

Family Medicine Residency

Ophthalmology Rotation

Brandon Churchill, M.D. (updated June 2021)

Rotation Goal

Family medicine residents will interact with physicians subspecializing in ophthalmology to familiarize themselves with the impact of ocular illness and dysfunction in pediatric and adult patients in both inpatient and outpatient settings per their community preceptor's discretion.

The ophthalmology rotation provides the resident with the opportunity to work one-on-one with a subspecialty attending, with the goal of obtaining competence in the diagnosis and management of commonly occurring ocular disorders as well as treatment of ocular emergencies. The subspecialist preceptors at the Eye Clinic serve both adult and pediatric populations. Please refer to the Residency Master schedule for the days you are scheduled to work with one of the following preceptors at the Eye Clinic. You will primarily be working with Dr. Bateman or Dr. Neel. If either of these preceptors are not in clinic during your assigned time, then you should work with one of the other listed preceptors. If you have any specific problems, questions, or concern regarding this rotation, please discuss these with the faculty rotation coordinator, Dr. Churchill. You will be given specific instructions to review prior to your rotation from Jennifer White. If she is unavailable, you can obtain these instructions from Marc Himmelsbaugh at the Eye Clinic.

Residents gain additional experience with ocular disorders while on inpatient medicine and emergency medicine rotations and from outpatient encounters during scheduled clinic times at UT Family Practice Center. While on the outpatient pediatrics rotation and various other times during this residency program, you will be assigned to work with a pediatric ophthalmologist to gain further experience in various pediatric ophthalmologic disorders. You will also be exposed to a variety of pediatric ocular pathology as well as be taught to recognize variations of normal ocular development during your inpatient pediatrics, NICU, and outpatient pediatrics rotations.

Rotation Goals:

- Review diagnostic, management, and appropriate referral criteria for common eye problems
- Learn how to help patients and their family members adjust to acute or chronic ocular illnesses that may significantly affect daily life and family function.
- Learn how to maximize visual function through the control of environmental factors, management of disease and preventive care.
- Learn how to minimize deterioration of ocular function through the initiation of appropriate treatment, including rapid referral when necessary.
- Learn when social/psychological intervention is appropriate in patients with ocular dysfunction.

Supervision

Direct observation is provided by precepting physicians. Precepting physicians include but are not limited to Dr. Mark Bateman, Dr. Jason Sullivan, and Dr. Sean Neel.

Rotation Objectives

By the end of the Ophthalmology rotation, PGY III residents are expected to expand and cultivate skills and knowledge learned during previous training and to achieve the following objectives based on the six general competencies. The resident should exhibit an increasing level of responsibility and independency as he or she progresses throughout the year.

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
Patient Care	SPECIALTY SPECIFIC OBJECTIVES			
	Develop skills that allow for compassionate, appropriate and effective care of pediatric and adult patients with ocular illness and dysfunction while integrating evidence-based medicine and local standards of care.	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning Computer Module	Direct Feedback Global Evaluation Procedure Certification In-training Exam Pre and Post Test	Daily Monthly Quarterly Annually Monthly
	Recognize the importance of the role of support systems in the health of patients with ocular disease	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation Procedure Certification In-training Exam Pre and Post Test	Daily Monthly Quarterly Annually Monthly
	Recognize the effects of loss of visual function.	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation Procedure Certification In-training Exam Pre and Post Test	Daily Monthly Quarterly Annually Monthly
	Develop and demonstrate a supportive and compassionate approach to the care of the patient with ocular disease, especially in the case of someone with deteriorating vision.	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation Procedure Certification In-training Exam Pre and Post Test	Daily Monthly Quarterly Annually Monthly
	Under direct supervision, perform the majority of the following procedures that are generally performed while on ophthalmology rotation and the number needed to document: <ul style="list-style-type: none"> • Tests of visual acuity, visual fields, and test for ocular motility (3) • Direct ophthalmoscopy (5) • Fluorescein staining of the cornea (3) 	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation Procedure Certification In-training Exam Pre and Post Test	Daily Monthly Quarterly Annually Monthly

	<ul style="list-style-type: none"> • Tonometry (2) • Slit lamp examination (2) • Eye exam for foreign body (1) 			
	Formulate a plan of management, investigation and need for expert advice with an awareness of the risks and costs of the investigation and the value of the information that will be obtained	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation Procedure Certification In-training Exam Pre and Post Test	Daily Monthly Quarterly Annually Monthly
	Appropriately utilize diagnostic tests and medications including: <ul style="list-style-type: none"> a. Mydriatics b. Topical anesthetics c. Corticosteroids d. Antibiotics e. Glaucoma agents 	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation Procedure Certification In-training Exam Pre and Post Test	Daily Monthly Quarterly Annually Monthly
	Manage and coordinate psychosocial and family issues, including long-term care of debilitating ocular conditions, necessary environmental adaptation and use of community resources	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation Procedure Certification In-training Exam Pre and Post Test	Daily Monthly Quarterly Annually Monthly
	Manage and recognize the prevalent and treatable diseases listed under "Medical Knowledge" with consultation as appropriate	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation Procedure Certification In-training Exam Pre and Post Test	Daily Monthly Quarterly Annually Monthly
	Under direct supervision, perform the following procedures and interpret the following results <ul style="list-style-type: none"> a. Tests of visual acuity, visual fields, and test for ocular motility b. Direct ophthalmoscopy c. Fluorescein staining of the cornea d. Tonometry e. Slit lamp examination 	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation Procedure Certification In-training Exam Pre and Post Test	Daily Monthly Quarterly Annually Monthly
	Formulate a rational plan of investigation and management, including assessment of severity and need for immediate expert assistance	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation Procedure Certification In-training Exam	Daily Monthly Quarterly Annually

			Pre and Post Test	Monthly
	Localize the problem and generate the differential diagnosis and management planning	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation Procedure Certification In-training Exam Pre and Post Test	Daily Monthly Quarterly Annually Monthly
	Perform physical examination in patients from newborns to adults, with emphasis on understanding normal neurologic and motor responses as well as appearance	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation Procedure Certification In-training Exam Pre and Post Test	Daily Monthly Quarterly Annually Monthly
Medical Knowledge	SPECIALTY SPECIFIC OBJECTIVES			
	Demonstrate an understanding of the role of the ophthalmic consultant, including identifying the different roles of ophthalmologists, optometrists, and opticians.	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation Procedure Certification In-training Exam Pre and Post Test	Daily Monthly Quarterly Annually Monthly
	Develop a basic knowledge of the following areas relevant to the management of ophthalmic diseases and apply that knowledge to provide the most appropriate patient care: A. Normal anatomy, physiology, development of aging of the eye and ocular function (see also Curriculum Guidelines for Care of the Older Adult) B. Psychological and adaptive needs of patients with chronic ocular deterioration C. Effects of drugs and toxins on ocular function and disease D. Effects of ocular drugs on systemic function E. Understanding of the ocular disability of elderly patients and the importance of regular assessment and maintenance of functional capacity (see also Curriculum Guidelines for Care of the Older Adult) F. Ocular complications of systemic illness G. Guidelines for appropriate intervals for vision evaluation from birth to senescence H. Appropriate indications for special procedures in ophthalmology and ophthalmoradiology	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation Procedure Certification In-training Exam Pre and Post Test	Daily Monthly Quarterly Annually Monthly

	<ol style="list-style-type: none"> 1. Fluorescein angiography 2. Ocular ultrasound 3. Visual field testing 4. Magnetic resonance imaging/Computed tomography of the eye <p>I. Implications of recommendation for refractive eye surgery</p> <p>J. Prevention of eye injury and vision loss</p>			
	<p>Develop the knowledge to formulate an initial diagnosis, manage, and provide appropriate referral criteria for common eye problems</p> <ol style="list-style-type: none"> 1. Refractive errors – nearsightedness (myopia), farsightedness (hyperopia), and presbyopia 2. Skin and adnexal disorders <ol style="list-style-type: none"> a. Infections – hordeolum, preseptal cellulitis, orbital cellulitis, dacrocystitis b. Inflammation – Graves’ disease, Chalazion c. Eyelid disorders – Entropion, extropion, ptosis d. Benign tumors – milia, papilloma, keratoacanthoma, nevus, xanthelasma, dermoid e. Malignant tumors – basal cell carcinoma, squamous cell carcinoma, lymphoma, malignant melanoma, and retinoblastoma 3. Conjunctival disorders <ol style="list-style-type: none"> a. Conjunctivitis – viral, herpes simplex, herpes zoster, keratitis, bacterial, allergic b. Conjunctival nevus – pterygium, pinguecula c. Conjunctival tumors 4. Corneal diseases <ol style="list-style-type: none"> a. Superficial trauma/infections – corneal abrasion, keratitis, corneal ulcers b. Dry eye and associated diseases 5. Iritis – unequal pupils, afferent papillary defect, adie’s pupil, homer’s syndrome 6. Cataracts 7. Glaucoma 8. Retinal disease 	<p>Conferences/Didactics</p> <p>Daily Rounds</p> <p>Research Discussions</p> <p>Self Directed Learning</p>	<p>Direct Feedback</p> <p>Global Evaluation</p> <p>Procedure Certification</p> <p>In-training Exam</p> <p>Pre and Post Test</p>	<p>Daily</p> <p>Monthly</p> <p>Quarterly</p> <p>Annually</p> <p>Monthly</p>

	<ul style="list-style-type: none"> a. Associated with visual loss – central retinal vein occlusion, branch retinal vein occlusion, central retinal artery occlusion, retinal detachment and vitreous hemorrhage b. Associated with medical conditions – hypertension, diabetes mellitus c. Macular degeneration d. Age-related changes <p>9. Optic nerve disorder 10. External muscular disorders – cranial nerve palsies 11. Trauma – blunt, penetrating</p>			
Practice Based Learning and Improvement	SPECIALTY SPECIFIC OBJECTIVES			
	See General Family Medicine Objectives for a comprehensive list.			
	Develop tools to help meet the needs of patients	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation Procedure Certification In-training Exam Pre and Post Test	Daily Monthly Quarterly Annually Monthly
	Recognize own level of competence in handling ophthalmic problems and the need for further consultation as appropriate.	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation Procedure Certification In-training Exam Pre and Post Test	Daily Monthly Quarterly Annually Monthly
	Incorporate evidence based medicine and resources into the care of ophthalmic problems.	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation Procedure Certification In-training Exam Pre and Post Test	Daily Monthly Quarterly Annually Monthly
Review current literature relevant to the care of individual patients and the community. (Write summary of journal article as it relates to Family Medicine)	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation Procedure Certification Summary of Article Pre and Post Test	Daily Monthly Quarterly End of Rotation Monthly	
Interpersonal and Communication Skills	SPECIALTY SPECIFIC OBJECTIVES			
	See General Family Medicine Objectives for a comprehensive list.			

	Communicate effectively with patients and their families while in the presence of their daily preceptor.	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation Procedure Certification In-training Exam Pre and Post Test	Daily Monthly Quarterly Annually Monthly
	Convey information in a clear and concise manner to patients, families, and other health professionals (i.e., use appropriate vocabulary choice, realistic outcomes, and working with difficult patients and family)	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation Procedure Certification In-training Exam Pre and Post Test	Daily Monthly Quarterly Annually Monthly
Professionalism	SPECIALTY SPECIFIC OBJECTIVES			
	See General Family Medicine Objectives for a comprehensive list.			
	Provide compassionate and high quality care to all patients regardless of gender, age, culture, race, religion, disabilities, sexual orientation or socioeconomic class	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation Procedure Certification In-training Exam Pre and Post Test	Daily Monthly Quarterly Annually Monthly
	Determine best methods for consultation of subspecialty physicians while caring for the ophthalmic patient	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation Procedure Certification In-training Exam Pre and Post Test	Daily Monthly Quarterly Annually Monthly
	Behave in a professional manner when interacting with patients or other health care providers.	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation Procedure Certification In-training Exam Pre and Post Test	Daily Monthly Quarterly Annually Monthly
Systems-Based Practice	SPECIALTY SPECIFIC OBJECTIVES			
	See General Family Medicine Objectives for a comprehensive list.			
	Develop an understanding of the appropriate role of subspecialty medicine in evaluation and treatment of ocular disorders and when an ophthalmology consult is warranted.	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation Procedure Certification In-training Exam Pre and Post Test	Daily Monthly Quarterly Annually Monthly
	Incorporate considerations of cost awareness and risk-	Conferences/Didactics	Direct Feedback	Daily

	benefit analysis in patient care	Daily Rounds Research Discussions Self Directed Learning	Global Evaluation Procedure Certification In-training Exam Pre and Post Test	Monthly Quarterly Annually Monthly
	Advocate for quality patient care and optimal patient care systems	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation Procedure Certification In-training Exam Pre and Post Test	Daily Monthly Quarterly Annually Monthly

Educational Resources

1. Berson FG. Basic Ophthalmology for Medical Students and Primary Care Residents. San Francisco, CA: The American Academy of Ophthalmology, 1999.
2. Chawle HB. Ophthalmology: A Symptom-based Approach. Woburn, MA: Butterworth-Heinemann, 1999.
3. Trobe JD. The Physician's Guide to Eye Care. San Francisco, CA: The American Academy of Ophthalmology, 2000.
4. Vaughan D, Asbury T, Riordan-Eva P. General Ophthalmology. Stamford, CT: Appleton and Lange, 1999.
5. Wu G. Ophthalmology for Primary Care. Philadelphia, PA: WB Saunders, 1997.
6. American Academy of Ophthalmology: <http://www.aao.org/news/eyenet>
7. National Eye Institute: <http://www.nei.nih.gov>
8. www.uptodate.com (available free through www.utdol.com in Jackson General Hospital)
9. www.epocrates.com
10. <http://www.kellogg.umich.edu/theeyeshaveit/>