Rotating students will spend 2 weeks in the department of ophthalmology outpatient clinics/consult service and the ambulatory surgical center, where they will focus on the perioperative care of patients undergoing cataract surgery (phacoemulsification) and those with ocular trauma.

The rotation is set for 6 days per week. 5 week days with a set schedule as stated above and an additional weekend day of call. You can pick either Saturday or Sunday of a given week. Call is to be taken at home between the hours of 0800 to 1700, during which you will be called in on consults and any emergent surgery. Additionally, you are also to participate on rounds if they occur between those hours. Please review the call schedule with residents and give the on-call resident your contact information.

During the course of the rotation, you will also have didactic sessions and grand rounds set up through the Surgery Clerkship that you will need to attend. You are not to skip any of these sessions, we understand that you may miss rounds that day and you will be coming in a little late for surgery on Thursday mornings.

You will have two one-on-one teaching sessions over the course of your rotation with one our faculty where you will review relevant ophthalmic anatomy & physiology, your patient notes, and ocular trauma cases (topics to review prior are listed in the goals and objectives following.) You will also present one patient during your 2nd session.

A 45 question multiple choice/free response quiz will be administered on the final day of the rotation. Reading material will be provided at the start of the rotation. The remaining material will be covered through teaching sessions. Up-to-date, https://eyewiki.aao.org/, and https://timroot.com/ophthobook/ are additional resources.

During the rotation residents will be exposed to the following topics & skills:

1. Perioperative care of phacoemulsification with intraocular lens implantation
   a. Anatomy of the eye
   b. Types of Cataract
   c. Visual Impairment secondary to cataract
   d. Indications for surgery
   e. Pre-operative assessment
      i. History
         1. Chief Complaint
         2. HPI
         3. PMH
         4. Medications
         5. SH
      ii. Examination
         1. Visual Acuity
2. Manifest Refraction
3. Glare Testing
4. Dilated pin-hole
5. Slit-lamp Examination
6. Dilated Fundus examination

iii. Biometry
1. A-scan
2. Keratometry
3. Lens Calculation
4. Selection of Intraocular lens (monofocal)

f. Perioperative preparation
i. Marking the site/verifying with consent form & Patient
ii. Dilation protocol
1. Discuss different drops used and why

iii. Techniques of Anesthesia
1. Topical
   a. With & without intracameral lidocaine
2. Peribulbar
3. Retrobulbar

iv. Timeout

v. Surgical Preparation

vi. Surgical Drape

2. Extracapsular cataract extraction (ECCE)
   a. Anatomy of the eye as it applies to ECCE
   b. Technique and surgical procedure
      i. ECCE with out phacoemulsification
      ii. ECCE with phacoemulsification
      iii. Intraocular lens (IOL) placement
         1. In the Bag
         2. Sulcus
         3. Sutured
            a. Iris
            b. Scleral Fixation
      4. Anterior Chamber IOL

iv. Intra-operative complications
1. Posterior Pressure
2. Iris Prolapse
3. Violation of the posterior Capsule at any time during surgery
   a. Capsulorhexis
   b. Hydro-dissection
   c. Phacoemulsification
   d. Irrigation & Aspiration
   e. Lens Insertion
4. Vitreous Prolapse
5. Dropped Nucleus
   a. Primary and secondary Complication

3. Post-operative Care
   a. Routine Post-operative care through 6 weeks
   b. Discuss Development of posterior capsular opacification (PCO) & Treatment
   c. Post-operative complications
      i. Acute
         1. Retained Viscoelastic
         2. Lens Subluxation
         3. Wound Leak
         4. Vitreous Prolapse & Incarceration
      ii. Sub-acute
         1. Endophthalmitis
      iii. Late
         1. Endophthalmitis
         2. Cystoid Macular Edema
            a. Etiology & Risk Factors
            b. Diagnosis
               i. Clinical
               ii. Diagnostic Modalities
                  1. Optical Coherence Tomography
                  2. Intravenous Fluorescein Angiography
   c. Management

4. Ocular Trauma
   a. Orbital Fractures
   b. Retrobulbar Hemorrhage
   c. Lid Lacerations
   d. Chemical Injury
   e. Corneal Abrasions
      i. Traumatic
      ii. Perioperative
   f. Traumatic Hyphema
   g. Corneal/Scleral Lacerations
   h. Globe Rupture