Ophthalmology Residency Program

Mayo Graduate School of Medicine

Mayo Clinic Rochester
Rochester, Minnesota
Ophthalmology Residency Program

The three-year Ophthalmology Residency Program at Mayo Clinic Rochester offers:

- Comprehensive training that prepares you for a career in clinical practice or academic medicine
- Extensive didactic training
- Numerous clinical and laboratory research opportunities, with an extensive database for epidemiological studies
- Rotations as a chief resident in Phoenix, Arizona, and Rochester, Minnesota
- Thorough preparation for certification by the American Board of Ophthalmology

Mayo Clinic’s favorable faculty ratio, large patient population and state-of-the-art diagnostic, therapeutic and research facilities combine to create a truly integrated educational experience. The “Mayo Clinic way” of graduate medical education ensures you will have the finest teaching and the broadest patient care experience possible during a busy, hands-on residency program.

Training at Mayo Clinic

Mayo Clinic has a long-standing tradition of practicing both the art and science of medicine. As one of the country’s largest and best-known private group practices of academic medicine, Mayo Clinic was founded on the belief that physicians need to work together, teach and learn from others, and conduct research to provide sustained, excellent patient care.
Physicians, scientists, residents, students, nurses and allied health staff members work as a team at Mayo Clinic. Our staff clinicians and scientists are called consultants in recognition of their teaching and mentoring role in the team.

Mayo Clinic teamwork spans many locations

In Jacksonville, Florida
Mayo Clinic Jacksonville
St. Luke’s Hospital

In Rochester, Minnesota
Mayo Clinic Rochester
Saint Marys Hospital
Rochester Methodist Hospital
Charter House

In Scottsdale, Arizona
Mayo Clinic Scottsdale
Mayo Clinic Hospital

Mayo Health System

Program Description

Mayo Clinic Rochester offers a three-year Ophthalmology Residency Program covering years PGY-2 through PGY-4 of postgraduate medical training. This program will give you a solid foundation for further subspecialty training or a career in clinical practice, research or academic medicine. The training includes inpatient and
outpatient ophthalmology, ophthalmic pathology, ophthalmologic surgery, a didactic lecture series and research.

Before you begin your ophthalmology residency, you need to take one year of clinical base training at Mayo or in another academic medical setting. This year normally includes clinical training in internal medicine, along with specialty electives such as neurology and otorhinolaryngology.

To fulfill this requirement, Mayo Clinic offers:
- A preliminary internal medicine program and a preliminary general surgery program at Mayo Clinic Rochester
- A transitional year program at Mayo Clinic Jacksonville
- A transitional year program at Mayo Clinic Scottsdale

**Clinical Training**

Your clinical training will combine 16 months of clinical rotations with 20 months of ophthalmologic surgery services. During clinical rotations, you will study the entire spectrum of ophthalmologic diseases. You will have the opportunity to learn and practice the following examination techniques and procedures:
- Argon, Krypton and YAG laser surgery
- Biomicroscopy
- Color Vision Testing
- Cryotherapy
- Dark Adaptometry
- Electroretinography
- Fitting Contact Lenses and Low-Vision Aids
- Fluorescein Angiography
- Ophthalmic Photography (including corneal endothelial specular microscopy)
- Ophthalmoscopy
- Orthoptics
- Outpatient Surgery
• Perimetry
• Refraction
• Slit Lamp Photography
• Tonography
• Ultrasonography

In addition to general ophthalmology, you will gain focused clinical experience in the following subspecialty areas:
• Anterior Segment Diseases
• Glaucoma
• Medical- and Neuro-Ophthalmology
• Oculoplastic and Orbital Surgery
• Ophthalmic Pathology
• Pediatric Ophthalmology
• Refraction, Contact Lenses and Low-Vision Aids
• Retinal and Vitreal Diseases
• Strabismus
• Uveitis and Ocular Inflammation

During your 20 months of ophthalmologic surgery training, you will care for both inpatients and outpatients, assist in surgery with your assigned staff member, and assume increasing surgical responsibilities as your training progresses. The surgical rotations include:
• Anterior Segment and Cataract Surgery
• Corneal Surgery
• Glaucoma Surgery
• Oculoplastic and Orbital Surgery
• Retinal and Vitreal Surgery
• Strabismus Surgery

During your third year, you will serve as chief resident for a total of six months at Mayo Clinic Rochester and two Phoenix, Arizona, locations — Maricopa County Hospital and the Veterans Administration Hospital. As a chief resident, you will have primary responsibility for a surgical and medical service. Mayo funds the authorized additional costs of travel, housing, car rental and licensure fees for off-campus rotations. Our residents consistently rate these rotations very highly.
**Typical Rotation Schedule**

The following is a typical ophthalmology residency rotation schedule.

<table>
<thead>
<tr>
<th>Rotation Name</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PGY-2</strong></td>
<td></td>
</tr>
<tr>
<td>Comprehensive Ophthalmology</td>
<td>4 months</td>
</tr>
<tr>
<td>Ophthalmic Pathology/Neuro-ophthalmology</td>
<td>2 months</td>
</tr>
<tr>
<td>Refraction, Contact Lenses and Low Vision</td>
<td>4 months</td>
</tr>
<tr>
<td>Glaucoma and Uveitis</td>
<td>2 months</td>
</tr>
<tr>
<td><strong>PGY-3</strong></td>
<td></td>
</tr>
<tr>
<td>Retina-Vitreous</td>
<td>2 months</td>
</tr>
<tr>
<td>Oculoplastic and Orbit</td>
<td>2 months</td>
</tr>
<tr>
<td>Cornea and External Diseases</td>
<td>2 months</td>
</tr>
<tr>
<td>Pediatric Ophthalmology and Strabismus</td>
<td>2 months</td>
</tr>
<tr>
<td>Anterior Segment and Cataract Surgery</td>
<td>4 months</td>
</tr>
<tr>
<td><strong>PGY-4</strong></td>
<td></td>
</tr>
<tr>
<td>Chief Resident, Rochester</td>
<td>3 months</td>
</tr>
<tr>
<td>Chief Resident, Phoenix</td>
<td>3 months</td>
</tr>
<tr>
<td>Comprehensive Ophthalmology</td>
<td>6 months</td>
</tr>
</tbody>
</table>

**Didactic Training**

**Lectures and Conferences**

Clinical conferences, seminars, small discussion groups, Grand Rounds, journal clubs and one-on-one instruction are all an integral part of the Ophthalmology Residency Program.
You will participate in a series of didactic lectures, which explore the entire field of ophthalmology during the three-year program. This series is based on the outline of the Ophthalmology Basic and Clinical Science Course issued by the American Academy of Ophthalmology. The lectures include:

- Binocular Vision and Ocular Motility
- External and Corneal Diseases
- Fundamentals and Principles of Ophthalmology (anatomy, biochemistry, physiology and pathology)
- Glaucoma, Disorders of the Lens and Anterior Segment Trauma
- Intraocular Inflammation, Uveitis and Other Tumors
- Neuro-Ophthalmology
- Ophthalmic Pathology
- Optics, Refraction and Contact Lenses
- Orbital, Lacrimal and Eyelid Diseases
- Retinal and Vitreous Diseases

Each week, from July through May, at least three didactic lectures are presented by the staff members in the Department of Ophthalmology, by faculty in related specialties, and/or by invited national and international guest speakers. Additional special conferences in optics, refraction and strabismus, medical- and neuro-ophthalmology, external diseases and fluorescein angiography will be available.

As a senior resident, you will attend and participate in the annual meeting of the American Academy of Ophthalmology, as well as the Annual Continuing Education Course of the University of Minnesota. Financial support for these two activities will be provided by the Department of Ophthalmology.
**Grand Rounds**
During your three years of study, you will prepare case study presentations. You will present the pertinent information of an interesting case, conduct an in-depth discussion of that case, and provide a current bibliography as part of Grand Rounds.

**Teaching Opportunities**
You will have the opportunity to teach Mayo Medical School students, visiting students from other medical schools and other residents in the clinical setting.

**Cardiac Life Support Certification**
Certification in Basic Cardiac Life Support and Advanced Cardiac Life Support (ACLS) is required for all Mayo Clinic residents. ACLS courses are held during the last week of June, just before the start of the academic year. The ACLS course also is offered evenings every three months during the year to facilitate recertification.

**Research Training**
You will be expected to conduct and complete at least one clinical research project during your residency. You also will be required to present the results of your research at the annual Resident’s Research Symposium and at appropriate national meetings. If your paper is approved by the department and is accepted for presentation at such a meeting, Mayo Clinic will fund the associated authorized travel costs.
General Program Information

Patient and Service Mix

As a regional medical center for the Midwest, Mayo Clinic Rochester registers more than 320,000 patients each year. Eighty percent of the clinic’s patients are self-referred and come from within a day’s drive. Although Mayo Clinic has a reputation for successfully handling the most obscure and difficult medical problems for people from around the world, common medical concerns are actually the norm. This allows you to see and treat an exceptional variety of illnesses during your clinical training.

Bench to bedside
Mayo Clinic is committed to basic and clinical research that leads to better patient care.

Mayo Clinic’s hallmark is teamwork —
- Among basic and clinical investigators
- Among investigators and clinical practitioners
- Across Mayo Clinic sites
- Between Mayo Clinic and other institutions

Mayo Clinic people in research —
- 250+ full-time physicians and scientists
- 400+ associates and fellows
- 1300+ administrative and allied health staff

Research funding sources —
- Extramural funds = $130 million+
- Mayo Clinic funds/other revenue = $110 million+
Call Frequency
Your call schedule will vary by individual rotation. Mayo Clinic follows the recommendations of the Accreditation Council for Graduate Medical Education.

Committee Assignments
You will be given an opportunity to gain experience in a number of administrative capacities. For example, appointment to the education committee will provide you with experience in education administration.

Moonlighting
Moonlighting is permitted for licensed residents beyond the PGY-1 level. Moonlighting activities may be scheduled during those times when you are assigned to consultative or outpatient rotations.

Evaluation
To ensure that you acquire adequate knowledge and develop your technical skills, your performance will be monitored carefully during the course of your ophthalmology residency. At the end of each two-month rotation, the staff consultants will examine and grade your performance. In addition, you will have an individual annual conference with the program director to assess and discuss your progress.

You will be asked to submit a written evaluation of the residency program every year. Also, every year, you will meet with the residency program director to discuss educational and organizational matters.
A computerized data collection system will track your surgical experience throughout training. You will receive a printout of your record each quarter.

Career Development

You will have the opportunity to meet periodically with various faculty members, administrators and the program director to discuss your goals. Mayo Clinic recruits many of its staff physicians from its own training programs. Thus, when you successfully complete the Ophthalmology Residency Program, job opportunities may be available at one of Mayo Clinic’s group practices.

Faculty

Mayo Clinic Rochester’s faculty is committed to teaching and facilitating the growth of medical knowledge. Many faculty members have published and lectured extensively and are well-regarded in their field. You will have direct access to these individuals throughout your training.

Visiting Professors

Many prominent professors visit Mayo Clinic each year. They present their work during noon and/or morning lectures and participate in hospital rounds. You will be encouraged to take full advantage of these opportunities.
Facilities and Resources

Facilities

The Mayo Clinic campus in Rochester, Minnesota, includes two hospitals with more than 1800 beds, a Level One Trauma Center, a comprehensive outpatient medical complex, a variety of research facilities, and several full-service laboratories and on-site pharmacies. More than 1000 staff physicians represent virtually all clinical specialties.

The Department of Ophthalmology provides services for more than 80,000 patient visits per year. Both inpatient and outpatient facilities at Mayo are state-of-the-art, and you will be exposed to some of the latest technical equipment available.

Libraries

Mayo Clinic’s library system in Rochester has one of the largest medical collections in the world — more than 4,300 journal subscriptions, nearly 353,000 bound volumes, and several medical databases and search engines. The main library provides study space, computers, microfilm readers and reader-printers, translations, duplicating machines, and book ordering and audiovisual services.

Reference librarians can arrange interlibrary loans, perform literature searches, and teach you how to use the computer database services that link Mayo to a global network of scientific information. More than 625 clinical conferences are preserved on videotape each year. You can view these tapes at the library or check them out for use at home.
Branch libraries include a health-related sciences library, two hospital libraries and the Learning Resource Center (LRC). The LRC, devoted mainly to the Mayo Medical School curriculum, offers special collections emphasizing women’s issues in medicine and health, medical education, and ethics.

**Computer Services**

Personal computers and software are available for residents and fellows to use. In addition, Mayo Clinic’s Microcomputer Education Center provides training in the use of computers for word processing, data collection and data analysis.

**Telecommunications System**

Mayo’s clinics in Rochester, Scottsdale and Jacksonville are linked via a sophisticated telecommunications system, which provides video teleconferencing and data transmission. Staff can have live, interactive consultations with physicians and their patients at the other sites via TV monitors. In addition, X-rays, laboratory test results, CT scans, ECG tests, angiograms and pathology slides can be transmitted between sites.

An advanced telecommunications system also is the foundation for Mayo Clinic’s unique five-digit telephone dialing and pager system. Physicians can be easily accessed for consultations or updates, strengthening the teamwork among consultants, fellows, residents and allied healthcare staff at all three practice sites.
Compensation and Benefits

Vacation and Trip Policy
You may take up to 15 working days (three weeks) each year for vacation.

You are encouraged to present your research at regional and national meetings. If you are selected to make a presentation, Mayo Clinic will pay the authorized expenses for you to attend that meeting (within the United States).

Stipends and Other Benefits
Mayo Clinic has highly competitive stipends and a benefits package that includes:
- A comprehensive medical care plan
- Short-term disability insurance
- Voluntary basic life insurance, disability insurance, and family life insurance
- Voluntary additional life insurance
- Voluntary accidental death and dismemberment insurance
- A dental assistance plan
- Excess personal liability insurance
- Professional liability coverage

Additional information about stipends and benefits will be provided during personal interviews.
The Rochester Community

Home of the original Mayo Clinic and an array of successful technology-based companies, Rochester, Minnesota, welcomes thousands of visitors from around the world each year. Rochester, population 80,000, provides all the benefits of small town living while offering amenities associated with larger cities.

If you’re interested in the fine arts, you’ll find an active network of enthusiasts who support a symphony orchestra and chorale, four theaters, a community art center, and several choruses and bands.

Rochester offers excellent sports and physical fitness facilities. Within the city limits are six golf courses; tennis and health clubs; an extensive network of walking, biking and in-line skating trails; nearly 2,000 acres of city parks; and a community recreation center. Several state parks are nearby, and it’s a very short drive to fishing, hunting, hiking, camping, boating, skiing or skating.

The Twin Cities of Minneapolis and St. Paul are only 80 miles north of Rochester. Among many attractions are the nationally famous Guthrie Theatre, the Minnesota Orchestra, the St. Paul Chamber Orchestra and the Walker Art Center. Both professional and collegiate baseball, football and basketball teams are based there. The Twin Cities also have world-class shopping and restaurants, including the Mall of America.
Good, moderately priced housing is relatively easy to find in Rochester. The public school system is one of the best in the state. Rochester has been selected as “one of the best places to live” in the U.S. by *Money* magazine for several consecutive years.

Close proximity between Mayo Clinic and home facilitates time with family and makes call from home quite manageable.

**Appointments and Applications**

There are four positions available in Mayo Clinic’s Ophthalmology Residency Program each year. Appointments are made through the Ophthalmology Matching Program (OMP). Qualified applicants must have completed a PGY-1 year in a program accredited by the Accreditation Council for Graduate Medical Education (ACGME).

Several PGY-1 positions are available at Mayo Clinic Rochester or Mayo Clinic Scottsdale for appointees to the Ophthalmology Residency Program. Appointments to these PGY-1 positions are made through the National Resident Matching Program (NRMP).

To apply to Mayo Clinic’s Ophthalmology Residency Program, you must first register with the Ophthalmology Matching Program.
We must receive your CAS application by October 1. If you are considered for an appointment, you will be asked to visit Mayo Clinic Rochester for an interview with the program director and selected faculty. Interviews are conducted from November through December each year.

In early January, applicants and training programs submit their ranking lists to the Ophthalmology Matching Program. Results from the match are announced at the end of January for the July 1 appointments of the following year.

**Inquiries**

If you would like more information, please contact:

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If you would like to discuss the Ophthalmology Residency Program with Mayo alumni living in your area, please write to us for a list of their names.

For more information about the Mayo Graduate School of Medicine, please visit our Web site at [http://www.mayo.edu/mgsm/gsm.htm](http://www.mayo.edu/mgsm/gsm.htm)