

Dr. Rishi Gupta

Ophthalmology

Overview

- 1. Profile:**
 - a. Positions: Associate Professor in the Department of Ophthalmology and Visual Sciences (Dalhousie University); Surgical Retina Specialist (Victoria General Hospital)
 - b. Training: Surgical and Medical Treatment of Retinal Diseases Fellowship (McGill); Ophthalmology Residency (Ottawa); MD (Toronto)
- 2. Pitch:** Cool, fast paced specialty with a lot of technology and gadgets!
- 3. Path:** He always had an interest in medicine and liked nearly everything he tried. He chose ophthalmology after a positive experience in med school, then chose surgical retina subspecialty as it was fascinating.
- 4. Personal:** He loves the plethora of roles he gets to play in the academic setting (direct patient contact, research, admin, teaching) but feels it is very important to find balance between work and life
- 5. Philosophy:** Explore as many areas of medicine as possible and find your spark! Choose the practice setting that works for you.

Elevator Pitch

(1:54)

- ***"People who like technology and gadgets often gravitate towards our specialty"***
- He sometimes gets to shoot lasers from device on head into people's eyes to prevent blindness from retinal tear ("How cool is that, like one of the X-men?")
- It's a very visual specialty with a lot of pattern recognition and piecing together subtle clues
- The fast pace of medical imaging, therapeutics, and surgical approaches keeps the field fresh and exciting!
- Very meaningful outcomes since people value their sight so much
- A very clean specialty where you don't need patients to disrobe, you don't deal with bodily fluids or do digital rectal exams (spoiler: you won't miss doing them!)
- "An area of medicine where the patients are happy and the doctors are happy, too"

Personality

(4:55)

- He thinks of himself as a **compassionate, empathetic** individual (big part of being a doctor is making human connection and showing people you care)
- Being **organized, efficient**, good **team player** and always striving to do your best is critical for successful patient outcomes
- You are now studying for success of patient, not for grades (attitude to always stay current and humble)

4th year med students' stereotypes of ophthalmology

(6:18)

- Insufficient interest, not enough exposure, too specialized, and too competitive
- Dr. Gupta's response:
 - Seek out opportunities to learn about specialties that may not be covered as much in med school curriculum (can talk to upper years)
 - For residency matching, always have a backup and try to figure things out early
 - Ophthalmology is very specialized and not all specialties are for everyone (for example, Dr. Kyeremanteng's interview terrified him!)
 - Expose yourself to as many areas of medicine as you can to find your passion
- Other stereotypes: ophthalmologists aren't real doctors!
 - Emerg, ICU, and anesthesiologist docs are the real doctors when it comes to emergencies
 - However, a lot of systemic diseases do present with eye findings so solid base in medicine is important
- Also, another stereotype is that ophthalmologists are great at standup comedy since no one's jokes are cornea ;)

Referenced Material: Linz et al. Evaluation of Medical Students' Perception of an Ophthalmology Career. *Ophthalmology* 2018; 125 (3):461-462.

Path

(11:40)

- Grew up in Newfoundland and always wanted to do medicine; his undergrad was in biochemistry at Memorial
- He wanted to do pediatrics in med school but was sick throughout his peds rotation, which soured him on the experience
- Loved his surgical rotations and started exploring ENT as well as psychiatry in summer research project
 - At Princess Margaret Cancer Centre with head and neck group, he found the operations incredible but wasn't sure if length of surgery was right for him (community ENT also didn't appeal)
- His cousin (an optometrist) kept telling him to check out ophthalmology
 - Had a great time at Toronto Western Hospital with supportive residents and the rest is history!
 - Ophthalmology blew him away (so many gadgets and very challenging!)
- Really enjoyed all of his rotations but some didn't appeal to him when thinking more long-term
- Backed up with anesthesia for CaRMS - really liked the anatomy, physiology, pharmacology
- Had a wonderful 5 year residency in Ottawa (ophthalmology seems pretty specialized already but it's actually split into 10 subspecialties)
 - He finds the retina fascinating so he completed a two-year fellowship in surgical retina subspecialty!
- After graduation, there were no surgical retina job openings so he did private practice in Gatineau for 1.5 years, then began his position at Dalhousie
- **Advice:** the earlier you can identify what you like, the more time you have to develop relationships and your application
 - If supervisors see you're interested and pleasant to be around, they will want to share exciting projects with you!

Day-to-Day Life

(21:40)

- Works full time at academic hospital in clinician-teacher track (direct patient care, administration, research, and teaching)
- Monday and Thursday - clinic days

- Start at 7:30 for paperwork, clinic at 8, end by 4 or 5 to get home to his kids
- New patients, follow ups, laser, intra-ocular injections and procedures
- Tuesday and Wednesday - OR days
- Friday might be clinic or OR (call for one week every fourth week)
- Admin work at start or end of day, departmental committee meetings in the evenings
- Research: patients, meetings, writing and reviewing manuscripts and protocols, journal clubs, peer-reviewed ophthalmology journal
- Didactic teaching for med students and residents, teaching in clinic and OR
- Spends eight hours every week on other professional projects (reading, journal club, surgical and patient education videos, he also wrote a book!)
- In a typical month, he spends about 90% of his time in direct patient care (clinic and OR), 5% research, and teaching and admin work longitudinally after hours
- First 5 years in practice were really intense for building resident and med school lectures, just getting established
- Always try to keep balance and take time for your own personal health

Dr. Gupta's book:

<https://www.amazon.ca/Reflections-Pupil-Ophthalmology-Textbooks-Colleagues/dp/1999419707>

Call: (25:17)

- Every fourth week for one week at a time
- Typically busy as 4 surgical retina specialists in Halifax cover all of the Maritimes
- Can access OR readily so can incorporate emergency cases into daytime hours, advantage is not having to operate at night
- Retinal detachment work and post-surgery eye infections are main emergencies

Typical patient population: (26:37)

- Different than general ophthalmology
- On surgical side, common referrals are for pathologies of macula, diabetes complications, dislocation of intra-ocular lenses many years after cataract surgery
- On medical side, lot of intravitreal injections, anti-VEGF to treat macular degeneration (stabilize people's vision)

Different subspecialties in ophthalmology:

(30:34)

- *Cornea*
- *Glaucoma*: when pressure of eye is too high, it can damage optic nerve
- Oculoplastics: patients with fibroid-related inflammation of eye or orbit fractures, lid droops
- *Neuro-ophthalmology*: tumors, idiopathic intracranial HTN, optic neuritis, uveitis (inflammation of eye)- most excited about seeing single WBCs in anterior chamber!
- Surgical retina
- *Vision rehabilitation* (can't improve with surgery or medications but how to maximize using what you have with filters, magnification)
- *Pediatric ophthalmology*
- *Ocular oncology*
- *Ocular pathology*

*Please note: this may not be a comprehensive list but we hope highlights the variability of ophthalmology.

Practice setting: There is a lot more free time in non-academic but Dr. Gupta loves his complementary roles in current academic practice (research and mentoring residents and med students), though it is a huge time and energy commitment. In a smaller or rural setting, you're in a private practice or non-academic community setting but you can still be involved in research and teaching (e.g. distributed medical education). "You have to expose yourself to different settings and see which one will work out best for you. No matter where you are, you can probably find the avenues to achieve your interests."

Personal Takeaways

(35:25)

Personal Story:

*"One of the biggest fears a patient has when they come to ophthalmology is that their condition will make them completely lose their vision... One of my mentors said to the patient [with advanced macular degeneration], 'you will never go blackout blind from this condition', and it wasn't really prompted. It was just something he presented to them... Right after that, you could see the **stress drain out** of this patient, and this wave of relief just wash over them... It was a moment I'll never forget because, although we had **no***

*treatment for them to heal their eye...we could **still help them** by educating them, being empathetic, and showing them that we cared. That always **stuck with me.**"*

Takeaway: Even if there is no treatment, you can still support the patient in other ways!

Note: While we tried to keep these transcriptions as true to the speaker as possible, some dialogue is paraphrased and/or edited for easier reading.

Final Comments

(42:33)

- See what grabs you and explore all areas of medicine.
- If you can find what you were born to do, you can excel in your career!
- Look for the spark and pay attention for something that comes naturally to you, that doesn't feel like work