

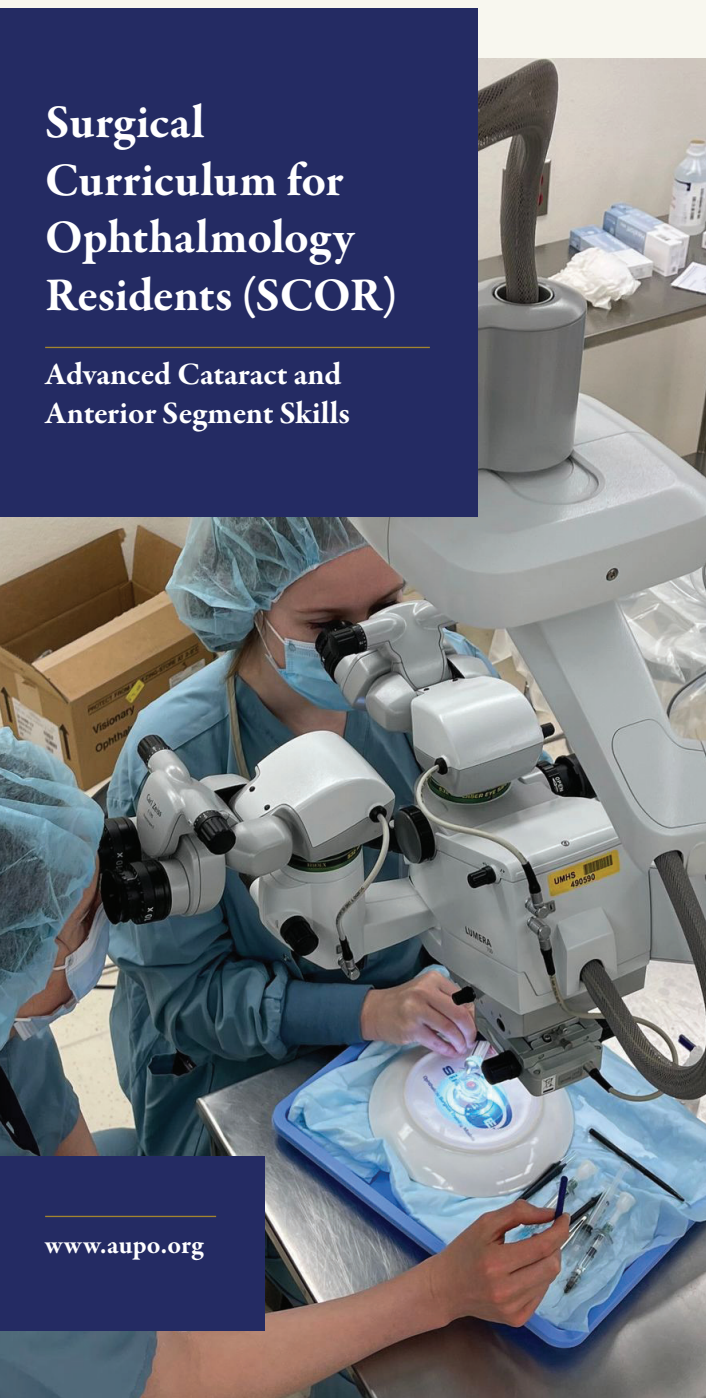


Association of University  
Professors of Ophthalmology

SCOR

# Surgical Curriculum for Ophthalmology Residents (SCOR)

Advanced Cataract and  
Anterior Segment Skills



[www.aupo.org](http://www.aupo.org)

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# Program Overview

AUPO 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. These efforts were spurred by discussions with the American Board of Ophthalmology (ABO), ophthalmology Chairs and Residency Program Directors, along with encouragement from industry.

The mission of AUPO's Surgical Curriculum for Ophthalmology Residents (SCOR) is to provide a standardized system of surgical training and assessment of competency for ophthalmology residents.

## Root Problems Being Addressed

- The lack of a definition of surgical 'competence' creates variability in proficiency among board certified ophthalmologists.
- The lack of accessible educational resources to support surgical competency creates variability in skill sets among board certified ophthalmologists.
- Variability of surgical competency among ophthalmology residents can lead to adverse patient outcomes.

## SCOR Program Goals

To provide:

- equal opportunity for **all** ophthalmology residents to access outstanding, standardized, surgical training and assessment
- access to multiple surgical platforms and training in basic and advanced surgical techniques
- equitable representation of equipment and supplies
- standardization of objective in-program and in-person assessment
- data-driven curriculum
- blended learning (online and in-person) and learner-centric design (built for residents)



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# Learning Objectives

- Develop advanced phacoemulsification skills such as stop and chop and phaco chop.
  - Manage critical challenges with cataract patients including mature cataracts, and capsular weakness.
  - Recognize and manage complications of cataract surgery including use of vitrectomy techniques.
  - Explain how various platforms are used with phacoemulsification technology, instrumentation, and lenses.
  - Demonstrate advanced microsurgical skills including minimally invasive glaucoma surgery procedures (MIGS), secondary IOL fixation and iris repair.
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## Curriculum

The SCOR curriculum is designed to include skills that are deemed the essential **requirements for competency** as well as skills that are deemed to be important, but not required, for all ophthalmologists. Instructional materials are designed to be responsive to the needs of residents, providing ‘**just in time**’ learning as well as **guided paths** of development.

For residents seeking **careers focused in surgical disciplines**, the Advanced Curriculum should be completed prior to independently performing the procedures.

## Skills Transfer

AUPO's objective is for every PGY4 ophthalmology resident to have the opportunity to participate in a SCOR skills transfer workshop. The goal is for residents to receive 1:1 instruction and practice on designated skills in phaco technique, anterior segment procedures, and suturing, rotating through the skills at timed intervals. Assessment of phaco technique skills is included. The skills transfer curriculum includes:

- Phacodynamics
- Advanced Nuclear Disassembly
- Critical Challenges
  - Zonulopathy
  - Posterior Capsular Rupture
  - Vitreous Prolapse

- Contributing Challenges
  - Small pupil
  - Iridodialysis
  - IOL exchange
- Elective Skills
  - MIGS
  - Advanced Suturing and Intraocular Knot Tying
  - Iris repair

## Distance Learning

All PGY4 residents at AUPO member programs have access to the online curriculum on the AUPO distance learning platform. Once a program is on-boarded, the residents and program directors have access to the modules and assessment tools. The online curriculum modules complement the required knowledge and the skills transfer workshop experience, and provide a ready reference throughout the final year of residency.

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## Assessments

Formative assessments are included during the skills transfer workshop. Assessments are a required part of the program and will not be used to “fail” a resident. Their purpose is to provide the resident standardized feedback in real time.

Created by a team of ophthalmologists and based loosely on the International Council of Ophthalmology (ICO) Ophthalmology Surgical Competency Assessment Rubric (ICO-OSCAR), assessments occur at the end of each skill rotation in the phaco lab. The assessment is a shared responsibility between trainers and residents. Trainers use a touchscreen tablet, with the assessment tools loaded for each resident and each procedure. Students will go through the evaluation with the trainer prior to rotating off the station.

The long-term goal for the assessment is to share standardized formative feedback provided in summary to the resident and the program at session-end.



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# Eligibility, Selection, Cost

Each skills transfer workshop has limited attendance based on space and equipment, and to ensure 1:1 trainer guidance when possible. The workshops are planned for PGY4 ophthalmology residents who meet the stated eligibility requirements.

## Resident Eligibility Requirements

- PGY4 ophthalmology resident.
- Meets minimum requirement of  $\geq 50$  cataract surgeries as primary surgeon and  $\geq 5$  MIGS procedures as assistant surgeon prior to date of skills transfer workshop.
- Attestation from Program Director and/or Chair, that minimum requirements can be met by time of workshop.
- Commitment to complete all online curriculum modules and meet post-skills transfer assessment milestones.

## Resident Selection

A maximum of one resident per program, who meets the eligibility requirements, will be selected on a first come, first serve basis up to the maximum attendance. (Additional positions per program will be considered if one resident per program goal is not met.) Programs with eligible residents are required to complete a nomination form at designated times during the year.

## Upcoming Sessions

Skills workshops are held in the first quarter of the year and in conjunction with the American Academy of Ophthalmology Annual Meeting in the Fall.

## Cost and What's Included

No charge to AUPO member programs. AUPO provides:

- access to the online curriculum modules for all residents
- skills transfer workshop (limited to 1 resident per program) including reimbursement of roundtrip economy airfare, hotel room and meals

Non-AUPO programs pay \$2,000 per resident. AUPO provides:

- access to the online curriculum modules for PGY4 residents accepted for skills transfer workshop
- skills transfer workshop (limited to 1 resident per program) including meals during workshop (program responsible for resident's airfare and hotel)

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# Nomination

A call for nominations is sent to ophthalmology residency program several months prior to each scheduled skills workshop. The goal is to include one resident per interested program. Any available seats are filled with additional residents from the interested programs until full. Each workshop is limited to 72 residents. We will contact all programs interested in nominating a resident.

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## Questions?

Contact the AUPO office at [aupo@ao.org](mailto:aupo@ao.org) or (415) 561-8548.

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## Faculty and Resident Feedback

*"The lab was fantastic. I think this is a terrific undertaking and the future potential seems incredible. I loved the one-on-one time with an attending."* (Resident)

*"Nicely modular so can be adapted to level of trainees attending."* (Resident)

*"I was pleased that the industry representatives participating in the lab focused entirely on familiarizing participants with device handling and insertion technique, rather than any "selling" or discussion of comparative effectiveness."* (Trainer)

*"Fantastic. The best wet lab for trainees I've ever attended or participated in."* (Trainer)

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## Support

The AUPO Surgical Curriculum for Ophthalmology Residents (SCOR) program is supported by educational grants from: Alcon, Bausch+Lomb, and Johnson & Johnson with additional support from Zeiss.

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## SCOR Team Leaders

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Our deepest gratitude to all of the volunteers who have helped make the AUPO SCOR program a reality.

