

So You Are Going to Be a Retina Fellow?

Outgoing fellows from Wills Eye Hospital share some tips for maximizing the fellowship experience.

BY EHSAN RAHIMY, MD; WITH MICHAEL DOLLIN, MD; JOHN D. PITCHER III, MD; AND CHRISTOPHER BRADY, MD

As the academic year begins, many recent graduates of ophthalmology residency programs are preparing to embark on the next phase of their clinical training as fellows. With each step—from medical school, to residency, and now fellowship—comes the expectation to sustain, if not exceed, productivity levels in less time. In this article, the outgoing section editors for the Fellows' Focus column reflect on their experiences as fellows, offering a unique and valuable perspective on how to get the most out of such a small time frame.



— S.K. Steven Houston III, MD; Ehsan Rahimy, MD; and David Reed, MD

The outgoing fellows at Wills Eye Hospital were eager to offer advice to incoming fellows. The pearls they provided cover everything from the logistics of personal organization to finding the ideal research project. In this article, these nuggets of wisdom are divided into 4 sections: medical retina, surgical retina, research, and job search.

MEDICAL RETINA

Keep a List of Interesting Cases

It is worthwhile to have a surplus of unique patient cases on hand that present challenging diagnostic or therapeutic dilemmas. You should start developing this list early in fellowship. This will be especially useful when the time comes to start preparing fluorescein or imaging conferences or submitting case presentations to local, regional, or national retina club meetings. Fellows with these cases on file will not be forced into last-minute scrambles to find material.

When You Hear Hoof Beats, Do Not Just Think of the Zebras

Do not strictly focus on rare conditions when creating a personal library of cases. Working with patients who have uncommon or unknown presentations may generate buzz among colleagues, but typical or atypical presentations of common diseases are of equal, if not greater, value. Textbook “bread-and-butter” cases are especially useful to have on file. These may someday contribute to teaching files for students, preparing

podium talks for meetings, or generating figures for publications.

Share the Wealth

You will likely assemble cases for rounds or teaching. Keep an organized library of images on a common computer in the fellows' room to share among your cofellows. By the end of fellowship, you will have accumulated an abundance of cases from which to draw should you or your cofellows need them in the future.

GALILEO Was Not an Italian Scientist

Both your colleagues and patients expect you to be conversant with the outcomes of major landmark retina studies. An accessible library (paper or electronic), housing copies of these trials and other major review articles, serves as a quick reference. Dedicate time to review these files at a slow and steady rate—say, 1 study per week—and briefly summarize salient points to keep these trials and results fresh in your memory. Additionally, paging through major journals on a regular basis works in your favor, as the topics in these publications are the topics your attendings will likely discuss in the clinic and journal clubs.

Learn the Code

As a fellow, you will focus primarily on learning the medical and surgical management of vitreoretinal diseases. However, it is important that you do not neglect the financial and business aspects of medicine that will

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surely have an impact on your livelihood long after fellowship ends. Develop a basic understanding of coding and billing practices early in your training. Further, just as you would consult attendings regarding clinical situations, seek advice from attendings on how to balance patient care issues with limitations in patients' health insurance.

Talk the Talk

Practicing medicine is as much an art as it is a science. You can learn much from observing attendings' interactions with their own patients and seeing how they explain diagnoses, prognoses, and treatment plans. Choose which tactics you find particularly effective and integrate them into your own practice patterns. Simple comparisons that patients can relate to that help them better understand their condition (eg, describing a retinal detachment as wallpaper unraveling from the inside of a room) can make a major difference in earning patients' trust and confidence.

Read When You Can

You already have a solid foundation in medical retina and uveitis from residency and from having read the American Academy of Ophthalmology's *Basic and Clinical Science Course* manuals. Despite having learned from those resources, there is much you will not know. Because free time is at a premium, try to at least read about interesting or pertinent cases you saw in clinic each day. There are many great textbooks out there, and some previous fellows at Wills Eye Hospital have found the following texts extremely useful: *Retina* (ed. Stephen J. Ryan, MD), *Retinal Detachment: Diagnosis and Management* (by Carl D. Regillo, MD, and William E. Benson, MD), *Vitreous Microsurgery* (by Steve Charles, MD; Jorge Calzada, MD; and Byron Wood, MS), *The Retinal Atlas* (by Lawrence A. Yannuzzi, MD), and *Gass' Atlas of Macular Diseases* (by Anita Agarwal, MD).

Veni, Vidi, Vici

Strive to see as many patients as your schedule permits. You have only 2 years to acquire as much knowledge,

skill, and experience as possible before the rest of your career begins. Leave no stone unturned, and keep an open mind in your approach to how you develop your own clinical acumen. Treating wet age-related macular degeneration by treat-and-extend versus as-needed approach? Try both! How great or small of a role will intraocular steroids play in your management of retinal vascular disease? Find out for yourself! Be mindful of patients who would make good candidates for less commonly performed procedures (ie, photodynamic therapy) and make the time to perform those procedures yourself. Spend time with your attendings in clinic and ask questions. Attendings are there for a reason, and you can extract valuable knowledge and insights from them, not only about managing diseases, but also about the factors outside of physician control such as expectations, adherence, and compliance. Maximizing these various experiences during fellowship increases the likelihood that you will be comfortable managing a given situation when fellowship ends.

SURGICAL RETINA

There Are Many—Too Many—Ways to Skin a Cat

Try to learn as many different techniques as possible prior to choosing the technique you prefer for individual situations. For example, experiment with 23- and 25-gauge vitrectomy for retinal detachment repair surgery, segmental and encircling scleral buckles, and different methods for performing pneumatic retinopexy. Be aware that attendings vary in their intraoperative surgical approaches, and in particular, pay attention to all the steps leading up to surgery itself. Take note of the nuances of how different surgeons position the patient's head on the gurney, deliver peribulbar/retrobulbar anesthesia, prep and drape the operative eye, and insert the trocars. Apply the techniques you find most useful to your own practice.

Keep a Surgical Journal

Each surgical case not only represents an opportunity to hone your technical skills, but also a chance to obtain surgical pearls that senior attendings may offer. You might hear these comments in passing during a case as an attending offers instruction on how to perform a certain step or rationale for why it is being performed. Afterward, mentally review the case and jot down these learning points in a journal. Some pearls may focus on technical aspects of surgery, while others may pertain more to the specific style or approach of a particular surgeon. You may find it helpful to review a particular attending's preferences and teaching points the night before surgery with that individual. A surgical journal can

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be of the pen-and-paper variety or electronic, but the medium of the journal is less important than the content inside it, and you should choose whichever format best suits you.

Know the Specs

Learn the vitrectomy machine(s) being used at your institution as best as possible. Company representatives assigned to your particular facility will be very helpful in this matter. You should contact them on your own or speak with them when they visit the facility. The Alcon Constellation representative for Wills Eye Hospital, for example, is always willing to answer questions and set up instruction sessions to review basic setup and troubleshooting of common problems. The representatives assigned to other institutions will be just as willing to help fellows understand the nuances of their products.

Press Record

If your operating facility has video recording capabilities, speak with the facility's audiovisual professional and senior fellows early in fellowship to learn how to optimize recording quality. Become proficient with iMovie (a user-friendly editing software) to ensure that your videos are edited coherently. Many fellows find that purchasing an external hard drive at the start of fellowship to record as many cases as possible is useful, as you never know when an unique case or surgical technique may come up and need to be stored. Often, interesting videos may be useful for formal presentation to colleagues as part of a lecture or national meeting (ie, an annual American Society of Retina Specialists Film Festival or a Vit-Buckle Society meeting). As with medical cases, you should assemble a library of surgical videos to share with your cofellows.

Spend Time in the Film Room

Just like professional athletes who analyze game film to prepare for their next opponent, a retina surgeon who reviews his or her surgical videos is afforded a unique opportunity to identify technical inefficiencies and flaws

and adjust accordingly. Beyond the personal library, you should use online supplemental video libraries, which contain videos that demonstrate important retinal surgical techniques and principles.

Two sources in particular that previous fellows at Wills Eye Hospital have found useful are Eyetube (eyetube.net) and the American Society of Retina Specialists Innovative Retina Surgical Video Series (asrs.org/education/innovative-retina-surgical-video-series/videos).



Discuss Your Complications

No matter how talented a fellow is, he or she is going to make mistakes. Mistakes are learning opportunities for surgeons-in-training, and learning how to manage these complications is a critical component of fellowship that should be embraced, not ignored. You must have an avenue by which to maintain open dialogue among your cofellows and attendings regarding complications. Most programs have a regularly scheduled surgical conference to present select challenging cases that are still fresh in the surgeon's memory. If your fellowship program does not conduct a formal surgical rounds or conference, it is still important for you to set aside time to verbally discuss a given surgical case with an attending. The review should summarize the procedure in a step-by-step fashion, leading up to the complication or inefficiency, how it was handled, and addressing how it might be avoided in the future. Communication reduces anxiety or guilt, builds camaraderie among colleagues, and, most importantly for patients, lowers the risk of recurrence.

RESEARCH

Get Involved Early

The fellows at Wills Eye Hospital are fortunate to have monthly retina research meetings attended by faculty, fellows, residents, and medical students, during which topics are openly brought up and potential research questions discussed. Actively participate in these meetings, and recognize their potential for helping you get involved at your institution beyond direct patient care. Attendings may approach you to gauge your interest in participating in a project. Obviously, you should select something that interests you, but it is also important to choose projects that seem feasible to complete during fellowship. Prospective studies, for example, offer great learning opportunities, but they may not come to fruition until much later in fellowship, or even beyond it. On the other hand, retrospective studies are generally completed much sooner, giving fellows abstracts that are ready for submission to academic meetings and potential manuscripts for

TABLE. APPROXIMATE ABSTRACT SUBMISSION DATES FOR MAJOR OPHTHALMOLOGY MEETINGS

Meeting	Time for Abstract Submission
Association for Research in Vision and Ophthalmology	Early December
American Society of Retina Specialists	Mid-to-late March
American Academy of Ophthalmology	Early April

publication. Ideally, you should have a balance of different tiers of projects by the time you depart fellowship: a major project worked on throughout the course of fellowship, several chart reviews, and smaller case series/reports.

Save the Date

In July of your first year, you should record the abstract submission deadlines for major academic meetings at which you hope to present during your fellowship (Table).

Do Not Bite Off More Than You Can Chew

There is such a thing as taking on too much in the way of research, especially early in fellowship while still getting acclimated to the program. It is better to have a single project to which you are dedicated and can see to completion rather than having many projects that are stalled because you are spread too thin. Lack of study progress and repeated delays or setbacks may also reflect poorly on you, as it demonstrates that you are not capable of meeting deadlines in a timely fashion.

JOB SEARCH & BEYOND

Academia Versus Private Practice?

An important question to entertain early in fellowship, if you have not already decided, is whether you would like to pursue a job in academia or private practice. These career paths are not mutually exclusive, contrary to what many might think (see "Choosing Between Academia and Private Practice," in the October 2013 issue of *Retina Today*). Consider the type of work environment in which you want to be primarily based and tailor your initial job searches based on those determinations. Of course, other contributing factors, such as your family's location or your spouse's career, apply as they did for residency and fellowship—now, perhaps more than ever.

It Is Never Too Early to Reach Out

Contact groups or institutions that fit your skill set and are located in geographic areas to which you are interested in relocating. The earlier the initial contact, the more thoroughly you can assess that region. You can e-mail, fax, or mail a cover letter with a CV and references to institutions for which you would consider

working. Also, ask attendings to reach out to colleagues in a certain area to see if there may be any upcoming employment opportunities. Often, you will find that groups may not be hiring in a particular year, or that they may be planning to look for someone in the following year's cycle. Still, your initiative demonstrates interest, which can be to your advantage should the hiring patterns of a particular institution change.

Have Fun!

Two years go by fast. Get to know the people you will spend this critical time with, as they will not only be your colleagues, but also your friends and strongest advocates for the rest of your career. ■

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