LAP X VR
SIMULATOR FOR LAPAROSCOPY

Positioning LAP-X VR

LAP-X VR is an innovative virtual reality simulator for cost-effective motor skills training in a safe environment for different surgical specialties. LAP-X provides a validated package of various curricula of increasing difficulty to attain proficiency skill levels in all surgical specialties, including gynecology, urology, pediatric surgery, general surgery, and gastrointestinal surgery. LAP-X VR offers you an excellent training aid to standardize, structure, and complement hands-on skills training in surgical residency programs. LAP-X VR helps to reduce the learning curve, to reduce operational procedure time and also to decrease instruction time. With the possibility of metrics measurement and performance recording as well as online remote assessment, LAP-X VR helps you to perfectly organize, manage and standardize training. LAP-X VR provides an ideal training solution to help surgical educators save time, effort and money while achieving the best training result.

Functionality

LAP-X VR features exercise videos, which the trainee can watch before performing the exercise. After the exercise has been completed, the trainee will receive an automatic assessment by the software. The trainee can then submit the scores and video recording to the instructor for later assessment. The instructor can log in locally or online to review the trainee's scores and video recording, and is given the possibility to assess the performance and give comments or feedback. LAP-X VR includes e-learning content, exam questions and the ability to create a personal portfolio. LAP-X VR also includes administration tools for educators that are easily incorporated in each hospital's training program, enabling the possibility of standardized training. The standardization of this training can be done in a hospital, but also in a cluster of hospitals or in a certain region.


LAP-X VR*

Benefits at a glance

▸ Innovative virtual reality system at low cost
▸ Portable, compact and easy to set up
▸ Intuitive and self-explanatory system
▸ Database to register different users
▸ Trainees' performance can be recorded for later assessment

▸ Real surgical instruments are used, narrowing the gap between training and real surgery
▸ Administration tool to monitor the training progress of trainees
▸ Change or add training modules and exercises

▸ Reduce learning curve, operational procedure time and instruction time
▸ Ideal for mandatory laparoscopic skills training
▸ Instant feedback with measurements

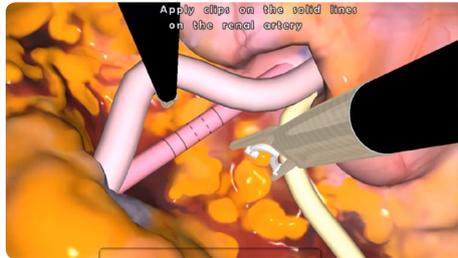MEDICAL X

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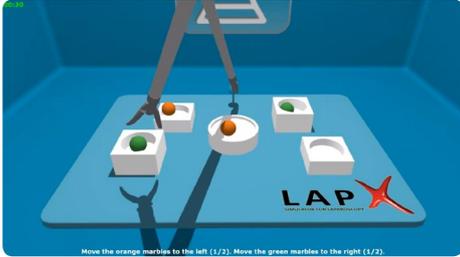
Modules

Basic Sills - Movement of Objects on Pins*

Basic skills
This module is designed to practice basic endoscope controlling skills in a non-anatomical environment.

Clipping of the renal vein for a complete nephrectomy*

Complete nephrectomy
Intended to train a laparoscopic complete nephrectomy. This exercise allows clipping and cutting the renal vein, renal artery, and ureter.

Removal of the appendix*
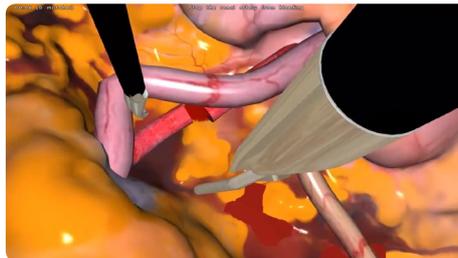
Laparoscopic appendectomy
This module is designed to train a laparoscopic appendectomy. Trainees can choose among different instruments, such as an EndoLoop, scissors, and/or EndoGIA.
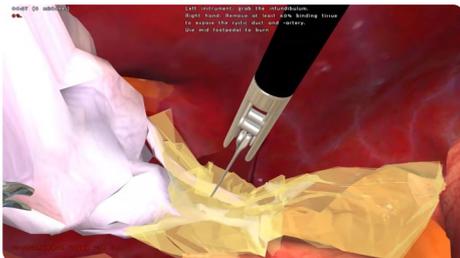
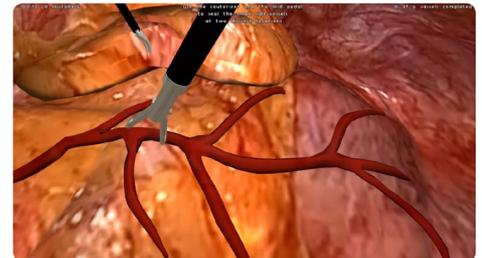**Removal of the gall bladder***

Laparoscopic cholecystectomy
Project and train a laparoscopic cholecystectomy intervention.

Solving kidney complications*

Preview kidney complication
Focuses on solving kidney complications up until performing a complete nephrectomy.

Vessel cauterization*

Vessel Cauterization
Designed for trainees to practice cauterization and cutting of vessels.

Practice navigation and anatomy*

Anatomy navigation
Made to test trainees' knowledge of the anatomical structures in the pelvic area, while simultaneously training controlling the endoscope.

System specifications
▶ Two controllers of 1.6 kg each
▶ Controller Dimensions: 22x15x32cm (WxDxH) each
▶ HD camera, led light, foot pedals
▶ Exercise platform 35x30x5cm (WxDxH)

Computer requirements
▶ Processor intel i7, 3.4GHz
▶ Operating system windows 7 or 8
▶ Memory >8 GB
▶ Video Card Nvidia® GeForce® GTX 650 or better

Light weight, portable, compact design

MEDICAL X