Residents and Faculty Collaborate on Curriculum Change

A new, interactive ophthalmology curriculum set to roll out in July at the John A. Moran Eye Center arrives thanks to a unique development process driven by residents.

“The trend away from traditional ‘sage-on-the-stage’ lectures to interactive learning is not unique,” explained Moran Vice Chair of Education Jeff Pettey, MD. “But the way we went about creating department-wide change speaks volumes about our approach to education.”

The approach? Asking residents what they needed to be successful and supporting their involvement in making it happen. At about the same time residents started expressing a desire for more active learning, faculty members were also speaking up for increased interactive methods.

“Residents and faculty both expressed the need for more dynamic educational exchanges,” said Rachel G. Simpson, MD, Moran’s associate residency program director.

Simpson, a former Moran glaucoma fellow and now an assistant professor of ophthalmology and visual sciences, led the formation of a working group of residents, fellows, and attending physicians.
New Lesson Plan Approach

Marissa Larochelle, MD, was the first Moran faculty member to revamp a traditional lecture into a more interactive format. Her lesson plan is below.

Lecture Topic: Infectious Posterior Uveitis, Including:

- Viral retinitis (HSV, VZV, CMV)—includes ARN, BARN, PORN and CMV retinitis
- Syphilis—ASPPC
- Toxoplasmosis
- Tuberculosis
- Endogenous endophthalmitis (bacterial, fungal)
- Neuroretinitis/Bartonella
- Toxocariasis
- Rare entities: West Nile, DUSN, onchocerciasis, Lyme, cysticercosis

Assigned Pre-Work:

- General review article
- Lecture by Albert T. Vitale, MD, hosted on Moran CORE website
- For the rare entities: Please pick any two and read theEyeWiki page
- Bartonella review
- Bonus read: Medical malpractice in uveitis

Class Format:

- Start with a short quiz to test your knowledge on pre-work
- Interactive cases
- Resident-led explanations
- Clinical pearls
- Clarifications and review of salient points
Taking on Resident Burnout

Medical residencies have long had a reputation as rewarding, albeit stressful experiences. But national survey results published in 2018\(^1\) revealed a troubling snapshot of the pressures on ophthalmology residents, in particular, and pushed issues of burnout, depression, and even suicide into a national spotlight.

Among the most-cited factors contributing to resident burnout: lack of control over schedules and lack of time for self-care.

The findings were at odds with the perceptions of most program directors. Another survey by the same research team revealed that only 25 percent of program directors expressed concern about resident wellness.

The survey results, along with many others, opened the door to change. As eye centers across the country acknowledge burnout and its consequences, the Moran Eye Center is taking unique steps to address the issues with real solutions.
**PROTECTED TIME**

Moran Eye Center Director of Wellness Griffin Jardine, MD, knows all about resident burnout.

"My ophthalmology residency was brutal in terms of lack of control over my schedule or time for any self-care—as it is for most residents," he said. "And it doesn't stop. During my fellowship, I worked for a full year with no vacation, but I did get to take half of a sick day for a root canal. It was one of those happy-unhappy situations. I couldn't believe I was sitting there in the dentist's chair, loving the downtime."

Jardine acknowledges that wellness is a complicated issue, and generational differences play a role.

"Among most health care providers, personal wellness has been a back-burner issue, as in 'don't be selfish, just pay attention to your patients.' But the reality is, data show that increased burnout correlates to worse patient outcomes and more errors," said Jardine.

With the support of Moran CEO Randall J Olson, MD, Jardine and Moran’s education team launched a wellness program for residents to augment university-wide efforts for faculty and staff.

A key component of Moran's program is “academic protected time” during the regular workweek.

"Yoga and mindfulness are nice, but they don't change the burnout rate," Jardine noted. "Residents want some control over their time, and that is what we've been able to negotiate. They now have two half-days a month to do whatever they like.”

Resident feedback has been positive.

"Administrative half-days have been an extremely positive influence,” one resident said in a survey. “Even though many of these half-days are not spent on wellness activities, they contribute to wellness because I have some carved-out time to work on things like research or extra study time.”

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**MOCHA WITH A MENTOR**

Residents Ariana Levin, MD, and Mike Burrow, MD, created a second initiative for Moran’s Wellness Program.

Called “Mocha with a Mentor,” it bypasses the formal pairing of mentors and residents and instead empowers residents to seek out a faculty member they admire.

The team created an email invitation to send on behalf of residents to faculty, indicating that a resident would like to meet and treat the faculty member (with a department-issued $10 gift card) for one-on-one time. Residents can ask the mentors about their careers, research, and ophthalmology in general—or anything else on their minds.

“It’s been a hit,” said Griffin Jardine, MD, Moran’s director of wellness. “Eighty percent of the meetings last for over 20 minutes. Faculty are flattered, residents get their undivided attention, and it goes a long way in terms of making meaningful connections.”

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**BY THE NUMBERS**

Here’s how Moran residents are making use of their two half-days of protected time a month:

- **Study**—29%
- **Wellness Activities**
  (such as hiking, biking, skiing)—28%
- **Research**—13%
- **Technical/Surgical Skills**—13%
- **Other**—17%
- **Choose Not to Use**—0%

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Global Outreach Fellow Works to Build Sustainable Eye Care from the Ground Up

To build something truly sustainable and effective, you need a strong foundation.

Perhaps no one knows that better than Sophia Fang, MD, who studied biomedical engineering and clinical research before becoming an ophthalmologist. As Moran Eye Center’s 2019-2020 global outreach fellow, she created behind-the-scenes tools and practices needed to make sustainable, effective eye care in outreach settings a reality.

“Sophia’s work is a shining example of how we approach the international fellowship at Moran,” said Jeff Pettey, MD, vice chair of education. “We support and encourage each fellow’s unique skillset. We also look at how we, as an academic medical center, can uniquely assist global and local partners working on expanding access to care.”

Fang’s background in engineering and data analysis influenced her focus on improving and streamlining online systems and key protocols used in Moran’s global outreach program.

“Even in the most remote corners of the world with the highest volumes of patients, our commitment to delivering high-quality care and developing effective training programs requires robust, innovative systems to gather good data,” explained Fang.

In Utah, Fang created protocols and electronic forms to gather more consistent data for the thousands of patients from underserved populations who receive free vision screenings, eye care, or surgery through Moran’s donor-funded Global Outreach Division.

Aravind Eye Care System in India—the largest eye care provider in the world—asked Fang to analyze its high-volume outreach endeavors and make recommendations to increase the efficiency and quality of patient care. She created a user-friendly interface that made it easier for doctors to find the information they needed about their patients from one screen.

While training nurses at Komfo Anokye Teaching Hospital in Ghana and residents at Tilganga Institute of Ophthalmology in Nepal, Fang helped develop an open-access, interactive online ophthalmic curriculum. For physicians, she edited, updated, and organized educational resources on small incision cataract surgery, an invaluable technique mainly used in the developing world.

“It’s been gratifying to have the opportunity to create and implement change during my fellowship,” said Fang. “In addition to making a difference, I am heading out into the world with a wealth of experience.”
Moran Eye Center: A Leader in Learning

PROGRAM OVERVIEW

High Surgical Volumes
In three years, one Moran resident, on average, performs about 740 surgeries. More than 300 are cataract—86 is the national requirement—205, the average.

Integrated Intern Year
A required intern year at Moran in ophthalmology and internal medicine means residents understand the U of U Health system from the start and graduate exceptionally prepared.

Resident Continuity Clinic
From day one, interns manage a patient’s eye care under the supervision of a board-certified ophthalmologist.

Online Publishing—CORE

Quality Improvement
Residents design quality improvement projects as part of value training to provide the best patient outcomes at the lowest possible cost.

Dedicated Research Time
Moran provides residents with protected research time one-half day each week; at least one new resident is awarded $15,000 for research, which Moran matches each successive year.

Elective Time
Third-year residents can tailor four months of elective time to hone skills on a subspecialty of interest and participate in international outreach work with Moran’s Global Outreach Division.

NATIONAL RANKINGS

Ophthalmology Times
6th Nationwide Residency Education Program

Doximity
9th Nationwide, 2nd in the West for Residency Education

SURGICAL EXPERTISE

At 11 Moran clinics, more than 40 clinical faculty members, up to 11 fellows, 12 residents, and 4 interns conduct about 150,000 patient visits and more than 6,500 surgeries annually, providing comprehensive care in nearly all ophthalmic subspecialties.

Here is a breakdown of the surgical experience a Moran resident, on average, gains in three years.

743 TOTAL SURGERIES

17 - Cornea
9 pterygium, conjunctival, other cornea
8 corneal transplant keratoplasty

26 - Glaucoma
14 trabeculectomy
12 glaucoma-filtering/shunting procedures

138 - Retina
99 intravitreal injections
39 retinal vitreous

13 - Refractive Surgery
13 keratorefractive

60 - Comprehensive Ophthalmology
29 YAG capsulotomy
23 panretinal photocoagulation
8 iridotomy

17 - Emergency Care
17 globe trauma

310 - Cataract

142 - Plastic Surgery
106 oculoplastic and orbit
29 ptosis/blepharoplasty
7 chalazion excision

20 - Pediatrics
20 strabismus
Message from the Chair

What makes a Top 10 educational program? The chief ingredient is the ability to combine a commitment to excellence in teaching and training with the willingness to innovate and implement change. This issue of Education Focus highlights a few of the ways we’re making significant changes at the John A. Moran Eye Center at the University of Utah.

Our Vice Chair of Education Jeff Pettey, MD, not only embraces innovation but also couples it with inclusion. It’s a winning formula he’s used in guiding the rollout of a new, interactive curriculum. Two other new initiatives, resident wellness and mentorship programs, are the result of residents, fellows, and faculty working together for the good of all.

At Moran, we are committed to supporting and encouraging each fellow’s unique skillset. International fellow Sophia Fang, MD, has used her background to help our outreach team and partners implement changes that will allow them to work more efficiently while expanding access to eye care in Utah and around the world.

As this edition of Education Focus is being produced, unique challenges posed by the COVID-19 pandemic are forcing us to think outside of the box even more when it comes to education as so much of our efforts have turned to keeping patients, providers, and staff safe. I couldn’t be prouder of how our team has responded in an environment where daily change has become a new norm. We will get through this crisis, and I cannot thank our key leaders enough for their excellent work in these difficult times.

Sincerely,

Randall J Olson, MD
Professor and Chair, Department of Ophthalmology and Visual Sciences
CEO, John A. Moran Eye Center, University of Utah