



High Fidelity Eye Surgery Simulator Simulation-based Training Program

Experience the difference on the HelpMeSee Eye Surgery Simulator!

Immersive, Instructor-led Program

Delivers real-time qualitative feedback

Cutting Edge Haptic Technology

(CGI) Computer graphics provide seamless movement and realistic tactile feedback

High Resolution Visuals

Three-dimensional views via microscope

Handpieces

High-fidelity calibrated tactile force and tissue sensation sharpens muscle memory

Standardized Curriculum

Ophthalmology training standards benchmarked

Performance Data

Trainee steps recorded, scored and reviewed. Meets proficiency and outcome standards

Assessments

Meets Ophthalmology competence standards

Deliberate Practice

Improved proficiency with ~300-500 attempts within 5 days

Training Benefits

Shorten Surgical Training Time

Expanded practice potentially reducing OR cost

Improved Surgeon and Trainee Confidence

Making and correcting errors repeatedly

Haptics Offer Lifelike Surgical Experience

A realistic virtual eye

HelpMeSee Certified Instructors

With Ophthalmology backgrounds



Columbia University Irving Medical Center

"We have integrated HelpMeSee's simulation-based training into our overall curriculum for our residents. Their model of an instructor-led course of concentrated, high-fidelity simulation-based training represents a paradigm shift in ophthalmic education that will make our residents stronger surgeons."

- Dr. Royce Chen
Residency Program Director, Columbia University

1 Source: Nair AG et al. Effectiveness of simulation-based training for manual small incision cataract surgery among novice surgeons: a randomized controlled trial. Sci Rep. 2021;11(1):10945.

2 Source: Nair AG et al. Assessment of a high-fidelity, virtual reality-based, manual small-incision cataract surgery simulator: A face and content validity study. Indian J Ophthalmol. 2022; 70(11):4010-4015.



50%
SURGICAL ERROR
REDUCTION¹

94%
OF SURGEONS
RECOMMEND²

Course Overview

World's most comprehensive simulation-based training program.

Ideal for residents, fellows, ophthalmologists, and residency training programs.

Primary Courses: Phacoemulsification, MSICS - 4-5 days

Secondary Courses: Suturing, Complications Management - 1 day each

Pre-learning: Interactive e-learning prior to training with high quality videos and assessments

80% Trainee Time Practicing Simulation: 20% Instructor observation, feedback, and assessment

Unparalleled Learning Environment: Software assesses surgical performance using objective parameters and competency-based assessment rubrics and training tools

Increase surgical competence for these situations and more:

- Surgeons returning to surgery – after a ‘break’ from practice or a change in practice
- Residents PGY1-4 – residents new to the OR or needing extra practice
- Residency programs - where investment in an on-site simulator may be cost prohibitive
- Reduce errors - through extensive hands-on practice (~300-500 attempts within 5 days)
- Learn new skills - suturing or practicing complication corrections

Locations

HelpMeSee Training
& Global Partners



USA:

- SIMLab (Main Center) - Jersey City, NJ

Latin America:

- Instituto Mexicano de Oftalmología (IMO) - Querétaro, Mexico

Europe:

- Gepromed - Strasbourg France

Africa:

- CSPI La Polyclinic D'Ilfy and Ministry of Health - Madagascar

India:

- HMS Center of Excellence – Mumbai
- Aravind Eye Hospital – Madurai
- LV Prasad Eye Institute (LVPEI) - Hyderabad

China:

- HMS Vision – Beijing
- Eye Hospital of Wenzhou University – Wenzhou
- He Eye Specialist Hospital – Shenyang
- Zhongshan Ophthalmic Center Sun Yat-sen University - Guangzhou

About HelpMeSee: Innovative, Global Non-profit Organization

Crisis: Escalating, dire need for cataract specialists across the globe ~14 ophthalmologists/million.

Mission: Eradicate blindness in ~100M people with cataract worldwide by 2030

Access: Expand global access to cataract surgery in those areas of greatest need

Founded: 2010 by Al Ueltschi and Jim Ueltschi – founders of FlightSafety International and Orbis

Partnerships: NGOs, Academic Institutions, National Health Authorities, National Research Org.

Innovation: \$150M invested in a world-class haptic feedback simulation-based system for training cataract surgeons and trainees. Development plans to expand surgical course offerings ongoing. Approximately 3000 surgeons trained since 2020. Goal: train 10,000 by 2030 to deliver 10,000 surgeries per trainee to eradicate the 100M blind due to cataract worldwide.



**TRAIN
WITH US**



Cataract Surgery

Simulation-based Training Courses

Primary Courses (4-5 DAY)

Phacoemulsification Course (PSTC) Step Details

- Perfecting hand/eye/foot coordination
- Corneal Incision - and paracentesis opening
- Capsule Opening - continuous circular capsulorrhexis
- Lens Removal - divide and conquer, stop and chop, vertical & horizontal direct chop
- Cortex Removal - using irrigation and aspiration cannulas
- IOL Implantation - with a folded IOL
- Stabilizing the eye and hydrating all openings - to close the surgical procedure

Manual Small Incision Cataract Surgery Course (MSTC) Step Details

Only high-fidelity simulator with haptic feedback offering MSICS training

- Sclero-corneal Groove - tunnel dimensions, uveal prolapse and perforation scores
- Keratome Entry - length of cornea dissected from limbus, contact, premature entry
- Capsulorrhexis - with range of 4.5-6 MM monitoring zonular dialysis and touches
- Nucleus Delivery - with wire Vectis, iris pull and endothelial touch
- Cortex Aspiration - and visco-elastic injection through paracentesis
- IOL Implantation - and dialing using forceps and Sinsky hook.

Secondary Courses (1 DAY)

Suturing Course

Only high-fidelity simulator with haptic feedback offering suturing training

- Passing the needle
- Tying the knot
- Cutting and burying the knot

Complications Management Course

- Anterior Vitrectomy
- AC IOL implantation
- Sphincterotomy
- Capsular Tension Ring Insertion

