

SIMULATION TRAINING RESOURCES

INTRODUCTION TO OPHTHALMOLOGY

The following table provides information on the various clinical skills and procedures that can be taught through simulation and the resources available.

Removal of corneal foreign body	https://www.simuleye.com/product-page
Corneal scraping	https://www.simuleye.com/product-page
Measuring eye pressures using Goldman tonometry	http://www.eyetechusa.com/framepage.htm
Gonioscopy	https://www.simuleye.com/products/simuleye-slt
Direct Ophthalmoscopy	https://www.vrmagic.com/simulators/simulators/eyesir-direct-ophthalmoscope/ https://www.epipole.com/model-eye/
Indirect Ophthalmoscopy	http://www.aurolab.com/retieye.asp http://simulatedocularsurgery.com/product/retinal-buckling-eye-advanced/ https://www.bioniko.com/fundus/ https://www.vrmagic.com/en/simulators/simulators/eyesir-indirect-ophthalmoscope/
Eyesi Simulator	https://www.rcophth.ac.uk/training/ost-information/simulation/eyesir-ophthalmic-surgical-simulators-in-the-uk-ireland/
Biometry	http://www.eyetechusa.com/framepage.htm

LASER SIMULATION

The following table provides information on the various laser procedures that can be taught through simulation and the resources available.

YAG Capsulotomy	https://www.simuleye.com/products/simuleye-yag http://www.eyetechusa.com/laser_model_eye.htm https://journals.lww.com/jcrs/FullText/2000/10000/Model_Eye_for_Nd_YAG_Laser_Capsulotomy.8.aspx
YAG PI	https://www.simuleye.com/products/simuleye-lpi http://www.eyetechusa.com/laser_model_eye.htm
Argon Retinopexy / PRP	http://www.aurolab.com/retieye.asp http://www.eyetechusa.com/laser_model_eye.htm
Selective Laser Trabeculoplasty	https://www.simuleye.com/products/simuleye-slt
Indirect Argon Laser Retinopexy / PRP	http://www.aurolab.com/retieye.asp http://simulatedocularsurgery.com/product/retinal-buckling-eye-advanced/
Cryotherapy	http://www.aurolab.com/retieye.asp http://simulatedocularsurgery.com/product/retinal-buckling-eye-advanced/

OCULAR SIMULATION

The following table provides information on the various ocular procedures that can be taught through simulation and the resources available.

Model eyes for Cataract, Cornea, Glaucoma, Intraocular injections, Strabismus and Vitreo-retinal procedures	http://simulatedocularsurgery.com/products/ https://www.bioniko.com/fundus/ https://eyecre.at/artificial-eyes/ https://www.simuleye.com/product-page
Heads for model eyes	http://simulatedocularsurgery.com/products/ http://www.pharmabotics.com/wetlab/ https://www.bioniko.com/romano/ https://www.bioniko.com/flex-orbit/ https://eyecre.at/padsholders/
Cataract kit	Kitaro Wet and Dry labs and Kitaro Complex lab are tools to teach/learn the important steps of cataract surgery.
Microscope	Zeiss Stemi microscope

SITUATIONAL AWARENESS AND IMMERSIVE SIMULATION

Advanced simulation models such as [SimMan 3G](https://www.laerdal.com/gb/products/simulation-training/emergency-care-trauma/simman-3g/) (<https://www.laerdal.com/gb/products/simulation-training/emergency-care-trauma/simman-3g/>) allow high-quality simulation training in a multitude of different scenarios and patient cases.

Further Resources:

1. **Simulated Ocular Surgery** - Simulated Ocular Surgery (SOS) hosts a dedicated **RCOphth channel** on their Simulation Gallery (<http://gallery.simulatedocularsurgery.com>). The principle aim of the Simulation Gallery is to create a repository for high quality surgical training videos from around the world, which will enable ophthalmologists to share their teaching tips for a particular procedure and for trainees to share their training experiences. Access to the website is free for all.
2. **American Academy of Ophthalmologists** - AAO has an extensive list of simulation tools and resources which can be accessed [here](https://www.aao.org/simulation-in-resident-education) (<https://www.aao.org/simulation-in-resident-education>).