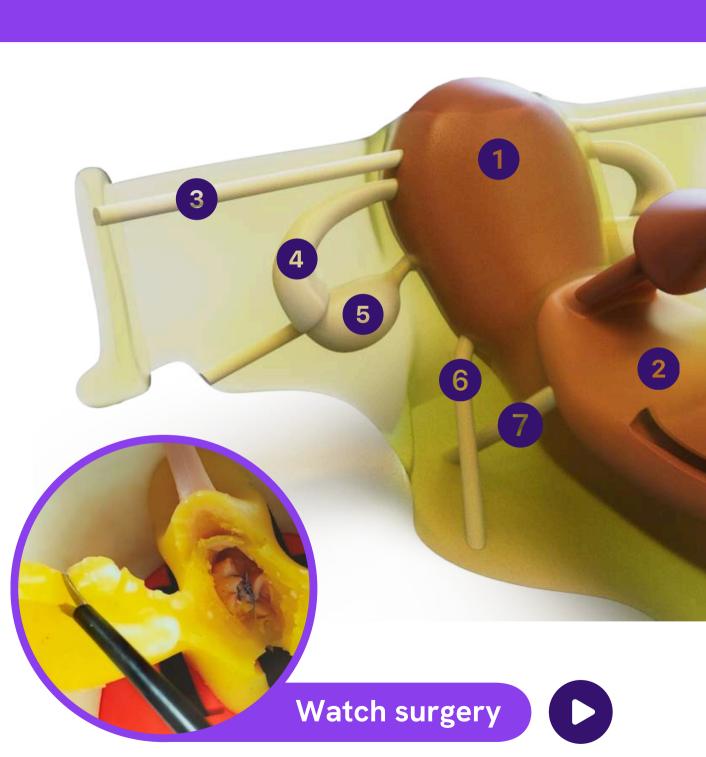




4 Fallopian tube5 Ovary

6 Uterine Artery

7 Ureter



Hands-on training models - GYN

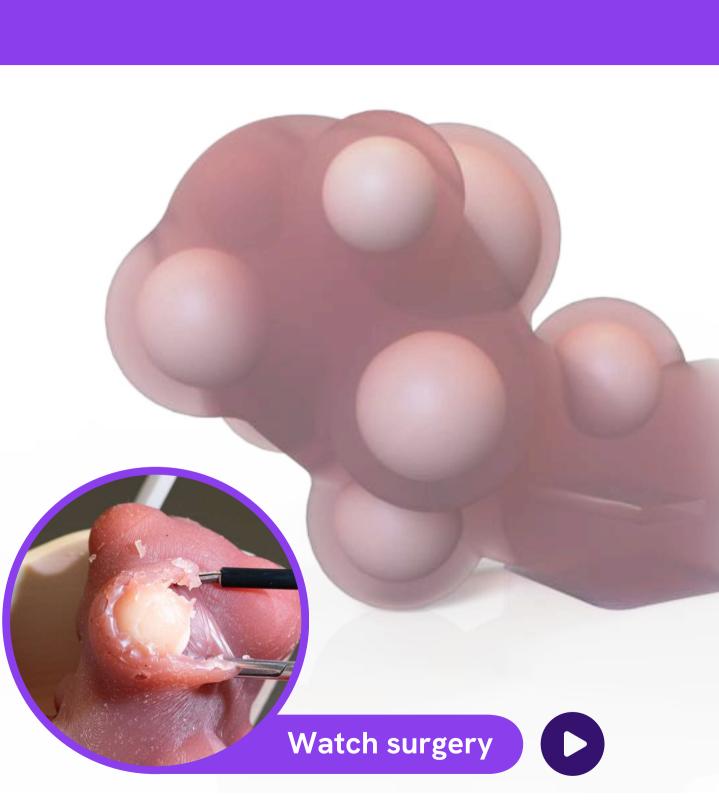
Uterus phantom for myomectomy



Includes a uterus similar to the hysterectomy model with 8 myomas:

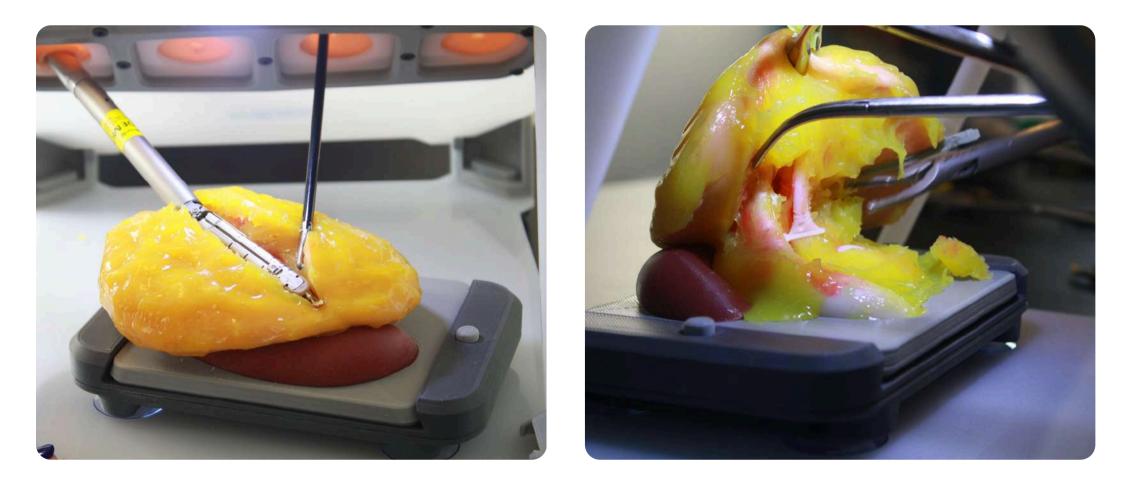
- Basic level (anterior myomas): M1 of 30mm (FIGO 5) and M2 of 21mm (FIGO 8)
- Intermediate level (lateral myomas): M3 of 15mm (FIGO 6), M4 of 21mm (FIGO 5), M5 of 15mm (FIGO 5) and M6 of 21mm (FIGO 6)
- Advanced level (posterior myomas): M7 of 21mm (FIGO 5) and M8 of 21mm (FIGO 5)

Each myoma presents a different level of difficulty for progressive and continuous training.



Hands-on training models - THORAX

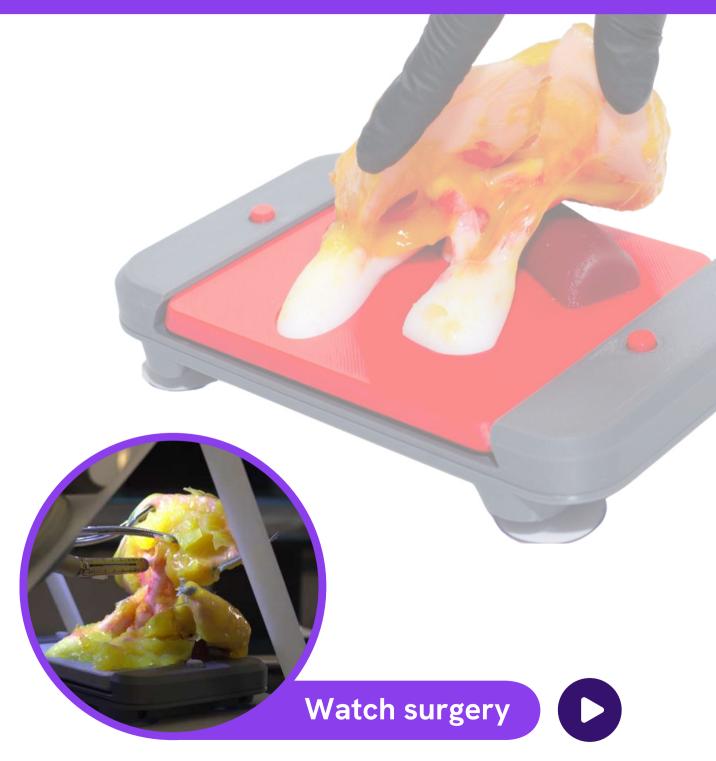
Lung phantom for left side lobectomy



The left lung model includes all lobes for upper of inferior left lobectomy. Represented anatomy:

- Left pulmonary artery
- Left pulmonary vein
- Aorta
- Bronchi

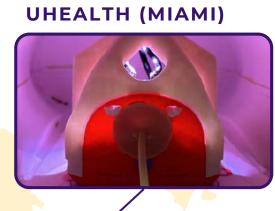




USERS | UROTRAINER

HTAL. ÁNGELES (MONTERREY)





UCL (LONDON)



CONGRESO SDU (SANTO DOMINGO)



INST. DEL CÁNCER (SANTIAGO)



AAU (CÓRDOBA)



MARIA REGINA HOSP. (CLUJ-NAPOCA)



DISTALMOTION (GENEVA)



SS INNOVATIONS (NEW DELHI)



SIUT (KARACHI)



URC SENGKANG HOSP. (SINGAPORE)



CMR SURGICAL (DUBAI)



URO - Suggested Academic Programs

Partial Nephrectomy Training

1 kidney model for every 3 trainees

Approx. 3hs hands-on training

Trainee #1

- PN 1 Tumor #4 15mm RENAL 4a
- PN 2 Tumor #5 35mm RENAL 7x
- PN 3 Tumor #2 20mm RENAL 10xh

Trainee #2

- PN 1 Tumor #9 15mm RENAL 5p
- PN 2 Tumor #6 35mm RENAL 7a
- PN 3 Tumor #1 15mm RENAL 5a

Trainee #3

- PN 1 Tumor #12 15mm RENAL 4p
- PN 2 Tumor #10 16mm RENAL 7p
- PN 3 Tumor #7 15mm RENAL 9x

- Periprostatic fat dissection
- Identifying the plane between prostate & bladder
- Bladder cuff dissection
- Performing neurovascular bundle (NVB) sparing
- Performing prostatic pedicle dissection
- Completing radical prostatectomy
- Urethro-vesical anastomosis

Suitable for both anterior, posterior (Retzius-Sparing), and combined approaches.

Radical Prostatectomy Training

- 1 prostate model for each trainee **Approx.** 4hs hands-on training
- Dorsal vein suturing

GYN - Suggested Academic Programs

Hysterectomy Training

1 hysterectomy model for each trainee Approx. 3hs hands-on training

- Identification of anatomical reference points.
- Dissection and cutting of the round ligaments, fallopian tube, and ovarian ligament.
- Dissection and cutting of the uterine artery.
- Identification and preservation of the ureter.
- Separation and dissection of the uterus from the bladder and identification of the upper part of the vagina.
- Uterus resection and closure of the vaginal cuff.

Basic level:

Intermediate level:

- Trainee #1 Lateral myoma of 21mm
- Trainee #2 Lateral myoma of 21mm Advanced level:

- Trainee #1 Posterior myoma of 21mm
- Trainee #2 Posterior myoma of 21mm

Myomectomy Training

1 myomectomy model for every 2 trainees **Approx.** 4hs hands-on training

- Trainee #1 Anterior myoma of 30mm
- Trainee #2 Anterior myoma of 21mm
- Trainee #1 Lateral myoma of 15mm
- Trainee #2 Lateral myoma of 15mm

THORAX - Suggested Academic Program

Left Lobectomy Training

1 lung model for each trainee Approx. 3hs hands-on training

Pulmonary Fissure Dissection

- Visual identification of the oblique fissure.
- Partial dissection to expose the junction between lobes.

Identification of Anterior and Posterior Lobar Junctions

• Visual identification of the connections between lobes.

Clipping and Separation of Lobar Junctions

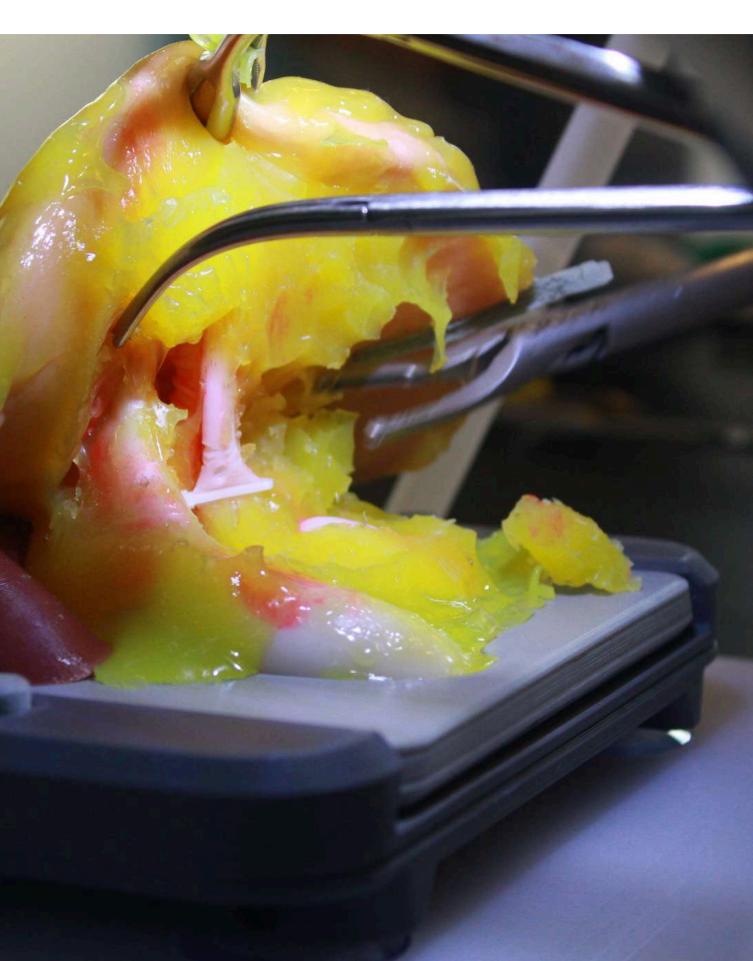
Dissection of Pulmonary Artery Branches, Pulmonary Vein, and Bronchi

- Identification of the structures.
- Differentiation of vessels and bronchi using anatomical landmarks.

Clipping and Division of the Bronchus, Pulmonary Artery, and Pulmonary Vein

Lobe Removal and Final Check

• Extraction of the lower lobe using a retrieval bag.



Success Cases

Implementing Urotrainer' models for uro-oncology robotic surgical training



Desai Sethi Urology Institute **University of Miami**

Chad Ryan Ritch, MD, MBA

Prostate models have been used in hands-on exercises to introduce the new daVinci SP system to the urology team



University College London Hospitals

Ashwin Sridhar, MD

The Robotic Radical Prostatectomy fellowship includes 5 Urotrainer's prostate models for each fellow to guarantee continuous and standardized training



Regina Maria Cluj-Napoca Hospital

Iulia Andras, MD

Running an annual Course for Robot-Assisted Partial Nephrectomy that includes every year +10 urology residents from multiple cities



Deutsches Buenos Aires Hospital

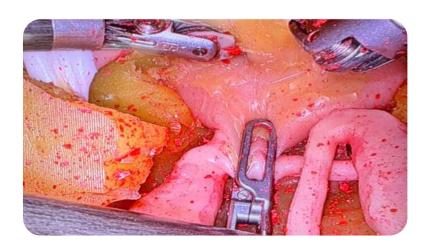
Gonzalo Vitagliano, MD

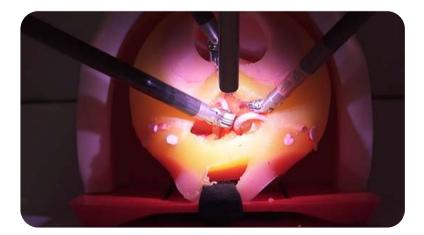
Both prostate and kidney models have been implemented for robotic surgical skills development of 3rd and 4th-year urology residents

WHY Urotrainer ?

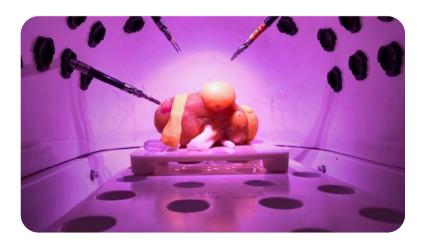
Superior training experience and flexibility







Cost-effective: Designed to train full surgical procedures step by step. Includes all anatomical



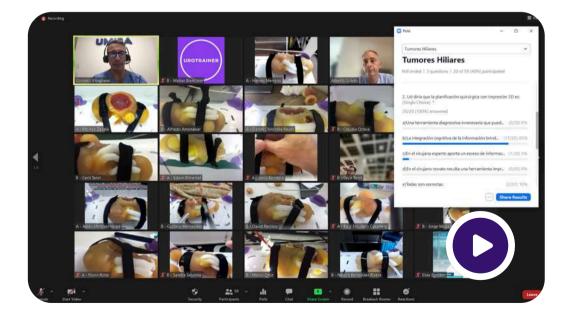
Surgical simulation videos



ROBOTIC SURGERY TRAINING



ROBOT-ASSISTED RADICAL PROSTATECTOMY



REMOTE HANDS-ON METHODOLOGY



UROTRAINER HANDS-ON COURSES



ROBOT-ASSISTED PARTIAL NEPHRECTOMY



RETZIUS-SPARING RADICAL PROSTATECTOMY

International & Scientific Validation







PD02-02 MULTI INSTITUTIONAL VALIDATION OF A NEW KIDNEY MODEL FOR LAPAROSCOPIC **NEPHRON SPARING SURGICAL TRAINING**



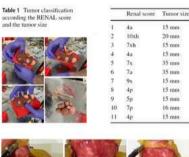






CONSTRUCTION OF A 3D SURGICAL MODEL FOR MINIMALLY INVASIVE PARTIAL NEPHRECTOMY: **THE UROTRAINER VK-1**







Users & Clients



















SIMMER

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CONFEDERACION AMERICANA **DE UROLOGIA**





Surgical Simulator for Laparoscopic Partial Nephrectomy for Renal Cell Carcinoma - Gonzalo Vitagliano



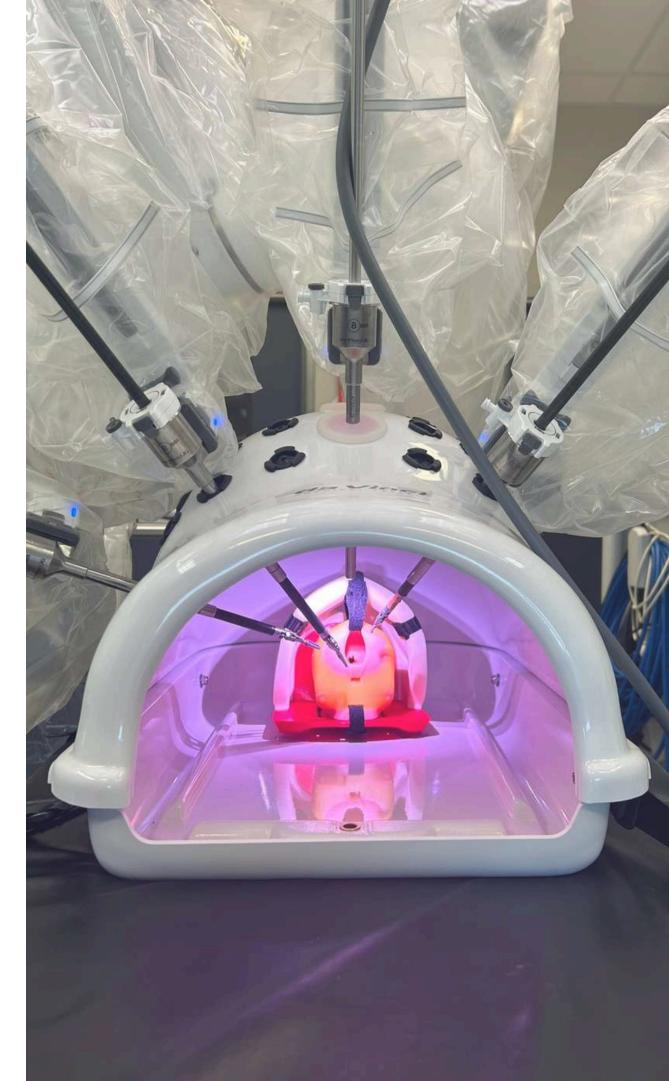


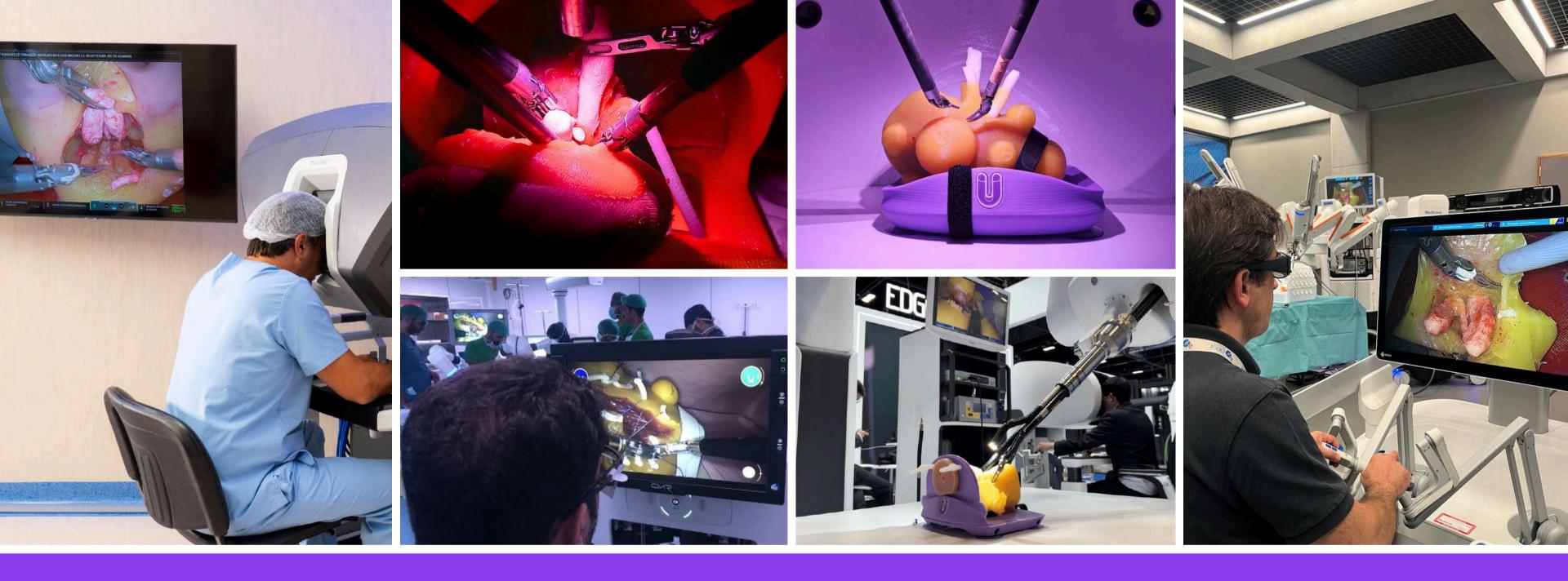
Contact Us



Do you want to see Urotrainer in action?

Prostatectomy Simulation







Training is caring

SIMULATION@UROTRAINER.COM

UROTRAINER.COM

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