RETINA FELLOWSHIP PROGRAM

LOMA LINDA UNIVERSITY
Eye Institute

Table of Contents

Director's Letter

Dear friends and future colleagues:

It is with great pleasure that my partners and I welcome you to the Loma Linda University School of Medicine and the Loma Linda University Eye Institute Retina Service. Since 2005, we have been training exceptionally-skilled vitreoretinal surgeons and medical retina specialists. Our vitreoretinal service has a long track record of offering state of the art vitreoretinal surgery, providing exceptional patient care, and conducting clinical research. Furthermore, we are involved in numerous educational efforts at the local and national level. We are very passionate about training the future generation of retina specialists. All of our attending physicians bring with them years of experience, allowing them to pass skills and techniques to our fellows each year. The diversity of training includes both university and county settings in two nearby locations. This varied exposure leads to an educational, fulfilling experience for the fellows. Along with obtaining excellent clinical and surgical skills, our fellows learn how to balance a busy clinic and surgery schedule in an efficient and economically-sensible fashion. Furthermore, our service strongly encourages fellow participation in clinical research and FDA registration trials.

We are also proud of our AUPO and ASRS accreditation for our retina fellowship programs.

My partners and I are committed to fellowship training and will continue to strive to make our fellowship a great experience that yields excellent vitreoretinal surgeons and clinicians for years to come.

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Professor and Director of Retina
Vice Chair and Fellowship Director
Department of Ophthalmology, LLU School of Medicine 11370 Anderson Street, Ste. 1800
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Testimonial

My first patient as a bright-eyed ophthalmology resident was a young man with AIDS and bilateral CMV retinitis. This theme of very sick patients with advanced pathology carried throughout my residency. It was fundamental to my learning and helped me develop into a competent ophthalmologist. There was nothing that could come through the ED/clinic door that I couldn't examine, assess and develop at least a framework for management. When I decided I wanted to be a vitreoretinal surgeon I knew that I wanted to train at a place where I would have exposure to varied medical and surgical pathology similar to my residency training. Additionally, I wanted strong clinical and surgical autonomy, but adequate supervision. Finally, I desired to be in a location where I would enjoy living and working. Loma Linda University fulfilled all the criteria and more.

As a first-year fellow, I worked closely with the medical retina team. I spent time in the attending private clinics seeing patients on my own and performing various procedures like pneumatic retinopexies, injections and lasers. I spent time with our pediatric retina and ocular oncology specialist assisting with ROP and complex pediatric and oncological retina surgeries. I had time to use the EyeSi simulator and assisted weekly in general adult retina surgeries. This strong foundation in clinical and surgical retina decision making laid the groundwork for a very active second year. As a second-year fellow, I ran the surgical retina clinic at the county hospital seeing patients directly and staffing residents. I was involved in all levels of OR and clinic administration mirroring real world attending responsibilities. I spent 2-3 days each week in the OR performing primary cases. In addition to the substantial medical and surgical retina exposure formal fellow education was built into the fellowship schedule. Every Friday morning, we met as a department and covered one of the following categories: retina case discussion, landmark paper review, Ryan's Retina chapter review or fellow surgical morbidity/retina department surgical highlights which we called (Quality Assurance). This dedication to formal fellow education is one of the many highlights of the program.

Another highpoint of the program is the people. The ancillary clinic staff and non-retina faculty at Loma Linda were amazing and treated fellows like attendings. I had top of the line equipment and ancillary staff support. The retina faculty were incredibly supportive and personally dedicated to my success. COVID19 presented an extraordinary challenge, but I was able to mitigate the OR closures and clinic reductions with the full support of my faculty. Throughout my fellowship, the residents were exceptionally capable. It was a pleasure working with them on call and in clinic.

Living in SoCal has been great! I picked up exercising outdoors and had time to explore the many shops, restaurants and activities available. I even had time to take several day/weekend trips to LA, San Diego, Palm Springs and Las Vegas to name a few. I feel equipped and confident in my medical and surgical retina skill set. I look forward to the next chapter as I start working at a multi-specialty private group in San Antonio, Texas.

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Testimonial

My first case as an attending was a COVID-19 patient with a chronic retinal detachment and PVR. I am not going to lie, I was scared, it was a different OR, there was a protocol for these types of patients, and it was my very first case after being done with my training. Little by little, things began to feel accustomed, based on my previous experiences as a fellow I had a plan on how to tackle the issue. The patient had a giant tear that radialized to the optic nerve. As I began the case I started thinking about what my mentors would do if they were to encounter the different challenges that I encountered on that one case. Today I am happy to say that the patient's retina attached beautifully and the patient recovered his vision appropriately.

As I look back into my training, I am very thankful for all of the pathology I came across. I am currently working in private practice and I am very appreciative of the autonomy that I had during my fellowship training at Loma Linda University Eye Institute. Not only have I learned how to be a vitreoretinal surgeon but I also gained the experience to teach the staff and learned how to handle a clinic on my own. I encountered anything from a simple ERM to different types of intraocular foreign bodies and everything in between. Some of the skills I picked up were from watching so many surgical cases and when it was my turn to perform them, I wanted to match the same maneuvers as my mentors.

I also appreciate our academic conferences, journal club, ROP rounds, FA conferences with fellows, and teaching the residents. My favorite conference was our monthly quality assessment where I got to speak about our surgical numbers and our surgical outcomes. During these conferences, I realized I have gotten exposure to not just different types of surgeries but also new technologies. Even though I am in my first year out of fellowship, I don't feel scared, I feel that my training at Loma Linda University Eye Institute prepared me to be a competent clinician and surgeon.

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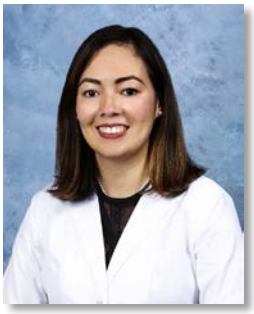

Current Fellows

Kinza T. Ahmad, MD
Surgical Retina Fellowship
Medical School:
Meharry Medical College, School of Medicine
Internship:
University of Arkansas for Medical Sciences
Residency:
University of Arkansas for Medical Sciences, Ophthalmology

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Moises Enghelberg, DO
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Fellowship Overview

Overview of Retina Fellowship

The Retina Service of the Department of Ophthalmology has trained multiple fellows since 2005. We currently offer one surgical retina fellowship positions per year and one medical retina fellowship position per year. These begin in July, with the surgical fellowship running for 24 months and medical fellowship for 12 months. Combined two-year international retina/research fellowships are also available—for inquiries regarding the latter please email Dr. K.V. Chalam (Director of Retina Fellowships)

First Year of Surgical Retina Fellowship

During the first year the fellows spend a majority of their time in the Retina Clinics where they evaluate and treat medical retinal diseases, performing most laser photocoagulation treatments and intravitreal injections. The last six months of the 1st year, the fellows operate (typically for scleral buckle, vitrectomy, and plaque procedures) while taking retina call every other week. Any available remaining time is devoted to clinical or laboratory research as well as conference preparation and teaching.

Second Year of Surgical Retina Fellowship

The second year has a surgical emphasis with time split between the operating room and Vitreoretinal Clinics. As a major healthcare system in the Inland Empire and vicinities, and a tertiary care referral institution, the fellow acquires extensive diagnostic and surgical experience in the management of simple and complex vitreoretinal disorders. The second year fellow gains administrative experience of running retina service at Riverside University Hospital System (RUHS). Vitreoretinal surgery is performed in both the main OR and ASC of the Loma Linda University hospital as well as ASC and main operating rooms of RUHS. Vitreoretinal surgery is routinely performed on 4 of 5 days of the week with heavy surgical load.

AUPO FCC
IN COMPLIANCE

Our Vitreoretinal Fellowship is AUPO FCC approved

Fellowship Overview

Other Retina Fellowships

One-year medical retina fellows spend time in the Retina Clinics where they evaluate and treat all medical retinal diseases, performing most laser photocoagulation treatments and intravitreal injections. There is no call taken by medical retina fellows. Medical retina fellows are actively engaged in clinical or laboratory research as well as conference preparation and teaching.

Retina International Fellowship

- International retinal fellows are accepted on a rolling basis. International fellows must have completed a retina fellowship in their home country.
- International retina fellows spend about 80 percent of their time engaged in research, about 10 percent seeing clinical patients and about 10 percent observing vitreo-retinal surgery at LLUEI
- Clinical fellows also are expected to engage in research. Time is set aside for conducting experiments and writing manuscripts, typically two or three half days each week. Clinical fellows conduct their research primarily at the department's research laboratories at LLU School of Medicine, working with Dr. Chalam and Dr. Rauser
- Retinal research fellows, working under the supervision of Drs. Chalam, Dr. Rauser, Dr. Shen and Dr. Sierpina have choice of areas in which to conduct their research.
- To apply for an international fellowship, please e-mail your CV and subspecialty of interest to Department of Ophthalmology Residency/Fellowship Coordinator Ana Polanco at APolanco@llu.edu

Retina Fellowship Pathway

Loma Linda University Eye Institute (LLUEI) offers training in medical retina and vitreoretinal surgery. Clinical and surgical training is supervised by **Dr. K.V. Chalam, Dr. Joseph Fan, Dr. Michael Rauser, Dr. David Sierpina, Dr. Bailey Shen and Dr. Martha Henao** at the Loma Linda University Eye Institute on the Loma Linda University campus, and at Riverside University Health System (RUHS) Medical Center, a county hospital of Riverside county. Fellows receive extensive clinical and surgical experience in treating vitreoretinal diseases, and they perform a large number of laser and surgical procedures in all areas of retinal disease.

Three training pathways exist:

- **Vitreoretinal surgery fellowship (24 months)**
  - One U.S. board-eligible ophthalmologist is accepted as a surgical fellow each year.
  - Fellows see patients in LLUEI and RUHS clinics as well as perform vitreoretinal surgery with attending staff.
  - Fellows spend on average 3 days per week in the operating room.
- **Medical retina fellowship (12 months)**
  - One-year medical retina fellows spend time in the retina clinics where they evaluate and treat all medical retinal diseases, performing most laser photocoagulation treatments and intravitreal injections.
  - There is no call taken by medical retina fellows.
  - Medical retina fellows are actively engaged in clinical or laboratory research as well as conference preparation and teaching.
- **Clinical and Research International Retina Fellowship**
  - International retina fellows are accepted on a rolling basis. International fellows must have completed a retina fellowship in their home country.
  - International retina fellows spend about 80 percent of their time engaged in research, about 10 percent seeing clinical patients and about 10 percent observing vitreoretinal surgery at LLUEI
  - International retina fellows also are expected to engage in research. Time is set aside for conducting experiments and writing manuscripts, typically two or three half days each week. Fellows, working under the supervision of Dr. Chalam, Dr. Rauser, Dr. Sierpina, and Dr. Shen, have their choice of areas in which to conduct their research.
  - To apply for an international fellowship, please e-mail your CV and subspecialty of interest to our Department of Ophthalmology Fellowship Coordinator Ana Polanco at APolanco@llu.edu

Fellowship Eligibility Requirements

Vitreoretinal surgery fellowship and Medical retina fellowship eligibility requirements

Fellowship applicants must:

- Have a medical degree from a U.S. or Canadian medical school approved by the Accreditation Council for Graduate Medical Education Have satisfactorily completed Steps I, II, and III of the U.S. Medical Licensing Examination (USMLE)
- Be in their final year of an accredited ophthalmology residency or have already successfully completed an accredited three-year ophthalmology residency
- Be a U.S. citizen
- Obtain a California medical license before beginning the fellowship

Clinical Training

The fellowship programs in retinal, vitreous and macular disease allow hands-on, in-depth experience and frequent didactic teaching in the following areas:

1. Retinal Detachments and Peripheral Degenerations

Fellows will learn the technique of indirect ophthalmoscopy, scleral indentation, examination of the vitreous by slit-lamp biomicroscopy and contact lens examination of the macula with slit-lamp and fundus contact lens. This experience is acquired by supervised examination of patients who have peripheral retinal degenerations, retinal detachments, retinal tears, and all types of macular disease. There are over 20,000 outpatient visits per year on the Vitreoretinal Service.

Indirect ophthalmoscopy and slit lamp biomicroscopy can be recorded on dedicated video instruments kept in the Retina Clinic.

2. Imaging

The technique and interpretation of high-resolution optical coherence tomography, OCT-angiography, autofluorescence, and stereoscopic and wide- field fluorescein angiography for the diagnosis of diseases of the posterior pole of the eye is acquired in coordination with the Photography Service of the Department of Ophthalmology. 1st-year vitreoretinal and medical retina fellows direct an imaging conference once a week during the academic year. This conference is attended by staff members of the Service as well as by fellows and residents in the Department of Ophthalmology.

Imaging is performed with state of the art devices for OCT, FA/ICG, autofluorescence, ultrawide field photography and OCTA, including:

- Heidelberg Spectralis SD-OCT machines
- TopCon photography and SD-OCT machines
- Zeiss SD-OCT units with OCT angiography
- Zeiss Plex Elite 9000 for ultra-wide swept source OCT and OCT angiography
- Ultrawide field photography, FA, and autofluorescence with Optos
- Portable OCT using the Bioptigen handheld SD-OCT unit

Clinical Training

3. Inherited Retinal Diseases

The surgical and medical retina fellows learn the diagnostic work-up and phenotypes of patients with inherited retinal diseases in clinics of Drs. Michael Rauser, David Sierpina, K.V. Chalam, Joseph Fan and Bailey Shen. Fellows gain extensive knowledge and experience in the latest treatments for these disorders, e.g. assisting in first-in-human surgeries using gene and stem cell therapy. Fellow research projects in inherited retinal diseases are encouraged. Electrophysiologic tests (dark adaptation, multi-focal and full field electroretinography) are performed by the Electrophysiology Service of the Department of Ophthalmology.

4. Surgery of Retinal Detachments and Peripheral Retinal Degenerations

Patients with varying and progressively more complex retinal detachments and retinal degenerations leading to detachment are studied and examined by the fellows as the patients are referred to the Service. Surgery is performed by a fellow under the direct supervision of the staff in the operating room. Primary scleral buckling procedures and pneumatic retinopexies are also performed. Post-operative care is directed by the staff surgeon but also seen and followed by the fellow who was involved in the surgery. See the Vitreoretinal Surgery section for further details.

5. Treatment of Diabetic Retinopathy

The diagnosis and selection of patients with diabetic retinopathy for treatment is performed as patients are referred to the Service. The necessary clinical judgment in selecting patients who can be expected to benefit from laser photocoagulation, anti-VEGF and steroidal therapies, and/or surgical intervention is acquired by examination of patients and consultation with the faculty. Clinical, translational and animal research projects in diabetic retinopathy are readily available.

Clinical Training

6. Macular Diseases

The Vitreoretinal Service evaluates over 2000 new patients a year with macular disease, the majority being patients with age-related macular degeneration (AMD) but a wide variety of other macular diseases are also seen. Fellows play an integral part in the evaluation and treatment of all patients. Fellows gain an understanding of the role of genetic research in AMD and macular dystrophies with application to clinic patients. In addition, there are numerous studies being carried out including phase I, II, and III trials in AMD with which fellows have the opportunity to be involved with.

7. Laser Photocoagulation

Fellows develop skills in treating a wide range of retinal and choroidal vascular diseases in addition to managing peripheral retinal tears using multiple wavelengths of visible and intrared laser for photocoagulation. Green and infrared indirect laser ophthalmoscopes are available for use.

Two Iridex lasers with multipattern capability are used regularly in the retina clinic along with micropulse yellow and diode lasers.

8. YAG Laser

A Nd:YAG lasers are readily available.

9. Cryopexy Treatment of Retinal Disease

Patients are treated under supervision of the staff on an outpatient basis (treatment room or minor operating room), in the ambulatory surgery center, or in the main operating rooms.

10. Ultrasound

There are two technicians with over 30 years of combined experience in standardized echographic techniques. Fellows are expected to learn echographic techniques in the surgical management of vitreoretinal disease, and have both didactic and hands-on training in ocular echography.

Clinical Training

11. Tumors

Experience in evaluation of uveal melanomas, metastatic tumors, and vascular tumors will be gained under direct supervision of Drs. Fan and Chalam. We were a clinical center for the COMS. Fellows participate in the evaluation and management for approximately 100 new uveal melanomas a year.

12. Pediatric Eye Disease

Retinopathy of prematurity screening is performed by the pediatric service and laser for ROP is performed by several members of the retina service. Opportunities to interact with the NICU service are available. Fellows specifically interested in pediatric disease can get experience in these areas.

13. Posterior Uveitis

Dr. Sierpina and other retina faculty have a special interest in inflammatory diseases of the choroid and retina. Patients are evaluated and treated by the fellows in conjunction with the faculty. Experience in diagnostic vitrectomy and administration of chemotherapeutic agents will be gained. Clinical trials for new therapies targeting posterior uveitis diseases are readily available for participation by fellows.

Retina Surgery Training

Approximately 1150 major vitreoretinal surgeries are performed annually. Proliferative diabetic retinopathy, epiretinal membranes, full-thickness macular holes, and rhegmatogenous retinal detachments are the leading indications though endophthalmitis, proliferative vitreoretinopathy, diabetic traction detachments, vitreous hemorrhages, post-trauma/IOFBs, and other etiologies are frequently encountered.

During this Fellowship, the vast majority of surgical procedures will be performed in large part, if not fully, by the Fellow. As fellows will have the rest of their careers to operate alone (depending on their practice environment), faculty directly supervise fellows for all cases—this allows the faculty and fellow to discuss the plan in advance of the case and debrief afterward in a manner that is most conducive for the fellow to yield the maximal amount of learning possible from each case.
Intraoperative digital recordings are done for all cases so they can be reviewed and presented at conference to improve techniques and facilitate discussion amongst faculty.

Eye OR team that consists of RNs and techs dedicated to ophthalmic surgery, including retina. This eye OR team is based in the ASC thus retina surgeries are currently being transitioned for over 95% of cases which should greatly limit night and on weekend surgeries with the exception of true retinal emergencies. On-call cases at night and on weekends will be in the main operating room but have the support of the same eye OR team members. Surgeries involving children are performed at the main operating room.

Thus, all retina surgeries are done under one roof of interconnected hospitals with 95% of cases being done in the ASC, which is located in the same floor as the eye clinic. Fellows do not do clinics or operate at any other facilities than our interconnected hospital system (i.e. no commuting between hospitals or different clinic sites is done by retina fellows).

Retina Surgery Training

State of the art equipment that is the standard at LLU in the OR includes:

- Alcon Constellation vitrectomy systems (23-27 gauge)
- 3 Zeiss Lumera scopes equipped with Resight wide-angle viewing system and Rescan intraoperative OCT (handheld contact lenses are also available)
- Standard Complement of vitrectomy instruments such as macular lenses, vertical/horizontal/curved scissors, ILM peelers, PVR forceps, chandeliers for bimanual peeling, membrane pics, diamond-dusted scrapers (Tano and Sapphire), multiple IOFB forceps, intra- and extraocular magnets, straight and curved illuminated endophotocoagulators, indirect laser, intraocular cryoprobe, silicone oil, perfluorocarbon liquids, etc.
- Scleral buckle materials

Trial of new, FDA approved instruments are done frequently at LLU Hospitals & Clinics in the retina OR.

There is a wet lab with microscope (with BIOM) and surgical simulator with the Vitreoretinal module (EyeSi VR Magic) available for use by the surgical fellows. Multiple wet lab sessions at LLUEI have allowed future technologies to be tested by fellows and faculty.

During the Fellowship, the majority of surgical procedures will be performed by the Fellow under the direct supervision of a member of the faculty. Intraoperative digital recordings can be done on all cases for presentations and used to review and improve techniques.

Wet and Dry Retinal Surgery Labs

We have several types of simulation labs with microscope (and wide-angle viewing systems) and surgical simulator with the Vitreoretinal module (EyeSi VR Magic) available for use by the surgical fellows. Wet lab sessions at the Loma Linda University Eye Institute have allowed future technologies (that haven't been released to the public yet like intraoperative OCT, vitrectors, forceps, etc) to be tested by fellows and faculty. We also have synthetic eyes with human model heads that can be used for vitrectomy and membrane peeling to facilitate better hand/head positioning, foot pedal familiarity, and surgical techniques.

Retina Research

The Vitreoretinal Service is actively involved in clinical and laboratory investigations. Each ophthalmology fellow is expected to complete a research project based on clinical or laboratory experience. Fellows have access to the Experimental Surgery Unit as well as all laboratories within the department if arrangements are made with the appropriate supervisors of those laboratories. An EyeSi vitrectomy simulator is also available to fellows at the Faculty Medical Offices (FMO).

Research is usually performed within the department but can take place in another department or, occasionally, at another institution. The research interests of the faculty are varied, and many projects are in progress. Presentations of research are made annually during the Resident/Fellow Research Conference at the end of the academic year.

Visit our most recent Resident/Fellow Research Day program for examples of typical areas of research interest.
The Retina Service is a regular site for major nationwide collaborative studies including:

- Gene therapy for Autosomal dominant retinitis pigmentosa Trial (phase II/III sponsored by AGTC Therapeutics)
- Gene therapy for exudative AMD (phase I)
- Combination anti-VEGF/PDGF therapy for wet AMD
- Combination anti-VEGF/ang-2 therapies
- Multicenter Uveitis Steroid Treatment (MUST) Trials
- Visual cycle modulator for dry AMD
- AREDS and AREDS II
- Comparisons of Age-Related Macular Degeneration Treatments Trial (CATT)
- VIEW1 (VEGF-trap)
- The Collaborative Ocular Melanoma Study (COMS)
- Choroidal Neovascularization Prevention Trial (CNVPT)
- Submacular Surgery Trials (SST)
- Complications of Age-Related Macular Degeneration Prevention Trial (CAPT)
- Protein Kinase C Inhibitor Study of Diabetic Retinopathy

Faculty and Research Areas of Interest

K.V. Chalam, MD, PhD, MBA, FACS

Research Areas of Interest

- Optical lens designing for vitrectomy systems
- Retinal Stem cell Isolation and transplantation
- Design of synthetic biological and chemical agents that facilitate vitreolysis
- Neuronal regeneration and retinal transplants using neural cell cultures
- Glutamate metabolism in retinal ganglion cells and evaluation of gene therapy
- Gene therapy and sub retinal delivery of therapeutic and biological agents

Michael E Rauser, MD

Research Areas of Interest

- Macular degeneration (Choroidal neovascularization and geographic atrophy)
- Diabetic retinopathy
- Retinal Vein Occlusion
- Influence of cataract surgery on macular disorders
- Implantable miniature telescope
- Ischemic Optic Neuropathy

Joseph Fan, MD

- Retinopathy of Prematurity
- Ocular oncology including Proton Beam radiation for Melanoma
- Diabetic Retinopathy
- Age related macular degeneration
- Retinal Vascular Disorders

Faculty and Research Areas of Interest

David Sierpina, MD

Research Areas of Interest

- Inherited retinaldystrophy
- Autoimmune retinopathy
- Uveitis diagnosis and management
- Cataract surgery
- Diabetic retinopathy
- Age-related macular degeneration Retinopathy of prematurity
- The conjunctival microbiome

Bailey Shen, MD

My research interests include epidemiology, clinical research and new device design. I am interested in clinical outcomes for diabetic retinopathy and rhegmatogenous retinal detachments. I am also interested in designing new devices for retinal photography and vitreoretinal surgery.

Retina Didactics

Retina fellows experience an unparalleled amount and quality of didactics at LLUEI. The retina service holds weekly, dedicated retina rounds. As all faculty have their own particular clinical and research areas of expertise, fellows get a wide breadth of case-based teaching in uveitis, inherited retinal diseases, tumors, infectious diseases affecting the posterior segment, common diseases such as AMD/diabetic retinopathy, and rare diseases referred from providers. In addition, there is a weekly retinal imaging conference that fellows (and/or residents on the retina rotation) present at on Friday mornings with faculty that are typically on rare, complex, or atypical presentation of common medical cases. Lastly, we have a detailed, comprehensive retina curriculum that integrates fellows into teaching residents in a structured, thoughtful manner.

Surgical didactics are conducted primarily in two ways: first, there are video case- based presentations with fellows and retina faculty every 2-4 weeks. The second way is done through individual one-on-one sessions with faculty whereby the fellow discusses the cases with faculty the night before surgery, then debrief after the cases to yield the maximal amount of learning possible from each case.

In addition, the entire department has weekly rounds at 7 a.m. that can range from case-based presentations by trainees, on-call rounds, sessions on tips for billing, ethics, advocacy, or research by faculty or visiting scientists. These are typically engaging sessions for all and represent a unique opportunity for all health care providers and staff in the department to be together. Friday mornings typically consist of (rotating) meetings with emphasis on quality assurance, journal discussions, case presentations or review of topics in a structured manner.

Rounds, Lectures, Conferences

Retina Specific
Each Friday all Retina Faculty and Fellows meet from 7:00-8:00 AM. Journal Club, quality assurance conference, case presentation, Basic and clinical retina syllabus didactics (Ryan's retina) are held on a rotational basis. Administrative issues of retina service are also reviewed and resolved at this conference.

General
Grand rounds are held Wednesday from 7.00 -8.30 a.m. in the LLUEI conference room. All residents and staff attend unless operating or engaged in acute medical care. During rounds, residents and fellows develop their public speaking skills by making presentations. Discussion by the faculty and house staff follows each case. The cases and discussions presented by Residents and Fellows at Grand Rounds are often further developed and published as case reports and tutorials.

Once a week during the academic year, didactic lectures on ophthalmology are presented. These two-hour lectures are organized to coincide with the American Academy of Ophthalmology's Basic and Clinical Sciences Course. Lectures cover most aspects of basic and clinical ophthalmology. Once every 10 weeks these sessions include a journal club covering recent journal articles in that subject area to help develop skills in practice based learning.

Six, day-long clinical conferences are held during the academic year. Clinics are closed on these days. Ophthalmologists from throughout Inland valley and Riverside County attend and present challenging clinical problems for discussion by faculty and guests. These meetings feature a visiting professor who presents a lecture based on his/ her research interests. The day is balanced by the presentation of a more clinically oriented topic. This conference has contributed to the excellent rapport between practicing ophthalmologists and the ophthalmology staff at the university.

Each year in June, alumni and other members attend a one day research seminar with invited speakers and a focus on a specific subspecialty topic.

Presentations of research are made annually during the Resident/Fellow Research Conference at the end of the academic year.

Schedule, Call, and Evaluation

Schedule

The retina fellowship schedule has been carefully crafted over many years to maximize the amount of time spent learning vitreoretinal surgery to prepare for practice while becoming highly proficient in medical retina. A significant amount of operating (averaging 3 days a week) occurs throughout 24 months of fellowship.

Fellows has opportunity to assist as well as independently perform surgery throughout the fellowship. Graduates of this program rave about the structure of this program and applicants are highly encouraged to contact any of recent Fellow Alumnus about this.

Call

Call is on a shared basis between surgical and medical retina fellows. Due to the availability of the eye OR team, there are a limited number of surgeries done at night and on weekends. No globe or anterior segment call is done by retina fellows.

Evaluation

At the beginning of the fellowship, the fellow is given a document outlining the goals and responsibilities of the fellowship. The evaluation of the fellow's progress during training is determined by periodic consultation among the members of the Vitreoretinal Service.

At the end of each training period all staff members must agree that the performance of the fellow has been satisfactory.

Following successful conclusion of the Fellowship a fellow will receive a diploma recognizing his/her achievement.

Quick Facts

Benefits

- Competitive Stipends
- Comprehensive medical, dental, hospitalization and pharmacy benefits for residents/fellows and their dependents
- Vacation each year: 4 weeks. For specific information see Paid Time Off and Leave Information

Board Certification Requirements

- While Ophthalmology, as a specialty, is board certified, Ophthalmology subspecialty fellowships are not board certified. Visit the American Board of Ophthalmology for specifics on board certification requirements.

Patient Volume in Retina

- Our patients represent all age groups and all socioeconomic strata and they present with virtually all acute and chronic conditions of the eye.
- LLU eye institute is a tertiary care center and our department receives referrals for specialized services from Inland valley, Riverside County, Los Angeles County, and neighboring states. Some patients travel from outside the continent to be seen by our physicians.
- In an average year there are approximately 20,000 retina/vitreous patient visits

What's so good about the Inland Empire?

- Our faculty are really nice, and exceptionally dedicated teachers too.
- We have a diverse faculty with wide-ranging clinical and research interests.
- Some of our faculty are internationally known and have been with us for many years. We also have several bright young faculty who bring new interests and enthusiasm to the practice.
- All the subspecialties are represented in our training program.
- Our programs, clinical and teaching are consistently ranked in the top ten nationally. Our fellows are great people and they make exceptional ophthalmologists.
- The Inland Empire is a highly intellectual community with premier arts events that are accessible to residents both in terms of cost and location.
- We have an outstanding school system for children in grades K-12. A great training program and a high quality of life.
- We want you to succeed.

Malpractice Insurance and Coverage's

Malpractice Insurance

Loma Linda University Eye Institute, an affiliate of Loma Linda University Medical School self-insures the tort liability of its employees. Resident and Fellow Physicians are employees for the purposes of Tort Claims Act. The coverage provided to Resident and Fellow Physicians is occurrence coverage.

GME Policies

We have indexed our policies and procedures in a document clearinghouse as a means of keeping items there as up to date as possible. Each of the documents listed on the clearinghouse page is in .pdf format and will be downloaded to your computer. All policies are subject to change.

Compensation and Benefits

Fellow compensation is at the level of PGY 5 & 6 during fellowship (range 69K-71K). Additional benefits including comprehensive health care coverage among other things.

LOMA LINDA
UNIVERSITY

Eye Institute

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