

## TREATMENT WITHOUT A TRANSPLANT – INNOVATIVE SOLUTION HONOURED



Research supported by the Sydney Eye Hospital Foundation has been honoured with an international award.

In the changing world of corneal treatment, a new approach is promising improved outcomes for Fuchs' dystrophy, a condition that can create blurry vision and even lead to blindness. The approach enhances the eye's capacity for self-healing after an operation for Fuchs' dystrophy and means more patients could have treatment without a transplant.

### THE NEW APPROACH

It was long assumed that the corneal endothelium (the back layer of the cornea) doesn't heal well and if it is removed as part of surgery for Fuchs' dystrophy, it always requires a graft to heal. But in 2014 a patient with Fuchs' from Sydney Eye Hospital was observed to heal her cornea after removal of the diseased layer without the need for a corneal graft at all.

This could have enormous implications for patients and organ donors, potentially freeing up the donor tissue pool and avoiding the complications that can sometimes come with a graft.

Backed by Sydney Eye Hospital Foundation funding, Dr Greg Moloney and the cornea team undertook further research. Their goal was to determine if all cases of Fuchs' dystrophy need a graft to restore clear vision.

Their study was published in the journal *Cornea* in 2017. The main findings were that 80% of patients operated on for Fuchs' dystrophy cleared their corneas without

a graft. Equally exciting, two patients who were failing to heal were stimulated to clear their cornea by the addition of a new glaucoma drop named Ripasudil.

### WHY IS IT IMPORTANT?

The cornea is the window at the very front of the eye. In Fuchs' dystrophy the cornea's back layer (the endothelium) loses healthy cells and with it its ability to correctly hydrate the cornea. Until recently the only accepted therapies were drops that dried out the swollen cornea or if the condition was severe, a transplant of the whole central cornea with the cornea of an organ donor.

*Recovery from surgery was long, and the results were variable. Improved vision was not always the outcome.*

Dr Moloney (pictured above) and others are conducting follow-up studies to see if Ripasudil can increase success rates of the new graftless surgery above 80% and make it a standard option for Fuchs patients around the world.



A cornea with Fuchs' dystrophy.

CONTINUED...

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### WHAT THE AWARD MEANS

The Troutman Cornea Prize for Young Clinician Investigators is bestowed annually for the most outstanding and innovative paper published in *Cornea* during the previous year, authored by an investigator up to 40 years old.

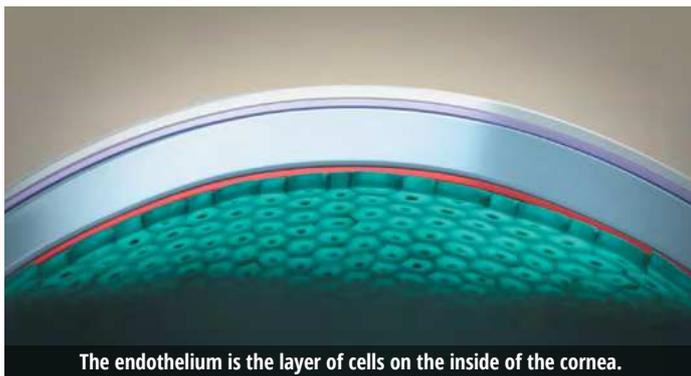


The eye side view – the cornea is the clear dome shaped “window” at the front.

Dr Moloney said receiving the Troutman Prize was unexpected and an enormous honour for the whole team. “It is tremendously satisfying for all of us at Sydney Eye who have worked on this project. This includes eye bank staff, nursing staff, pharmacists, corneal fellows and the entire corneal unit.”

*The prize comprises an award of almost AU\$7,000 and the opportunity to present his work at the annual scientific meeting of the Cornea Society.*

The Sydney Eye Hospital Foundation devotes nearly 20% of its funding to research. Outcomes like this show the value of any donation.



The endothelium is the layer of cells on the inside of the cornea.

### A WINK & A BLINK: NEWS IN BRIEF



**The iFix pen** for which we have been campaigning has received a big boost with the announcement by the NSW State Government of a grant of \$1.1 million to progress commercialisation. This clever device is already being trialled on animals. Professor Gerard Sutton’s team is planning to undertake a phase 1 human trial next year. You can see why the NSW Medical Devices Fund would be excited by a device that can deliver eye-repair fluids in the field, effectively “colouring in” the damaged area with life-saving drugs.

**A Box Just For Wishes.** The Sydney Eye Hospital Foundation has asked the Hospital’s doctors for their hopes and dreams – what equipment, what projects, what ideas would they like to see funded? Given how creative is so much of the research already under way, we’ll be intrigued to see what the busy staff want for Christmas. But hospitals also need the simple stuff: updated eye charts, new furniture, the latest software. We’ll keep you posted.



**If there’s a suspected concussion** in a sports game, the King-Devick Test can provide an initial diagnosis in only 2 minutes. A video funded by the Foundation in late 2017 for Sydney Eye Hospital and HeadSafe NSW has now been produced and is giving schools and sports groups the low-down on this important test across the state.

# MEET THIS YEAR'S FOUNDATION FELLOWS

## Every year the Sydney Eye Hospital Foundation funds a number of Fellowships.

Experienced and talented eye doctors from Australia and overseas can apply for these 12-month positions, each in a different specialisation. Fellowships are keenly sought after and are a key Foundation funding goal: the worldwide exchange of knowledge and skills is vital.

Foundation Fellows work with patients, help train students in their specialisation and participate in research. The Sydney Eye Hospital benefits in numerous ways from these programs, including clinical research and national and international publication. Some of our Fellows are from developing nations and return to their country with enhanced skills from their year on the floor of this fully operational Eye Hospital.

### Our current Foundation Fellows are:



**DR ZOYA RABKIN-MAINER, Glaucoma Fellow**

Zoya trained in Israel. She has taught medical students, engaged in clinical research, and developed a special interest in glaucoma. She will take the knowledge & skills she gets here back to Israel and work as a glaucoma consultant. She's thrilled by this once in a lifetime opportunity to work and study here.



**DR LAI YONG TAI, Oculoplastic Fellow**

Oculoplastic surgeon Dr Lai Yong Tai trained in Malaysia and has held fellowships in London and Melbourne. She participates in public screening events and clinical teaching for medical students, junior residents and paramedics. Lai is keen to learn new surgical techniques from our

renowned oculoplastic surgeons over the next 12 months in Sydney, here with her family.



**DR NEIL AVERY, Graham Lovett Vitreoretinal Fellow**

Since 2009 Neil has travelled annually to St Ann's Bay in Jamaica to help provide ophthalmic care to those who do not have access to specialised care. There, he has developed a special interest in small incision cataract surgery. He is looking forward to the opportunity to work at Sydney Eye Hospital and to learn from world class vitreoretinal surgeons. Away from work Neil and his family are enjoying exploring Sydney and all it has to offer.



**DR DANIEL GARCERANT CONGOTE, Mabs Melville Corneal Fellow**

Daniel studied medicine in Colombia and ophthalmology in Madrid, where he is working on a PhD thesis on corneal topography. His goal is to improve his clinical and surgical skills in cornea pathology at our world renowned facility, and participate in the leading research the cornea team is performing. He hopes to pass on this knowledge when he returns to Colombia. Meantime he and his family are excited by the chance to visit Australia's cities and beautiful landscapes.



**DR ELISA CORNISH, Medical Retinal Fellow**

Elisa completed her ophthalmology training at Sydney Eye Hospital. This is her second fellowship: last year she held the Professorial Uveitis Fellowship. Elisa is thrilled to join our renowned Medical Retina Unit to refine her skills. She will also continue her involvement with the macular research team, working

to develop new treatments for the disease.



**DR NINO HIRNSCHALL, Corneal Fellow**

Nino started his ophthalmic research at medical school in Vienna, before becoming a research fellow in London and completing a PhD in medical physics in Vienna. He is keen to learn from the cornea team at Sydney Eye Hospital, to improve his clinical and surgical skills and spend a year in this beautiful city together with his wife Karin. After the fellowship he will return to Austria to use the knowledge he has gained as a corneal surgeon and researcher.



**DR ZAID MAMMO, Dr Eddie Donaldson Vitreoretinal Fellow**

Trained in Vancouver, Dr Zaid Mammo has completed a one-year vitreoretinal fellowship at Columbia University in New York. He is thrilled to have the opportunity to learn from and work alongside some of the world leaders in the field of vitreoretinal surgery. On completing his fellowship, he plans to return to Canada to work as a consultant in a tertiary care centre. Outside work, Zaid is enjoying life in Sydney and exploring Australia.



**DR SHAAN WIRYASAPUTRA, Professorial Uveitis & Medical Retinal Fellow**

Shaan trained in Singapore. Drawn to ophthalmology for its marriage of clinical medicine and surgery, she has chosen to pursue subspecialty interests in medical retina and uveitis. She is grateful for the opportunity to train at Sydney Eye and is looking forward to honing her clinical and surgical skills under the tutelage of our fine team.

## HOW TO DONATE...

 **DONOR HOTLINE** 02 9382 7408

 **ONLINE** [www.sehf.org.au/donate](http://www.sehf.org.au/donate)

 **MAIL** Post the completed form below to  
Sydney Eye Hospital Foundation

## A BEQUEST IS A GRACIOUS WAY TO GIVE HOPE INTO THE FUTURE

A bequest is your personal legacy to the future. You can make provisions in your will to ensure that money, property or valuables from your estate are donated to the cause of your choice.

Many folk find great relief in knowing they can demonstrate their commitment to a special cause in this way, especially when current circumstances restrict their level of contribution. Often it's former patients or their family, or someone with a special interest in eye health or blindness in the community, who include the Sydney Eye Hospital Foundation in their wills. **It's a way of saying "thank you, keep up the good work"**.

Your "delayed gift" can be an effective contribution to saving the sight of thousands each year, help train specialist eye surgeons, and buy crucial equipment.

It's best if you wish to make a bequest to be sure that the instructions in your will are clear, so do contact us first.

**The support is truly appreciated.** You would be helping the work of Sydney Eye Hospital continue to its high standard, encouraging our staff and volunteers to plan for the future, and offering hope to those who will receive the Hospital's care in the future. You can be confident that the care will be backed by the latest technology and research.

If you would like to investigate the possibility of donating to the Foundation through a bequest, just tick the Bequests box on the response slip.

You can also contact the Foundation's Chief Executive Officer, Mr Kevin Gardner, on (02) 9382 7408 or email [bequest@sehf.org.au](mailto:bequest@sehf.org.au).

### Sydney Eye Hospital Foundation Board of Management

All Members of the Board of Management are financial members of the Foundation. They also give their time freely in the interests of enhancing the ability of Sydney Eye Hospital to provide first class eye care to the public of Sydney and beyond.

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