



..... • Structured Training in Anterior
and Posterior Segment Surgery



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OpSim

Ophthalmic Surgical Simulation Platform



SiMedix
Simulated Medical Experiences

About OpSim



A Realistic Ophthalmic Surgical Training System

OpSim is a comprehensive ophthalmic surgical training system that recreates realistic ocular tissue behavior and key elements of the surgical environment through immersive visualization, surgical handpieces, microscope-style interaction, foot-pedal control, and procedure-specific software.

The platform supports training in anterior and posterior segment surgical skills within a realistic, repeatable, and measurable simulation environment.



High-Fidelity Simulation



Structured Curriculum



Competency Assessment

Transforming Ophthalmic Surgical Education



OpSim Training Philosophy

From Practice to Mastery

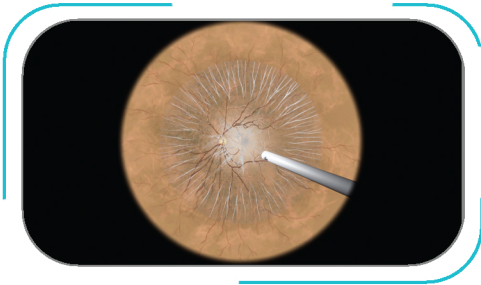
OpSim is built on a competency-based, simulation-driven approach that enables trainees to progress from observation to hands-on surgical performance in a safe, controlled environment.

- Build precision and control
- Practice safely through repetition
- Improve readiness for real surgery



Curriculum

OpSim courseware guides trainees through progressive stages of surgical skill development, from basic orientation and instrument handling to complex intraocular task management. The curriculum develops spatial awareness, bimanual coordination, tissue safety, safe-zone control, hand-eye coordination, and procedure-specific decision-making through a structured sequence of training levels.



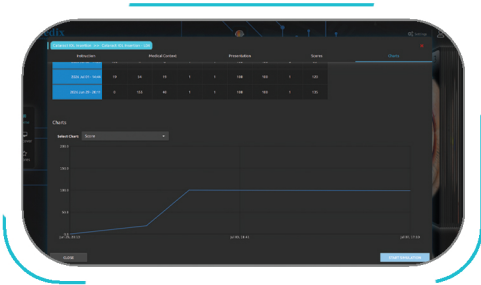
Core Vitrectomy



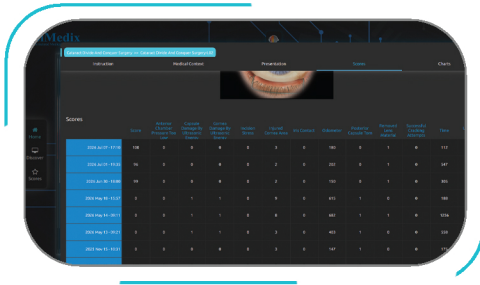
Iris Expansion Ring

Assessment

OpSim provides objective assessment by monitoring movement accuracy, hand stability, instrument control, tissue contact, simulated tissue behavior, task completion, and procedure-specific errors. Measurable training data help instructors review performance, identify skill gaps, and provide targeted feedback.



Progress Chart



Scoreboard



Stereo Microscope Unit

Creates a stereoscopic 3D view with realistic depth perception.



Patient Head Interface

Simulates patient head positioning for realistic hand and instrument access.



Surgical Instruments

Simulator handpieces are designed to resemble real surgical instruments.



Microscope Foot Switch

Enables precise microscope positioning for an optimal view.



Control Touchscreen

Allows supervisors to observe the surgical procedure.



Adjustable Stereo Vision System

Ergonomic adjustment system for comfortable microscope viewing.



Height-Adjustable Base

Allows height adjustment for ergonomic positioning and user comfort.



Instrument Foot Pedal

Replicates the foot-control functions of an ophthalmic OR machine.

Anterior Segment Skills Training Pathway

OpSim's anterior segment pathway is designed to develop the essential microsurgical skills required for cataract surgery and other anterior segment procedures.

Through progressively challenging training scenarios, trainees build precise instrument control, bimanual coordination, tissue awareness, and safe manipulation of delicate ocular structures, including the cornea, lens, capsule, and zonular fibers.

This structured learning pathway enhances surgical precision, procedural confidence, and readiness for real operating room performance.

Posterior Segment Skills Training Pathway

OpSim's posterior segment pathway is designed to prepare trainees for vitreoretinal procedures by developing depth perception, fine instrument control, and safe interaction with delicate posterior segment tissues.

Simulation-based training helps learners improve forceps handling, bimanual coordination, membrane manipulation, and the controlled execution of procedures such as ERM peeling, PVD induction, core vitrectomy, ILM peeling, retinal detachment repair, and endolaser.

With progressive skill development, trainees gain the technical consistency, confidence, and control required for posterior segment surgery.



Deployment, Training & Lifecycle Support

OpSim is CE-certified and supported by multilingual software, on-site installation, user and instructor training, warranty coverage, after-sales service, and remote software updates and maintenance.

With successful installations and a structured support process, OpSim is designed for reliable long-term use in professional training environments.

Why OpSim for ophthalmic education?

- Designed for universities, hospitals, and simulation centers
- Anterior and posterior segment training on one platform
- Strong value for educational investment
- Longitudinal progress tracking
- Standardized training for trainees

