

University of Kentucky Chandler Medical Center

Department of Ophthalmology

OUR FACILITY

The Department of Ophthalmology is located in the Kentucky Clinic, and is also affiliated with the Veterans Affairs Medical Center. Our outpatient facility has been recently expanded to better serve the needs of our patients.

The facility accommodates the latest in ophthalmologic technology. We are equipped with Argon, Krypton, and YAG lasers, four perimetry rooms, a visual functions laboratory, and a clinical ocular motility laboratory. The clinic is also furnished with two minor surgery suites, a photography/fluorescein angiography suite, ultrasound equipment, and newly- equipped exam rooms.

The UK Ophthalmology Clinic has served as a comprehensive referral center for physicians and eye care professionals throughout Kentucky and the region for over three decades. We have advanced our role as a leader in ophthalmological care with our specialized staff and the services they provide.

OUR STAFF

The Department of Ophthalmology staff includes 11 full-time clinical and research faculty members and three part-time appointees. Twenty-five ophthalmologists from the surrounding area serve on the voluntary teaching faculty. Our support staff consists of more than 25 people, including technicians certified by the Joint Commission for Accreditation of Allied Health Personnel in Ophthalmology.

Residents are an integral part of the UK Department of Ophthalmology. Their education is achieved in part through patient contact as they learn to diagnose and treat patients under the guidance and supervision of our staff physicians.

The faculty have received local, regional, and national recognition for their clinical and research pursuits, which enhances their firm commitment to the education of our residents.

OUR SUB-SPECIALTY SERVICES

The Department of Ophthalmology has full-time faculty representation in all of the sub-specialty services of ophthalmology. Ophthalmic specialties include:

CONSULTATIVE OPHTHALMOLOGY - The department supports a comprehensive ophthalmology service with a high volume cataract service. The department provides in-patient and emergency ophthalmological consultations for the UK Hospital and the Veterans Affairs Hospital. Because the UK Chandler Medical Center has a Level III trauma center providing care for patients from Central and Eastern Kentucky, our faculty and residents care for a large number of patients with complex orbital and ocular trauma.

CORNEA AND EXTERNAL DISEASE - An on-site corneal modeling system provides computerized corneal topographic imaging of the external surface of the eye. The department directs the Lion's Eye Bank for Eastern Kentucky and has an active corneal transplantation service. Keratorefractive surgery, including radial keratotomy and LASIK, are also performed by UK Department of Ophthalmology faculty.

GLAUCOMA - The glaucoma service provides state-of-the-art treatment with sophisticated equipment and is involved in many national studies. The early diagnosis of glaucoma is facilitated by the capabilities of the visual functions laboratory.

NEURO-OPHTHALMOLOGY - Our department offers consultation services to patients with eye movement and vision problems that are related to nervous system diseases. Resources available to neuro-ophthalmology patients include static and kinetic visual field testing, visual functions testing, and the neurological, neurosurgical, and neuro-radiological services at the UK Chandler Medical Center.

OCULOPLASTIC AND RECONSTRUCTIVE SURGERY - The oculoplastic service covers all aesthetic and reconstructive procedures for the orbit and lacrimal system. Laser resurfacing procedures and blepharospasm clinic are examples of specific specialty areas.

OPTOMETRIC/CONTACT LENS - Our department has an optometric service that provides routine eye exams and low vision services, as well as a comprehensive contact lens facility.

PEDIATRIC OPHTHALMOLOGY AND STRABISMUS - Our high volume pediatric ophthalmology practice provides comprehensive services in visual sensory and ocular motility disorders in children and adults. The service is supported by technical capabilities of the visual functions laboratory, MRI-CT imaging, and a full array of general pediatric and genetic services at the University of Kentucky Chandler Medical Center.

RETINA AND VITREOUS DISORDERS - The vitreo-retinal service has two full-time faculty members who perform state-of-the-art surgical procedures, including endolaser photocoagulation, fluorocarbon gas-fluid exchange, and sophisticated sub-retinal surgical procedures. Argon and Krypton lasers are available to treat diabetic retinopathy, retinal tears, and macular degeneration. The vitreo-retinal faculty are supported in diagnostic efforts by the fluorescein angiography service and the visual functions laboratory.

RESEARCH

Research is a vital element in the future of ophthalmological patient care. It is a prominent focus of our department mission, encompassing both basic and clinical sciences. Many of our residents participate in research projects and present at national meetings during their residencies.

The growth in research productivity is seen in the dramatic increase in research awards and publications in the last decade. Competitive research grants have been received from virtually every organization interested in vision research, including the National Eye Institute, Research to Prevent Blindness, Fight for Sight, Knights Templar Eye Research Foundation, and the Benign Essential Blepharospasm Research Foundation. Excellent research facilities and support personnel are available both within the department and in the Medical Center core laboratories.

The scope of research includes most major areas of ophthalmology. In particular, the department has attained national prominence in the areas of eyelid movement disorders, intraocular drug delivery, and cell and molecular biology of extraocular muscle.

Faculty members developed an intraocular drug delivery system for the treatment of CMV retinitis. This work continues with evaluation of other novel delivery systems for the treatment of intraocular diseases, including macular degeneration and diabetic retinopathy. Studies directed toward understanding the extraocular muscles have identified mechanisms that regulate the development of this unique muscle group in health and disease. An important recent breakthrough in our quantitative studies of eyelid movement disorders has led to the hypothesis that the adaptive systems that maintain day-to-day stability of blinking may either protect against or contribute to movement disorders such as blepharospasm.

COMMUNITY PHYSICIANS

Community physicians throughout the Commonwealth are an important concern of the UK Department of Ophthalmology, because our department serves as a major referral center for physicians from a variety of specialties. While most doctors who refer patients to our clinic are located in Central and Eastern Kentucky, patients are also referred from throughout the state and region.

Our voluntary faculty consists of 25 community doctors, which gives our residents a broader experience and provides a forum between academics and practitioners in private practices. The dedication and enthusiasm displayed by our voluntary faculty greatly benefit the department, the residents, and the community.

We have established a network of eight satellite clinics throughout Central and Eastern Kentucky. Many of our faculty members and residents travel to these various clinics to see patients and perform surgeries in their areas of expertise. These satellite clinics provide a solid network of visual health care for the benefit of our rural patients.

THE RESIDENCY PROGRAM

The University of Kentucky College of Medicine offers a three-year residency program dedicated to training ophthalmologists who will be equally prepared to enter practice or proceed with sub-specialty training. This goal is attained by providing training in clinical ophthalmology, with didactic teaching and exposure to basic ophthalmic research.

All residents begin their training with a one-week program that introduces the approach to and treatment of eye patients. During the three years, residents cultivate their skills in diagnostic procedures and methods, patient care, and ophthalmic surgery by working one-on-one with our attending physicians.

During the first year of the program, residents complete rotations in pediatric ophthalmology, general ophthalmology, and the Veterans Affairs Hospital general clinic. First-year residents also serve as assistant surgeon and first surgeon on strabismus, cataract, and trauma cases.

Rotations during the second year of training include cornea and external disease, vitreo-retinal disease and surgery, and the Veterans Affairs Hospital general clinic. During this year, the resident has more responsibility for medical and surgical patient care. Second-year residents learn to perform anterior segment and retinal surgery, and they take responsibility as first surgeon in some cases at the Veterans Affairs Hospital. Second-year residents also gain exposure to laser surgical techniques.

Senior residents assume major responsibility for the Veterans Affairs Hospital clinic, as well as completing rotations in general ophthalmology, glaucoma, neuro-ophthalmology, and oculoplastic surgery. Third-year residents take full responsibility as first surgeon in selected intraocular and oculoplastics cases. A senior resident is assigned to the in-patient consultation service where he/she develops the skills required to assist physicians from other specialties in the diagnosis and treatment of ophthalmology problems related to systemic disease.

The University of Kentucky Department of Ophthalmology has nine residents and offers three residency positions in ophthalmology per year, which are filled through the Ophthalmology Matching Program. Beginning in 1998, the department also offers three PGY-1 ophthalmology internship positions, available only to those residents who match in our ophthalmology residency program for their PGY-2 through PGY-4 years. These internship positions provide experience in internal medicine, surgery, neurology, radiology, emergency medicine, and ophthalmology, with rotations at the UK Chandler Medical Center and affiliated hospitals.

PEDIATRIC FELLOWSHIP

The UK Department of Ophthalmology sponsors a one-year pediatric ophthalmology and strabismus fellowship. The fellow spends roughly 80 percent of his/her time providing patient care in the outpatient clinic and in the operating room. Our department has the largest volume pediatric ophthalmology and strabismus service in Eastern and Central Kentucky, giving the fellow the opportunity to evaluate and treat patients with a wide variety of disorders.

The fellow also sees patients at Cardinal Hill Rehabilitation Hospital in Lexington and at our Hazard, Kentucky pediatric ophthalmology satellite clinic. This physician holds the rank of assistant professor and is considered an attending physician for resident supervision and night call. In addition to teaching residents, the fellow will have the opportunity to conduct basic science and clinical research and to prepare presentations for national meetings.

The fellowship is offered through the Ophthalmology Fellowship Match. Candidates must have completed a residency in ophthalmology and be eligible for an unrestricted medical license in Kentucky.

NEURO-OPHTHALMOLOGY FELLOWSHIP

The department offers a one-year post-residency fellowship in neuro-ophthalmology. This fellowship emphasizes the diagnosis and the medical treatment of adults with nervous system diseases affecting eye movements and vision. Instruction in pertinent surgical techniques is available. Research opportunities are offered in both human and animal ocular motor and visual functions laboratories.

The fellowship is offered through the Ophthalmology Fellowship Match. The candidate for this fellowship will have completed a residency in ophthalmology approved by the Accreditation Council for Graduate Medical Education, and will be eligible for unrestricted medical licensure in Kentucky. The neuro-ophthalmology fellow is appointed as assistant professor for one year with all pertinent attending duties.

A regular series of lectures in the basic and clinical science of neuro-ophthalmology supplements the clinical teaching that follows each day's consultations. The fellow will receive added instruction in tests and techniques of special interest to the neuro-ophthalmologist, such as lumbar puncture, manual and automated perimetry, and botulinum toxin injection for facial dyskinesia.

The University of Kentucky Chandler Medical Center is an equal opportunity institution.