The Evolution of Wet Lab Instruction
By the ASCRS

The society’s training of surgeons and residents has changed over the years.

BY GEORGE BEIKO, BM, BCH, FRCSC

In 1987, the ASCRS started wet lab instructions for its members. The organization added lessons in epikeratophakia and RK to its original offering of phaco education.

Wet lab instruction evolved in 1995 into skills training courses involving both a didactic presentation and a wet lab. Education focused on phacoemulsification and combined procedures in glaucoma. These courses evolved in 2001 into skills transfer sessions, with offerings that included basic and advanced phacoemulsification.

In 2006, the ASCRS recognized its membership’s desire for more advanced wet labs. William Fishkind, MD, accepted the position of, and still serves as, physician director for these courses. Under his leadership, laboratories began to include training in advanced phacoemulsification, limbal relaxing incisions (LRIs), vitrectomy, and capsular tension rings (CTRs). Instruction in CTRs was also subsequently included in the advanced phaco sessions.

This article describes what was offered at the most recent ASCRS meeting in April 2008.

ASCRS 2008 Skills Transfer Sessions

This year, the ASCRS offered three skills transfer sessions: advanced phacoemulsification, vitrectomy, and LRIs. Each had a compulsory didactic course prerequisite. Attendees of the skills transfer laboratory had the opportunity to have a 1-hour, one-on-one session with a recognized expert in the specific area covered. All instrumentation, devices, and necessary equipment for the teaching of the techniques were available during this year’s wet labs. Attendees had to be registered for the ASCRS meeting to attend the skills transfer sessions. A registration and an associated fee of $310 were required for each of these sessions.

Advanced Phacoemulsification

The advanced phaco session was intended for experienced surgeons and was taught by specialists. I was one of the two lead instructors for this course (Figure 1). The program included tips on and the latest techniques for bimanual microincisional phacoemulsification, chopping, flipping, clear corneal incisions (LRIs), vitrectomy, and capsular staining, advanced machine settings, CTRs, new IOL technology, and astigmatic management via LRIs and toric IOLs (Figure 2). Participants practiced techniques for managing the iris and suturing IOLs to the iris. The didactic course prerequisite for this laboratory was “Learning Phaco Chop: Pearls and Pitfalls.”

Vitrectomy

The vitrectomy skills transfer session included a pars plana approach for the anterior segment surgeon. With the assistance of a vitreoretinal specialist, the faculty covered the nuances of the pars plana incision technique, staining of the vitreous using particulate materials, the vitrector’s settings, and manipulation of the vitreous. The course emphasized...
the principles for safely handling complications. The didactic course prerequisite for this wet lab was “Comprehensive Strategy for Unplanned Vitrectomy Technique for the Anterior Segment Surgeon.”

LRIs

During the LRIs skills transfer session, surgeons demonstrated techniques such as corneal relaxing incisions to control postoperative astigmatism in cataract surgery patients. The didactic course prerequisite for this wet lab was “Management of Astigmatism in Conjunction with Clear Corneal Phaco Surgery.”

IN SUMMARY

The intent of these wet labs is to allow experienced surgeons to update their skills through an initial lecture followed by hands-on training from an international, expert faculty.

In order to facilitate the learning experience, instruments, devices, and instrumentation were solicited and received from numerous partners in industry. The ASCRS gratefully acknowledges the following companies for their support of the ASCRS skills transfer sessions: Accutome Inc. (Malvern, PA); Alcon Laboratories, Inc. (Fort Worth, TX); Advanced Medical Optics, Inc. (Santa Ana, CA); Bausch & Lomb (Rochester, NY); Carl Zeiss Meditec, Inc. (Dublin, CA); Dutch Ophthalmic Research Corporation International BV (Zuidland, the Netherlands); FCI Ophthalmics, Inc. (Marshfield Hills, MA); Mastel Precision, Inc. (Rapid City, SD); MicroSurgical Technology (Redmond, WA); Rhein Medical Inc. (Tampa, FL); and Rumex International Co. (St. Petersburg, FL).

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