





LapSim® - Give your training centre a competitive edge

Surgical Science and our pioneering LapSim® simulator can improve your training and patient outcomes simply and quickly. And by working together we can make virtual reality (VR) simulation an essential and cost effective component of your resident training.

The Training Benefits of a LapSim Simulator:

- Train without risk to patients, reducing errors in first operations.
- Shorten the learning curve and be more prepared for real surgery.
- Train more effectively compared to traditional methods.
- Learn 24/7 and accelerate the time needed to gain competency.
- Receive standardized, objective, data-driven feedback.
- Work at your own pace and reduce demands on supervision time.
- Practice entire surgical procedures and experience the realities of the OR.



Simbionix LapSim is the only training simulator that comes with a customizable curriculum so you can develop and enhance your residents' program.

Prepare More Confident Surgeons

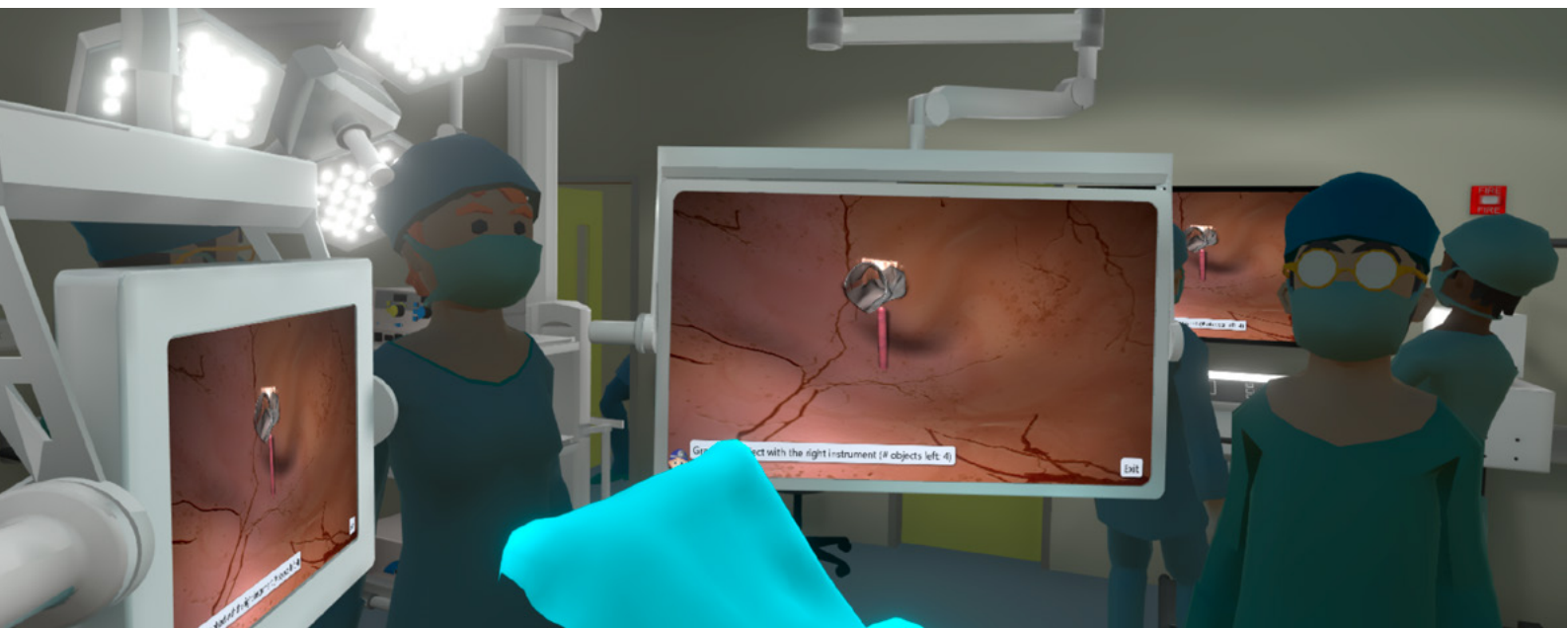
There are many benefits to VR simulation training. It shortens the time it takes to gain surgical competency and delivers consistent cost-effective training that helps develop more prepared surgeons, reducing medical errors.

Advanced, Effective Training

How are your residents trained today? Are they getting consistent training? Does it take them a long time for them to become competent? Are their skills good enough to enter the OR? With a LapSim simulator you get a standardized 24/7 guided training program that provides real-time feedback. This reduces the demands on supervision time and leads to more skilled and confident surgeons, ready for the OR.

Better Patient Care and Safety

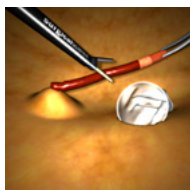
This graph shows the learning curve for a typical resident. The role of a LapSim simulator is to shorten the time it takes your residents to be trained in fundamental surgical skills such as depth perception and instrument handling. LapSim makes sure residents are prepared, safe and confident to start laparoscopic surgery on real patients.



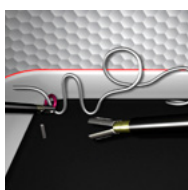
Library of Modules

The complete training solution

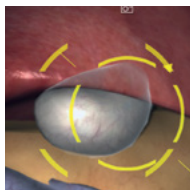
Our 'Fundamental Skills' modules provide proficiency-based training to help students achieve the manual dexterity needed to perform surgery. Each exercise has increasing difficulty levels that challenge residents and keep them motivated.



BASIC SKILLS



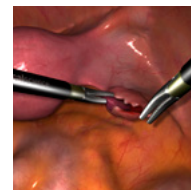
TASK TRAINING



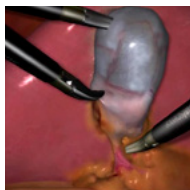
CAMERA ANATOMY TRAINING



NEW VATS LOBECTOMY FULL SUITE



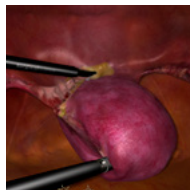
GYNECOLOGY



CHOLECYSTECTOMY



APPENDECTOMY



HYSTERECTOMY

With the Surgical Procedure modules, residents can master essential elements of full surgical procedures and experience the true realities of the OR.

More Procedures: Inguinal Hernia - Nephrectomy - Bariatrics - Suturing and Anastomosis.

LapSim® - Teach the Skills That Surgeons Really Need

The LapSim simulator comes with an improved and more intuitive interface, new performance and assessments metrics and an immersive 360 VR headset. This means LapSim is more effective at teaching laparoscopic skills than ever before.

The Next Level in VR Training

- With the latest haptic technology residents can master hand-eye coordination and psychomotor skills, and develop accurate manual dexterity.
- The new LapSim 360 simulation suite creates an immersive, multi-sensory training experience that allows residents to feel more involved and closer to the real OR experience.

New Metrics for Clear, Objective Feedback

- Residents get a comprehensive data-driven training report that analyses their skills in more detail than ever before.
- Assessment metrics are classified into easy to understand surgical terms so residents know what they are good at and what they are not.
- Each exercise can be recorded to provide detailed performance analysis. This supports skill development and encourages residents to train.

- All parameters are grouped according to the GOAL* rating scale, a validated assessment tool that measures training outcomes.

More Intuitive Interface

- An effective goal-orientated environment helps residents learn and stay motivated.
- Easy to use and navigate, with easy to follow instructions and video guides.
- Clear overview of over 40 courses, including introductory courses and challenging exams.



* Global Operative Assessment of Laparoscopic Skills

LapSim® - Your first choice for training

State-of-the-Art Technology

LapSim is an advanced simulator, with detailed graphics, haptic feedback and a new intuitive interface. It provides a rich and immersive, multi-sensory training experience that is unmatched in the market today.

The LapSim - Certification Program

Our simulators are the most scientifically validated in the world. Studies have proven that our simulators work and that VR skills successfully transfer to the OR. We have applied these studies to create our own validated curricula, the LapSim Certification Program™.

The LapSim Certification Program

is a validated curricula that makes sure your residents reach an accredited proficiency in laparoscopy. There are two certified residency programs:

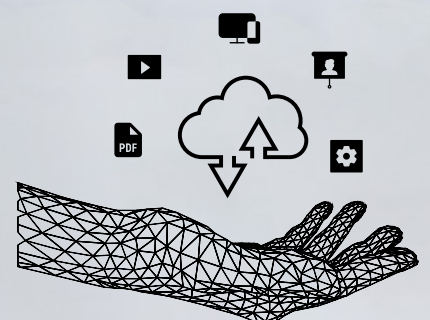
- Designed especially for residents in General Surgery and includes Expert Training and the Ahlberg Exam. It is based on a study published in the American Journal of Surgery that showed that training on a VR simulator to a level of proficiency significantly improves intraoperative performance during a resident's first 10 laparoscopic cholecystectomies.
- Designed especially for residents in Gynecology, including Expert Training, Salpingectomy and the Larsen Exam. It is based on the study "the effect of VR training on laparoscopic surgery" published in the British Medical Journal which showed the positive impact of LapSim training on patient outcomes.

These certification programs use the same parameters as these studies. You can configure these parameters - the difficulty levels, camera angles and metrics - to meet your own specific standards and requirements.



MentorLearn Cloud

Ask how the MentorLearn Cloud simulator curricula management system can support your Symbionix simulator. MentorLearn's many capabilities include remote simulator administration, online learning, anywhere results monitoring, proficiency based hands-on training, as well as simulation video capture that is ideal for debriefing.





"This is a very useful tool in teaching the basics of upper- and lower GI endoscopy. The registrars especially enjoyed the opportunity to hone their skills without fears of harming a patient - to the extent that they requested more time to practice on it!"

Jan Van Zyl

Associate Professor,
University of the Free State

