Rotating students will spend 4 weeks in comprehensive/sub-specialty ophthalmology clinics, operating room, and participate in call and the inpatient consult service. Goal of this rotation is develop history taking skills and perform basic aspects of the ophthalmic examination related to a future career in ophthalmology. The beginning of the rotation will be devoted to developing clinical skills while spending time with ophthalmic technicians and the residents. Once you have reached a level of comfort/proficiency you will present cases directly to the attending, effectively functioning as 1st year ophthalmology resident. You will spend 2 weeks on the in-patient consult service where you will assist the resident and present cases. Additionally, you will take 4 days of weeknight call (M-Th) and one weekend call (F-Su), of your choice. At the conclusion of the rotation, you will take a written examination and present an interesting case to the department. During the rotation residents will be exposed to the following topics & skills:

**Anatomy of the Eye**

i. Anatomy

1. Orbit
2. Eyelids
   a. Lid margins
   b. Mucocutaneous Junction
   c. Meibomian Glands
3. Conjunctiva
4. Sclera
5. Cornea
6. Anterior Chamber & Angle
7. Iris & Pupil
8. Lens
   a. Ciliary Body
   b. Zonules
9. Vitreous
10. Retina
11. Choroid
12. Optic Nerve
   a. Meningeal Sheath
Common Ophthalmic Diseases & Ocular Manifestations of Systemic Disease

ii. Orbit
   1. Thyroid Orbitopathy
   2. Preseptal & Orbital Cellulitis

iii. Eyelid
   1. Chalazion
   2. Basal Cell Carcinoma
   3. Squamous Cell Carcinoma

iv. Conjunctiva
   1. Conjunctivitis
      a. Viral
      b. Bacterial

v. Cornea
   1. Corneal Abrasion
   2. Corneal Ulcer
      a. Dendritic Ulcer (HSV Epithelial Keratitis)
      b. Infectious

vi. Anterior Chamber
   1. Acute Angle Closure Glaucoma

vii. Iris & Ciliary Body
   1. Anterior Uveitis
   2. Hypopyon

viii. Lens
   1. Cataract
      a. Congenital
      b. Senile
      c. Associated with Systemic Diseases

ix. Retina
   1. Vascular Diseases
      a. Diabetic Retinopathy
      b. Retinal Vascular Occlusions
         i. Venous
         ii. Arterial
   2. Degenerative
      a. Age Related Macular Degeneration

x. Optic Nerve
   1. Primary Open Angle Glaucoma
   2. Disc Edema v Papilledema
   3. Ischemic Optic Neuropathy

xi. Trauma
   1. Fractures
   2. Hyphema
   3. Ruptured Globe
Clinical Skills

1. **Visual Acuity & Refraction**
   a. Snellen
   b. Near Card
      i. Please discuss the use of pin-hole and correction for near vision in regards to visual acuity testing.
   c. Perform a manifest refraction

2. **Pupils**
   a. Size & Shape
   b. Light Reaction
   c. Near Reaction
   d. Relative Afferent Pupillary Defect
   e. Evaluation of patient with anisocoria

3. **Motility**
   a. Cardinal Eye Movements
   b. Evaluation of patients with CNVI & CNIII palsy
      i. Also demonstrate measurement of levator function

4. **Visual Field**
   a. Confrontational visual field
      i. Teach students to use 1, 2, or 5.

5. **Amsler Testing**
   a. Use back of near card.
   b. Define metamorphopsia & scotoma

6. **Intraocular Pressure**
   a. Via palpation- discuss the difference between soft eye and hard eye
   b. Via applanation tonometry

7. **External Inspection of Ocular Surface**
   a. Diffuse illumination
      i. Conjunctiva (palpebral & bulbar)
   b. Cornea
   c. Anterior Chamber
   b. Fluorescein Staining with strips & Cobalt Blue Filter

8. **Slit-lamp examination**
   a. Anterior Segment
   b. Posterior Segment
      i. Anterior Vitreous
   ii. 90D binocular examination of the posterior pole of the retina

9. **Direct Ophthalmoscopy**
   a. Red-reflex
   b. Optic Nerve
      i. Disc Margins
   ii. Spontaneous Venous Pulsations
   iii. Cup-to-disc ratio (by color)
   iv. Neural Retinal Rim (color)
   v. Fovea

10. **Indirect Ophthalmoscopy**
   a. 20D examination using the binocular indirect ophthalmoscope of the peripheral retina