



Association of University
Professors of Ophthalmology

SCOR

Surgical Curriculum for Ophthalmology Residents (SCOR)

2021–2024
Annual Report



AUPO Surgical Curriculum for Ophthalmology Residents (SCOR)

AUPO SCOR has been actively working on a standardized surgical curriculum for ophthalmology residents since 2018. The objective is to help programs achieve their goal of training residents who are expected to be competent in a broad range of basic and advanced surgical skills.

Since 2021 the AUPO SCOR Program has continued to grow and successfully provide surgical skills training. More than 1,000 residents have accessed our Learning Management System and nearly 600 PGY4 residents from 100 residency programs have completed the SCOR Surgical Skills Workshop where they received 1:1 training from highly trained and experienced faculty from across the United States. In addition, the AUPO SCOR Program continues to add to its extensive Ophthalmology Training Curriculum library available online to every residency program across the United States and Canada.

In this report, we have shared details of the current state of affairs of the AUPO SCOR Program and the future goals and next steps that we are working on to make this program indispensable for the entire ophthalmology training community.



Goal and Mission

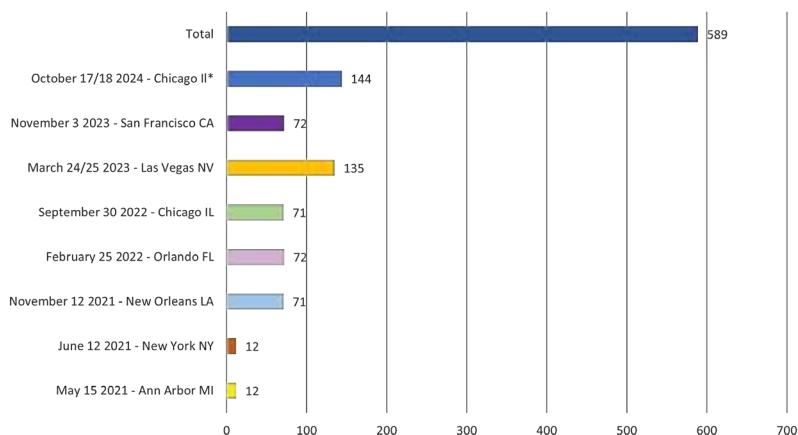
The goal of AUPO SCOR is to train residents to be competent in a broad range of basic and advanced surgical skills. Our mission is to provide a standardized system of surgical training and assessment of competency for ophthalmology residents.

SCOR Executive Committee

- Shahzad Mian, MD, Director
- Grace Sun, MD, Skills Transfer Lead
- Yousuf Khalifa, MD, Online Learning Lead
- Susan Culican, MD, PhD, Assessment Lead
- Seth Pantanelli, MD, MBA, Multimedia Lead
- Steve Armenti, MD, PhD, Training-the-Trainer Lead
- Steven Feldon, MD, MBA, AUPO Executive Vice President
- Craig Carey, AUPO SCOR Client Services Manager

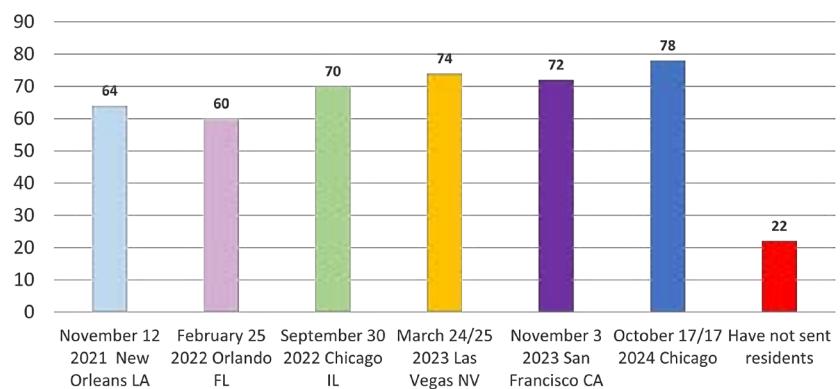
Statistics

AUPO SCOR Unique Resident Participants



AUPO SCOR Participating Resident Programs

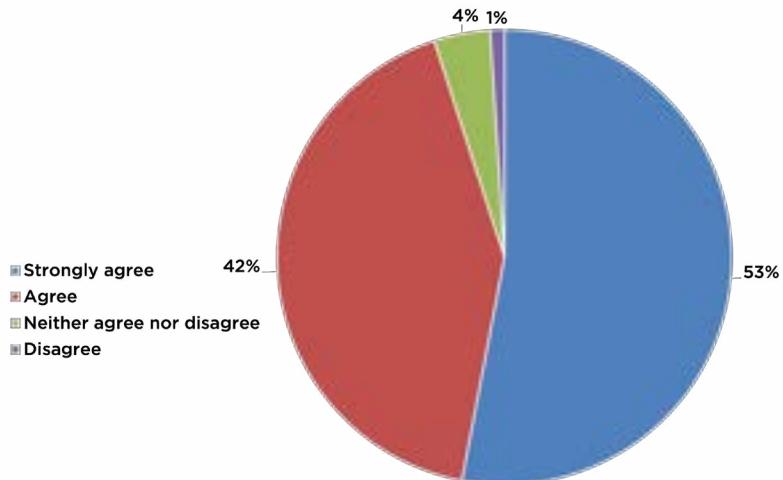
**ACGME - 124 accredited residency programs



Online Learning Management System (LMS)

Did the online LMS modules contribute positively to your overall learning experience?

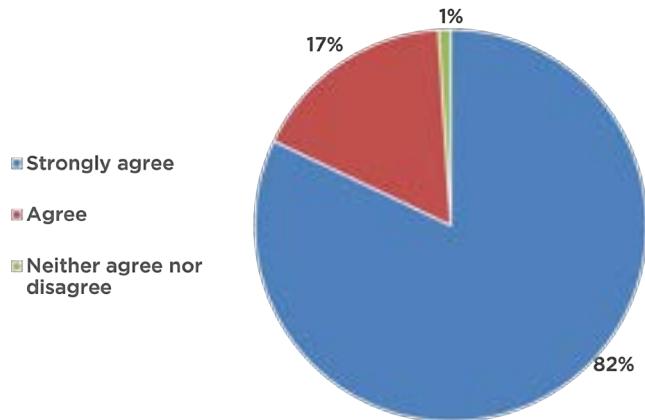
Note: Post workshop survey data from October 2024 Workshop



Workshop Impressions

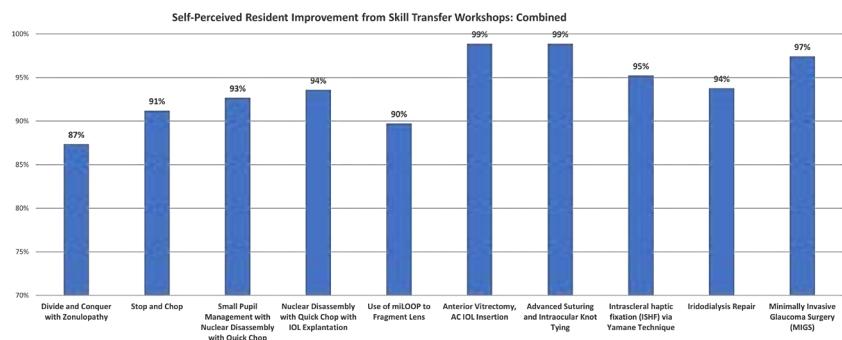
Did the SCOR Advanced Cataract Surgery Curriculum Contribute Positively to your overall learning experience?

Note: Post-workshop survey data from October 2024 Workshop



Self-Perceived Resident Improvement from Skill Transfer Workshops

Note: Post-workshop survey data from November 2021 – October 2024 Workshops



Feedback

Resident Feedback

- I really enjoyed the lab; it was complimented well by the LMS content. The skills transfer portion worked remarkably well - to provide some anecdotal evidence, two days after returning from the course I encountered a large amount of zonulopathy when disassembling a traumatic white cataract. The capsular bag was found to have more than 6 clock hours of zonular loss. I had never encountered this before and though my attending had never used capsular hooks; I was able to lean on some of the skills I picked up in the SCOR lab (namely capsular hook placement and anterior vitrectomy) and salvage the case.
- Absolutely fantastic - appreciate all the hard work put into this event. It really made a difference in my residency education. I will (and already have) be recommending this to my rising third year residents.
- It was an amazing experience. It exposed me to several topics that I had little to no experience with iris suturing, intraocular suturing, iridodialysis repair. I had a wonderful time. All the faculty and staff were amazing to work with. I feel very lucky for being able to attend.
- Very worthwhile. The lab helped to enhance my existing skills with the guidance of experienced faculty while also exposing me to new devices and techniques.
- The lab was a great experience and allowed me to practice with phaco machines and MIGS devices that my institution does not have access to.
- I learned tremendously. I was able to practice a lot of techniques that I hadn't done so far so that was helpful. I will use these skills in the future.

Trainer Feedback

- Outstanding. Would recommend to all residents. I think that advanced PGY-3's would benefit a lot as well.
- I think it's a great lab and truly will be a pivotal lab for resident education in the future. I love that most of the people I met are dedicated teachers and really wanting to do this. That also goes with the residents who are motivated to learn as much as they can and love feedback for these sessions. A positive teaching experience and environment throughout. First SCOR event for me but having been teaching at other events I think it's in a class of its own. Congrats to those who put this together and the staff!
- This is a great lab, very well organized with great proctors and equipment. I thoroughly enjoyed it and would recommend my residents participate.
- Continues to improve in its efficiency. Keep up the awesome work!
- A well-run and worthwhile activity. Residents seemed to really find it valuable. Glad to see it expanding to make it more accessible to residents.
- Awesome opportunity for residents to get excellent hands-on training. Very well organized and run. Congrats on putting together an impressive program.



SCOR Learning Management System

Universal · Comprehensive · High Quality

Advanced Cataract Curriculum

Phacodynamics

- Alcon Centurion
- B&L Stellaris Elite
- J&J Whitestar Sig
- J&J Veritas

Advanced Nuclear Disassembly

- Principles of Chopping
- Stop & Chop
- Quick Chop

Critical Challenges

- Principles of Vitrectomy
- Zonulopathy
- Posterior Capsular Rupture
- Vitreous Prolapse

Contributing Challenges

- Small Pupil
- Iridodialysis Repair
- IOL Exchange

MIGS

- Principles of MIGS
- iStent
- KDB
- Hydrus
- Omni

Published Courses

- AAO Ethics Committee – Informed Consent
- Anterior Chamber Intraocular Lenses (ACIOL)
- Capsular Tension Rings
- Capsule Retractors
- Getting Started with the AUPO SCOR LMS
- Hydrus Microstent
- IOL Removal by Cutting
- IOL Removal by Folding: Cartridge Technique
- IOL Removal by Folding: Forceps Technique
- IOL Removal by Folding: Twist Technique
- IOL Removal by Large Incision
- Intraoperative IOL Exchange Management
- Introduction to Horizontal Chop
- Introduction to Vertical Chop
- Iridodialysis Repair
- Iris Hooks
- Iris-Fixated Intraocular Lens (IFIOL) — McCannel Suture Technique
- Kahook Dual Blade
- MIGS Open-Angle Glaucoma Management
- MSICS: Ruit Technique
- Management of the Small Pupil
- OMNI Surgical System
- Orientation to Alcon Centurion
- Orientation to the Bausch + Lomb Stellaris Elite



- Orientation to the Bioniko Eye Model
- Orientation to the Johnson & Johnson Veritas
- Orientation to the Johnson & Johnson Whitestar Signature Pro
- Pathophysiology of Iridodialysis
- Pathophysiology of Posterior Capsular Rupture
- Pathophysiology of Small Pupils
- Pathophysiology of Vitreous Prolapse
- Pathophysiology of Zonulopathy
- Posterior Capsule Rupture Management
- Principles of Chopping
- Principles of Intraoperative IOL Exchange
- Principles of Manual Small Incision Cataract Surgery (MSICS)
- Principles of Micro-Invasive Glaucoma Surgery (MIGS)
- Principles of Vitrectomy
- Pupil Expansion Rings
- Quick Chop Technique
- Scleral-Fixated Intraocular Lens (SFIOL) — Gore-Tex Suture Technique
- Stop and Chop Technique
- Zonulopathy Management
- iStent inject W

Platform Videos



The screenshot shows a list of video lessons on the left and a navigation menu on the right. The lessons are:

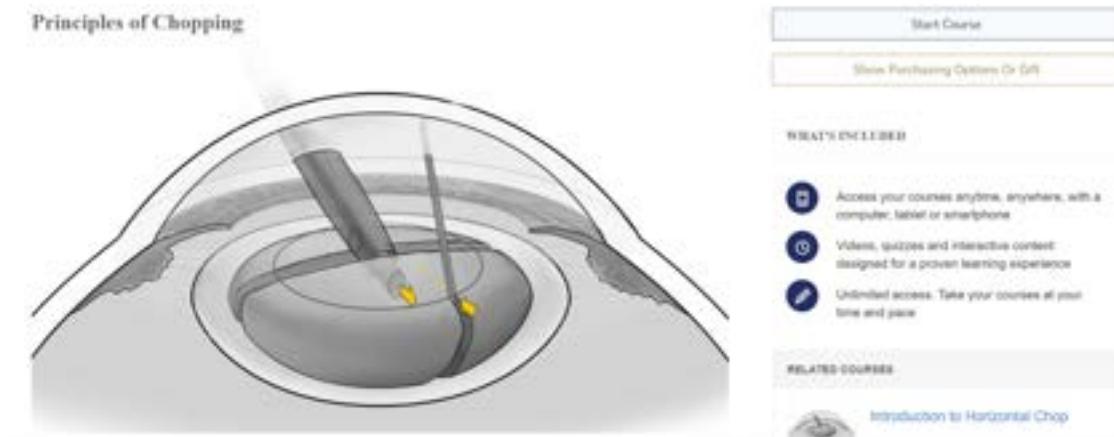
- Introduction to Dr. Tolosa & Antonio Vitrectomy (1hr)
- Introduction to Dr. Tolosa & Antonio Trabecu (1hr)
- Introduction to Dr. Louis Roth (1hr)
- Introduction to the Axies (1hr)

The navigation menu includes:

- Introduction (checkmark)
- Welcome (checkmark)
- Objectives
- Unique Features
- Getting Started
- Machine Settings
- Vitrectomy
- End of Case

NOTES, SUPPORT, and SIGN OUT buttons are also visible.

Step by Step Courses

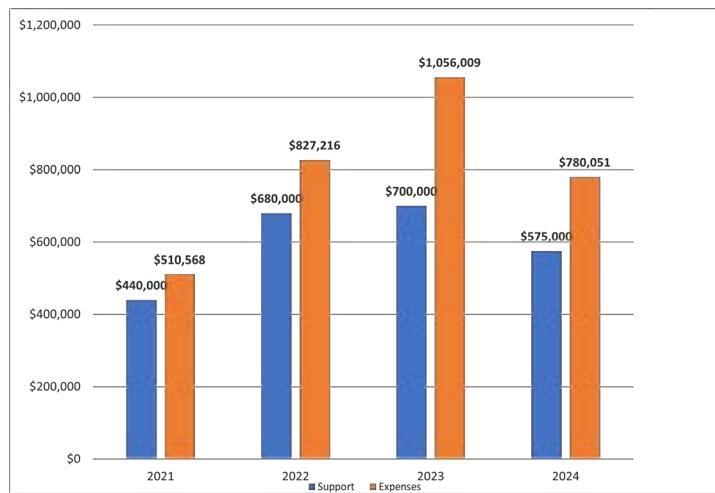


The course page for "Principles of Chopping" includes:

- Start Course button
- Show Purchasing Options Or Gift button
- WHAT'S INCLUDED:
 - Access your courses anytime, anywhere, with a computer, tablet or smartphone
 - Videos, quizzes and interactive content designed for a proven learning experience
 - Unlimited access. Take your courses at your time and place
- RELATED COURSES: Introduction to Horizontal Chop

A diagram of an eye with a scalpel and a needle is displayed.

AUPO SCOR Program Support and Expenses



PGY 1/2 Microsurgical Education Bootcamp Modules

The PGY1/2 Microsurgical Boot Camp curriculum is a comprehensive, adaptable program designed to standardize baseline microsurgical competencies among incoming ophthalmology residents. It addresses the common challenge of varying surgical skills among new PGY1/2 residents, offering a modular structure that covers essential topics such as microscope use, suturing, and various ophthalmic laser procedures. The curriculum's flexibility allows programs to tailor it to their specific needs and resources, whether implemented as a concentrated boot camp or spread throughout the year. It combines self-study, hands-on wetlab practice, and competency-based assessments to efficiently prepare residents for their surgical rotations.

- Microscope Basics I: Setup and Alignment
- Microscope Basics II: Intraoperative Control and Adjustments
- Suturing I: Simple Corneal Lacerations
- Suturing II: Corneoscleral Lacerations
- Suturing III: Stellate Corneal Lacerations
- Ophthalmic Lasers I: Introduction
- Ophthalmic Lasers II: Nd:YAG - Principles
- Ophthalmic Lasers III: Nd:YAG Posterior Capsulotomy
- Ophthalmic Lasers IV: Nd:YAG Iridotomy
- Ophthalmic Lasers V: Panretinal Photocoagulation (PRP) - Principles
- Ophthalmic Lasers VI: Panretinal Photocoagulation (PRP) - Demonstration

Next Steps / Goals 2025

Standardized Curriculum

- Expand video library
- Expand microsurgical skill boot camp

Skills Transfer Workshop

- Two workshops
- 144 residents

Assessment Tools

- Program director report
- Expand workshop video recording and independent assessment

Training the Trainer

- Enhanced accessibility
- Webinars and courses
- Hands on training

