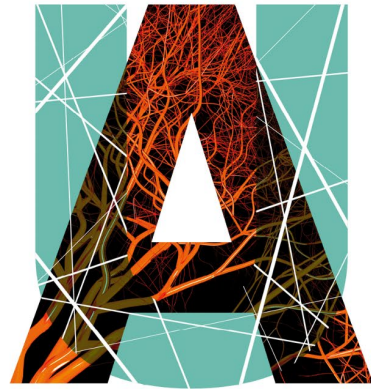


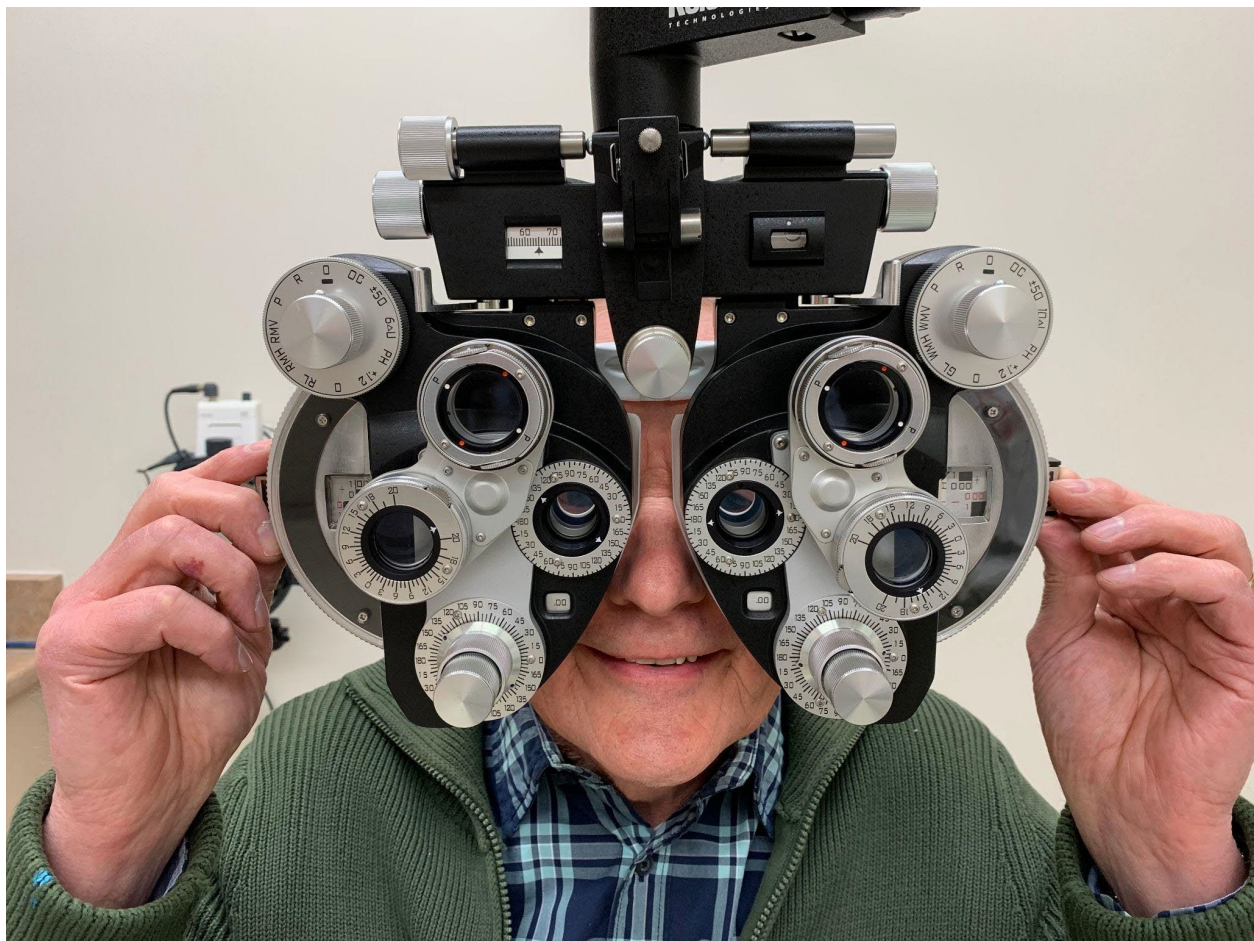


UNIVERSITY  
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# Newsletter



Department of Ophthalmology and Visual Sciences  
January 2023



Sitting down and writing a newsletter for the Department is something I have never done. Why now? Well, 2022 was a very challenging year and it's worth telling everyone that we made it!

Let's start with January.

Dr. **Karim Damji's** departure for Karachi Pakistan to Chair a new Department of Ophthalmology at the Aga Khan University was a feather in his cap undoubtedly but also recognised the importance of our Department as a training ground for leaders in Ophthalmology, especially in global health. We'll get to that later. What we did not anticipate was the illness of Dr. **Rizwan Malik** who had been appointed in the fall of 2021 and did not return to work at the start of 2022. The combined lack of two glaucoma specialists was a huge stressor for the Department. The remaining glaucoma team stepped up – Dr. **Ordan Lehmann** triaging cases, the surgeons taking cases off Malik's list and the clinic trying to direct unlinked patients to care. We were very fortunate to have recruited Dr. **Victor Penner**, originally from the University of Manitoba, to fill in for us temporarily until he could move permanently to Edmonton, joining the practice of Alberta Eye MD. Later in the summer, Dr. **Mat Palakkamanil** joined us as a glaucoma specialist having completed a fellowship in glaucoma at Dalhousie University. By the fall, we were back at full strength.

Mid-summer saw the return of Dr. **Matt Benson** to the Department after a one-year fellowship at the prestigious National Eye Institute of the National Institutes of Health (NIH) in Bethesda, Md. By the way, Bethesda, Md. is not named after the biblical pools of Bethesda but in fact the Bethesda House of Mercy, a church built in 1820 in what was then countryside. Matt's appointment is a "special-continuing" Faculty member of the University of Alberta Department of Ophthalmology and Visual Sciences – essentially no salary but the privilege of basing his practice entirely in the Royal Alexandra Hospital (RAH) and research space at the Katz building. He will be carrying on this work that he started in his MSc during his residency on peroxisomes and the retina, and continued while at NIH. He has recruited a graduate student, **Constantin Mouzaaber** to work with him. Matt was fortunate to be awarded a Bayer Professorship that provides start-up funding for his research for the next two years – with an emphasis on precision medicine in ophthalmology. Constantin is the only graduate student in the department now as **Paul Crichton** graduated at Fall Convocation with an MSc. His thesis was on the immune mechanisms in ocular gene therapy.

My own lab has seen the departure of Dr. **Fay Zhai** and Dr. **Manlong Xu** to Toronto as PGY1 trainees in Medical Genetics and Ophthalmology, respectively. They had been with the Department for six and four years. Our postdoctoral fellow, Dr. **Nicole Noel** left in the late fall to take up another fellowship with Ryan MacDonald at the Institute of Ophthalmology of the University College London, U.K. She will be working on aging in the retina of killifish which matches her interests in zebrafish retinal development and function.

In August, Dr. **Brittany Carr** joined our department as a vision scientist. Brittany is a native Albertan. She obtained her PhD with Bill Stell at the University of Calgary working on myopia in animal models. She then completed a postdoctoral fellowship with Dr. Orson Moritz at UBC where she worked on *PROM1* gene function in *Xenopus* (yes, that is the frog). The frog's photoreceptors are amazingly much bigger than humans or mice or zebrafish. Brittany has been busy writing grants and setting up her lab in the Katz building alongside Dr. Benson.

## Other News

Dr. **David Climenhaga** retired at the end of 2021 after a distinguished career as a corneal specialist, tirelessly supporting the corneal transplant program.

Dr. **Morley Kutzner** retired at the end of 2022. His roles in surgical training of many graduates and his advocacy for physician and resident wellness are greatly appreciated.

Dr. **Jonathan Heston** moved to BC after many years of practice at the Alex in a uveitis clinic and private practice. The Department is recruiting a replacement in uveitis, anticipating a start perhaps in 2024.

**Narin Sheri** joined us in September as a genetic counselor (four days/week) having trained at the University of Manitoba. We had been without a counselor for six months and are delighted to have her join us.

Dr. **Vanessa Bosch** was a successful candidate for a position in Vision Rehabilitation. As she is a graduate of a training program in Mexico, she is still in the process of gaining licensure in Alberta –hopefully in mid-2023.

The Department is pleased to informally announce a replacement for me as Chair and Zone Clinical Chief of Ophthalmology. Dr. **Edsel Ing** came to Edmonton Dec. 9-12 as a candidate and a formal announcement appears imminent from AHS and the Faculty of Medicine and Dentistry about him starting Aug. 1, 2023. I stepped down as Chair/Chief at the end of January. Dr. **Chris Rudnisky** has graciously accepted an Acting-Chair position and the Acting Alberta Health Services Lead for Ophthalmology in the Edmonton Zone. We are very grateful to have his support to help lead while we are in transition.

Future recruitment of a Program Director is needed as Dr. **Carlos Solarte** will step down in the summer of 2023. He is completing his Master of Education from Maastricht University in the Netherlands, using “Competency by Design” as his thesis subject. Dr. Solarte has been awarded the AMAN Builders Inc. Global Professorship in Ophthalmology. The professorship will help foster opportunities in educational initiatives with our Department and the Aga Khan University and other international institutions. Dr Solarte is for example working with setting up a PhD project at Tamale U in Ghana on retinoblastoma. In the fall, Dr. Solarte was promoted to Associate Professor. Congratulations!

The University of Alberta initiative to reduce staffing levels has created challenges for many in knowing who is doing what. Many of the non-salaried staff members had been in limbo about their status. Finally, the University was able to promote Clinical Academic colleagues who had been patiently waiting (they know how long).

As many of you are aware, our department has for many years participated in a “sandwich fellowship” program under the leadership of Dr. Damji. The Glaucoma Team has now created a more formal one-year fellowship program. Their current fellow is Dr. **Nimrod Dhar** from Israel. Retina also has a well-established fellowship program with two fellows in each of two years. Their fellows are **Carl Shen, Roseanne Marten, Amit Mishra, and Graeme Loh.**

Two of our residents, Dr. **Scott Anderson** and Dr. **Meghan Smith**, travelled to Cuenca, Ecuador with Dr. **Jaime Badilla** and Dr. **Travis Pollock** to bring cataract surgery to an underserved population there over a two-week visit. Paul Dusseault of the Edmonton Riverview Rotary Club and the local Rotary club were sponsors. Plans are underway to repeat this event in the fall of 2023.



Here is an excerpt from Paul Dusseault of the team:

### **Misión Claridad Mission Clarity - Cataract Surgery Project in Ecuador, September 2022**

In Ecuador, cataract surgery is not covered by the public health-care system. Surgery is available at private clinics; however, the cost is approximately \$2,500 USD per eye. As a result, many people are left with untreated cataracts that lead to severe vision impairment and blindness. Paul and Cynthia Dusseault, from the Rotary Club of Edmonton Riverview, learned about this in early 2020 and committed themselves to provide cataract surgery to those most in need in Ecuador. After over two years of detailed planning and preparation, including multiple delays due to COVID, Paul and Cynthia led a group of 13 eye professionals to Cuenca, Ecuador in September of this year. The team, consisting of two ophthalmologists, two resident doctors, four nurses, an optometrist, an optician, and three volunteers, left Edmonton on Sept. 15 with 24 hockey bags of donated medical supplies. Over the course of five long days, the Canadian team, working in two ORs and supported by an Ecuadorian team in a third OR, performed 77 extracapsular cataract surgeries.

Building on the success of this first mission, Paul and Cynthia are planning another cataract mission for the fall of 2023. Paul and Cynthia are also looking at other eye-health initiatives for southern Ecuador. This includes supplying a surgical microscope and other equipment to enable a public hospital to perform cataract surgery. Another initiative, suggested by the Ministry of Public Health, is to explore options to improve eye-care services in the remote Amazon basin of Ecuador.



Research Day 2022 welcomed Dr. **Peter Dolman** from UBC to deliver his keynote address titled "Evaluation and Management of Dyshyroid Optic Neuropathy." Sixteen department members delivered eight-minute seminars on both clinical and basic science topics.

Dr. **Scott Anderson** was awarded the Reg Martiniuk Memorial Award for his presentation on “The Incidence of Subretinal Hemorrhage among Individuals Treated For Neovascular Age Related Macular Degeneration: Is Maintenance Therapy Preventative? - An Update.”

The award adjudicators felt that all three basic science presentations were outstanding and consequently, all three presenters were awarded the OVS Best Basic Science research award:

- **Maria Sharkova** for her presentation, “Characterization of photoreceptor microvilli in Zebrafish.”
- Dr. **Nicole Noel** for her presentation, “ PIKfyve mutation leads to a novel ocular disease with CNS manifestations.”
- **Paul Crichton** for his presentation, “Creation of an *in-vitro* Co-culture Model of Microglia and Retinal Pigment Epithelium Cells for Investigation of the Innate Immune Mechanisms of the Retina.”

Our two senior residents, Dr. **Marvi Cheema** and Dr. **Sim Sandhu** were celebrated at a reception in the Art Gallery of Alberta at the end of May. Marvi has been training in vision rehabilitation with mentors in Canada, U.S.A. and abroad. Sim has been practicing comprehensive ophthalmology in the Edmonton area.

At the very end of the year, the Department was challenged with the decision to move a large volume of cataract surgeries into chartered surgical facilities. Staff met with the Chief Medical Officer of Alberta Health Services, Dr. **Francois Belanger**, to voice their concerns about the effect of this decision on the integrity of the regional program and teaching. While this move provides an excellent opportunity to reduce wait times and improve access for patients, the logistics for scheduling have been challenging. Working together, developing the concept of sections within Ophthalmology – Comprehensive Ophthalmology, Cornea, Glaucoma, Oculoplastics, Pediatric Ophthalmology and Retina – we have successfully created a new zone-wide schedule. Residents will be joining staff in these facilities; this will be quite a change for the future.

Finally, a significant moment happened at the end of the year, on Dec. 14 at the RAH. Three Albertans, all from Calgary and who have Leber congenital amaurosis, underwent surgery with Luxturna™. A team of support staff and physicians including three retinal surgeons (**Matt Tennant, Rizwan Somani and Mark Seamone**) surgically placed a replacement gene under the retina. The gene replacement vector is manufactured by Novartis. This event is the first time that the product was paid for by a provincial health-care system. Edmonton will also become the Western Canadian site for future cases. It goes without saying, but I will – we could not have done this without having invested over the years in developing an academic Department with the expertise to do this. We are witnessing the future of precision medicine.

## Looking to the Future

The Department’s 31<sup>st</sup> annual Research Day will once again be held in person at the Robbins Pavilion at the Royal Alexandra Hospital on Friday, May 26, 2023. We are working with the technical team at the hospital to deliver a live-streamed event as well. We are excited to welcome Dr. **Natan Choudhry** as our keynote speaker. Please join us if you can. In closing, it has been a privilege to help lead the Department. I am looking forward to seeing the Department move forward with its academic mission in 2023. Best wishes, Ian