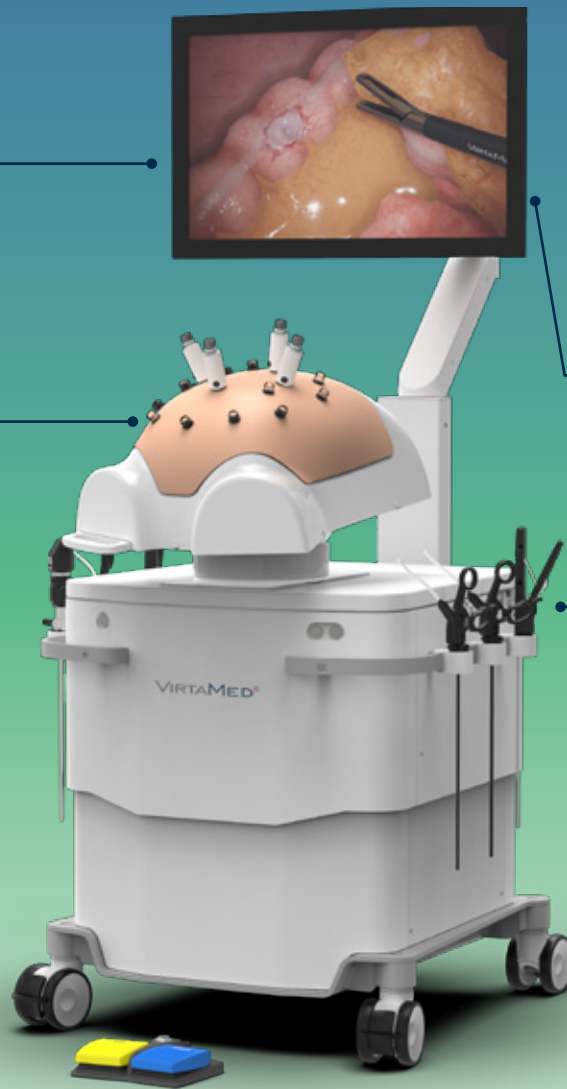


Photorealistic  
patients

Anatomical model

Pathologies and  
complications

Original instruments



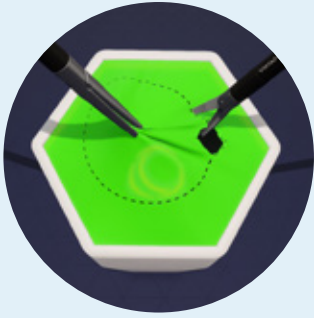
# LaparoS<sup>™</sup>

Comprehensive laparoscopy training  
simulator with unmatched realism:  
real graphics, real instruments, real feel.

LaparoS<sup>™</sup> enables the integration of modules from other specialties  
(UroS<sup>™</sup>, GynoS<sup>™</sup> and ArthroS<sup>™</sup>) on the same platform.

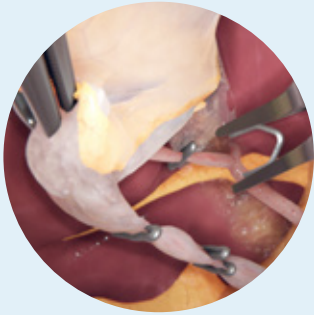


# — Educationally relevant training



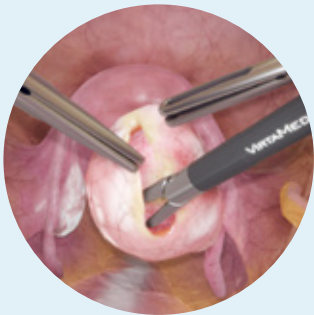
## Essential skills

Training cases inspired by FLS to prepare for: bimanual coordination, pattern cutting, loop ligation, needle manipulation and intracorporeal knot tying. Using a simulated 0° or 30° optic, trainees can also become proficient in camera navigation, eye-hand coordination, clip placement, development of ambidextrous psychomotor skills, as well as laparoscopic suturing and needle handling.



## General surgery

Condensed training cases focus on specific skills and adverse events derived from cholecystectomy, appendectomy and incisional hernia, allowing residents to focus on repeating and mastering each skill individually. Rare situs-inversus totalis patient cases train ambidextrous and non-dominant hand skills.



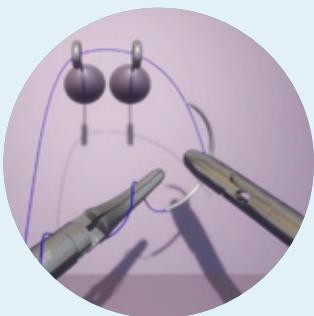
## Gynecological laparoscopy

Condensed training cases include diagnostic laparoscopy, anatomy identification, clipping and cutting, and more training cases derived from highly realistic scenarios including hysterectomy, tubal ligation, ovarian cystectomy, salpingectomy, adnexectomy, endometriosis and salpingotomy for management of ectopic pregnancies.



## Colorectal surgery module

Condensed diagnostic and therapeutic training cases with highly realistic scenarios derived from right colectomy. This module helps trainees practice key steps in right colectomy with a broad selection of diagnostic cases followed by a questionnaire. Trainees learn how to safely expose the ileocolic pedicle with blunt dissection, electrocautery, and a vessel sealing device.

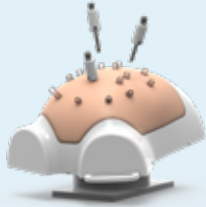


## Suturing

Cumulative and step-by-step training cases focusing on specific skills for safe needle manipulation and intracorporeal knot tying (half knot, square knot, and surgeon's knot). Using two needle holders, or a grasper and a needle holder, trainees can hone their skills with precision and confidence, ultimately enhancing their proficiency and readiness for certification, such as the GESEA MIGS.

# Positioning for better outcomes

With the VirtaMed LaparoS™ the preparation prior to surgery is taken into account: correct patient positioning is crucial for surgical efficacy and patient safety,<sup>1</sup> a well-considered choice of trocar positions ensures safe surgical access and efficient instrument triangulation and team training is crucial to improve team collaboration and shorten operative times.



Trocar placement



Patient positioning



Team training

# Develop ambidexterity in the optimal way

Residents are able to repeatedly train their non dominant hand to improve performance of both hands and reach proficiency benchmarks, supported by formative guidance and summative feedback. Situs-inversus totalis patient cases challenge residents to reorient their visual motor skills and encourages bilateral transfer.

As a result, residents gain better understanding of situations that require working with the non-dominant hand in an inverted environment. The LaparoS™ Essential Skills module provides an excellent way to improve ambidexterity in an abstract environment.



“What fascinates me the most about the new simulator is really taking not just the operation in consideration but the entire preparation: positioning trocars and being able to simulate as close as possible to reality.”

Prof. Dieter Hahnloser  
CHUV Lausanne, Switzerland



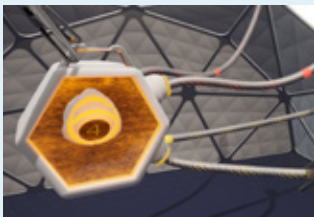
<sup>1</sup> Agostini J, Goasguen N, Mosnier H. *Patient positioning in laparoscopic surgery: Tricks and tips.*, Journal of Visceral Surgery (2010) vol. 147, no. 4, p. 287-291.

# Enter the OR with confidence

VirtaMed's Training & Education team are experts in the pedagogy of using simulation for medical education and will support you in the entire learning journey, from the integration of simulation into your existing training curriculum to implementing standardized levels of proficiency prior to entering the operating room.

## A modular learning approach

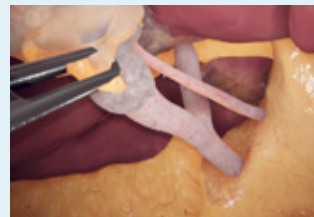
With LaparoS™ the trainee starts with essential psychomotor skills training in an abstract environment and then transfers these skills into short anatomical learning sequences, once this is mastered, anatomical variations and complication handling can be trained. Modular training approaches like the one implemented in LaparoS™ have been validated to be successful in shortening the learning curve and mitigating surgical risk.<sup>2</sup>



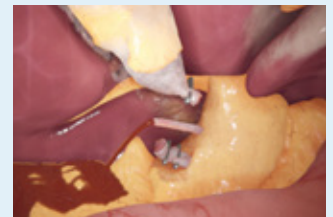
Essential skills



Deconstructed skills



Clinical variations



Adverse events



“You are able to mimic exactly what we do on a real patient [...] I like the idea that we can actually intercede and add complications, we can add bleeding, we can add a leakage from the gallbladder for example [...] so all those things give you the feel that you are in the OR.”

Dr. Ivan Puente  
Broward Health, Fort Lauderdale, USA

## VirtaMed Connect

Connect is VirtaMed's cloud-based solution that lets you access your simulator data anytime from anywhere. Use Connect to remotely create courses, track student progress, and manage your simulator usage – all from the convenience of your desk or tablet. With Connect, trainees are motivated through online leader boards and can compare their own results over time.



<sup>2</sup> Stolzenburg et al.: *Modular surgical training for endoscopic extraperitoneal radical prostatectomy*. BJU Int. 2005 Nov;96(7): p. 1022-7.

[sales@virtamed.com](mailto:sales@virtamed.com)

**VIRTAMED**   
Better Surgeries

**North America**  
16144 Churchview Drive  
Suite 101 Lithia  
FL 33547, USA  
Phone: +1 813 661 4341

**International**  
Rütistrasse 12  
8952 Schlieren  
Zurich, Switzerland  
Phone: +41 44 500 9690

**China**  
1212 Shui On Plaza  
Huai Hai Middle Road 333  
Shanghai, PRC  
Phone: +86 21 6368 8810