

# EYECURE.

NEWS FROM THE QUEENSLAND EYE INSTITUTE FOUNDATION

ISSUE 09 | SEPTEMBER 2018

## WELCOME

Welcome to the latest edition of Eyecure, the newsletter of the Queensland Eye Institute Foundation.

We celebrated QEI's 53rd anniversary this year and in this issue we reflect on past and current research projects and outcomes. We would also like to introduce you to John Weiland, a military veteran, who has been a patient of the QEI Clinic's Neuro-Ophthalmologist, Dr Anthony Pane. John was diagnosed with a severe case of myasthenia – a muscle weakness disease causing his eyelids to droop which left him feeling vulnerable, unable to drive or watch TV.

We feature Professor Ravi Thomas, the QEI Clinic

Glaucoma Specialist and Clinical Epidemiologist's recent teaching tour in India, and how education plays a vital part in our purpose of saving sight.

We would also like to take the opportunity to thank you for the kind support for Michelle's story in our Tax Appeal, and to introduce you to the QEI Foundation's new Board member, John Lowes.

Thank you again for all your support and we wish you an enjoyable spring.

**Mark Radford, CEO**



## RESEARCH

**QEI recently celebrated its 53rd anniversary.**

Earlier this year, QEI celebrated its 53rd anniversary - our journey began in 1965 when the Australian Foundation for the Prevention of Blindness (Queensland Division), the forerunner of Prevent Blindness Foundation, was incorporated with a mission to establish an academic eye institute to undertake world-class research into diseases that threaten the eye. Fifty-three years on, the Queensland Eye Institute is Queensland's largest independent academic research institute devoted to eye health.



## QEI'S CRAZY RICH ASIANS MOVIE FUNDRAISER

QEI's COO, Kelly Langdon, Partnerships Manager, Rachell Hansen and CEO Mark Radford with Hollywood star Chris Pang.

## A SUMMARY OF RESEARCH OVER THE YEARS CONTINUED

1965-2005:

### Prevent Blindness Foundation

For much of its early history most of the research supported by the Prevent Blindness Foundation was conducted by Professor Lawrence Hirst.

- Under the guidance of Professor Lawrence Hirst, the first Eye Bank in Queensland was opened, which has distributed to date over 16,000 corneas to patients in Queensland.
- Epidemiological studies led to an understanding of the rates of eye diseases in Queensland, and the role of sunlight

exposure in the development of severe eye diseases (Nambour Skin and Eye Study).

- Development of treatments for the ocular surface squamous neoplasm – a common malignancy of the conjunctiva and cornea which can be thought of as the “skin cancer” of the eye.
- Professor Hirst developed a novel surgical treatment for pterygium, known as P.E.R.F.E.C.T. for Pterygium® procedure. Pterygium is the growth of pink, fleshy tissue on the conjunctiva, the clear tissue that lines the eyelids.

- First successful treatment of Paecilomyces endogenous keratitis (a fungal infection of the cornea).
- Professor Hirst and Professor Damien Harkin completed the first Australian clinical trial of cultivated corneal epithelial stem cells for repairing the ocular surface.

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1965 TO  
2005

## JOHN'S BATTLE

An army military veteran including the Cambodian and Balkans conflicts, John Weiland didn't expect to be fighting a losing battle on the home front with his eyesight. But the 68 year-old former senior army officer who lives in Capalaba felt he was doing just that when, after visits to two different ophthalmologists, he still had no idea why he was "seeing double".

Although each of his eyes still saw clearly on its own, with both eyes open John had started to see two copies of everything. John's eyelids also began to droop, to the point where he had to physically pull his eyelids open with his fingers to see. These issues were incredibly annoying, and disabling – he couldn't read, had difficulty working around the garden and had to stop driving. "I was unable to get on with my life, I felt like I was losing control and I was starting to feel really vulnerable," he says. "Not being able to drive was really affecting my independence and mental health too."

Visits to two eye specialists had not yielded any diagnosis. A third, Dr Neroli Porter, was suspicious that John could have a rare but serious muscle weakness disease called myasthenia. She referred John to Dr Anthony Pane, neuro-ophthalmologist at the Queensland Eye Institute.

"John was in a really bad way when we first met," said Dr Pane. "His eyelids were almost closed. And when I pulled his eyelids open, both of his eyes were almost completely paralysed – he could hardly move his eyes at all. He was getting double vision because his eyeballs were pointing in completely different directions."

Dr Pane performed some clinical tests for myasthenia. When he put an ice pack on John's drooping eyelids, they lifted immediately. And when he had John look up for two minutes, his lids fell further. "John certainly had severe myasthenia," said Dr Pane, "so we started treatment immediately."

Myasthenia is a muscle weakness disease caused by antibodies in the patient's blood accidentally attacking the joining point between the nerves and muscles. Sometimes – as in John's case – only the eye muscles are attacked, causing drooping eyelids and double vision; in other cases, other body muscles



can be affected. In many cases of myasthenia, double vision is the first symptom.

Dr Pane prescribed John tablets to suppress his over-active antibodies, and another medication to strengthen his weakened eye muscles. Even within a few days John's eyelids began to open, and his eyes began to move again. After four weeks, his eyes were wide open and his vision was back to normal.

Reflecting on recent events John says, "At 68 I thought, "this is it" with my eyesight and it was a permanent condition. I had become house bound, I couldn't read, garden, watch TV or use my computer. It was an awful experience and I'm very grateful that my condition was finally diagnosed correctly."

John is now also back to walking his dogs, seven year-old Honey and 10 year-old Benny, both fox terriers. He spends most of his free time involved in animal rights, veterans' welfare and doing research in military history. The battle is over, at least for now.

JOHN WEILAND



## A SUMMARY OF RESEARCH OVER THE YEARS CONTINUED

**The Queensland Eye Institute was opened in 2005.**

### **2006-2018:**

- Successful use of silk fibroin membranes as substrates for growing corneal epithelial cells and retinal epithelial cells; reported for the first time in the scientific literature. Investigators: Professors Traian Chirila and Damien Harkin.
- Successful application of silk fibroin membranes as substrates for corneal endothelial cells; first publication in scientific literature. Investigators: Dr Peter Madden, Professors Traian Chirila and Damien Harkin.
- Investigative work on the growth of corneal endothelial cells from donor eye tissue in the laboratory. These cells form the interior lining of the cornea and are essential for corneal transparency. Investigators: Professor Damien Harkin, Dr Jenny Young and collaborators at the University of Melbourne.
- Developmental work on the isolation of silk sericin, the second major component of silk. It was discovered and reported for the first time that sericin promotes growth of ocular cells better than fibroin. Investigators: Dr Shuko Suzuki and Professor Traian Chirila.
- Developmental work on novel surgical adhesives/sealants based on the chemistry of silk proteins. Investigators: Dr Shuko Suzuki, Professor Traian Chirila and collaborators at the University of Queensland and University of Western Australia.
- Development of an improved animal model of ocular surface disease in order to study the safety and efficacy of potential new therapies. Investigator: Professor Damien Harkin.
- A new concept for an artificial corneal endothelium. Investigators: Professors Traian Chirila and Lawrence Hirst, and Dr Peter Madden.
- Development and successful use of a technique to measure oxidative stress in a glaucoma model, and further development of a fluorescent probe to allow quantification of antioxidant agents. Investigator: Assoc. Professor Nigel Barnett.
- Contributions to the understanding of the interaction of cells and surface of polymers, a fundamental issue in tissue engineering. Investigators: Professor Traian Chirila and collaborators at the University of Queensland.
- Development of a new treatment for the floppy eye syndrome based on photocrosslinking of collagen. Investigators: Dr Tai Smith, Dr Shuko Suzuki and Professor Traian Chirila.
- Development of hydrogel post-surgical dressing pads based on polymer interpenetrating networks. Investigators: Dr Tai Smith, Professor Traian Chirila, Dr Shuko Suzuki, and collaborators at the Queensland University of Technology.

2006 TO 2018

## TEACHING TOUR IN INDIA

Education plays a vital part in our purpose of saving sight, and QEI brings together professionals with a common goal to gain new knowledge in vision sciences and to work towards reducing vision loss. QEI's Ophthalmologists run events for Optometrists and Ophthalmologists, which are integral to medical education with over 700 attendees in the last year. QEI, makes education available in regional and remote areas, so Ophthalmologists, Registrars and Doctors from all over Australia can dial in live or access the recordings to our Grand Rounds.

As part of his commitment to education, QEI's Glaucoma Specialist and Clinical Epidemiologist, Professor Ravi Thomas visits India on a yearly basis. He lectures on glaucoma and provides hands-on teaching and the transferring of required clinical skills, and he also teaches the principles and practice of evidence based ophthalmology. The Vision Glaucoma program was started while Professor Thomas worked in India, and with ongoing support from Allergan and Zeiss in India has continued since he moved to QEI. The program focusses on smaller hospitals and cities,

and aims to provide an upskilling for Ophthalmologists working there. "Teaching in India is a way for me to give back to my country where I received my education." says Professor Thomas. This year's teaching program took place at hospitals in New Delhi, Lucknow, Patna, Kochi, Thrissur and ended with a conference in Bangalore. Here are a few photos of his recent teaching tour!

# INDIA 2018



## JOHN LOWES JOINS THE QEI BOARD

We are delighted to welcome John Lowes, who has a long history with QEI, as a Director of the QEI Foundation Board. John is a Special Counsel with Shand Taylor Lawyers which he joined as a Partner in 2007. Previously he was the Principal of Lowes & Co, a predominantly property focused law firm which he ran for 11 years. Prior to this he was a Partner for eight years with an international law firm.

With over 37 years as a practising solicitor, John concentrated on all aspects of property, small business law and private client advisory. He has also acted for a broad range of health professionals and specialist medical groups. John gained Specialist Accreditation in Property Law from the Queensland Law Society in 2002 and served for ten years as a member of their Specialist Accreditation Board. John's extensive experience will be immense value to QEI in achieving our purpose to save sight.

## OUR PURPOSE

This Purpose Wheel shows what we do at the QEI Foundation, and why we do it with our committed team of doctors, clinical assistants, nurses, scientists, researchers and support staff.



## QEI'S CLINICAL TRIAL ON CHANNEL 9

QEI's Clinical Trial on treating Amblyopia – also known as “Lazy Eye” – made it onto Channel 9's News recently. The aim of the trial is to explore how a new device developed by Dr Stuart Hazell and his colleagues at Amblyoptica can help its treatment.

The QEI Clinic runs clinical trials to test new treatments, devices and interventions to manage various diseases or medical conditions. These research studies explore whether a medical strategy, treatment or device is safe and effective for humans.

## MOVIE FUNDRAISER CRAZY RICH ASIANS

What a fantastic night QEI had in August hosting a Movie Fundraiser to raise vital funds to save sight. Over 300 people attended the exclusive pre-screening of the US box office hit, Crazy Rich Asians with co-star, Chris Pang, who plays Colin Khoo in the movie joining us. Thanks to our supporters, we raised over \$11,500! We would like to thank Westfield Garden City and Event Cinemas, our major prize

sponsors: Singapore Airlines, Singapore Tourism Board and the Fullerton Hotel Singapore, pre-film entertainment sponsor, Secure Capital and other supporters, South Bank Day Hospital and Rydges South Bank. And last but not least, thanks to Kevin Kwan, Crazy Rich Asians author who generously provided his support in facilitating the pre-screening.



Photo credits: Jared Vethaak Photography



## SAUSAGE SIZZLE FUN

Our Bunnings BBQ in August was a great success! Thank you to all our volunteers who helped on the day, to one of our kind donors who covered all costs associated with the BBQ enabling the QEI Foundation to benefit a full 100% and to Alderley Hire for their support. We would like to thank Bunnings for the opportunity to host a Sausage Sizzle Fundraiser BBQ – the event is so popular within the local communities that the waiting list can be as long as six months! 1100 sausages, 45 loaves of bread and 50 kg onions helped us raise over \$3,000!

# 2018 TAX APPEAL – THANK YOU!

In our Tax Appeal we highlighted the story of Michelle, who has been a patient of the QEI Clinic for almost 30 years. Michelle was only six-weeks old when she lost her sight in one eye after being diagnosed with a cataract and saving the sight in her other eye had become the priority. At the age of nine she was also diagnosed with glaucoma and she has been seeing the QEI Clinic's Doctors for treatments and check-ups since day one.

We would like to thank Michelle and her parents, Christine and Bob for sharing their story with our supporters, enabling QEI's researchers to continue

their work and help people like Michelle save their sight. "I am grateful for QEI and their work in saving my sight and enabling me to live a full life" – says Michelle.

Thank you again for your kind donations!



## Help us save money by donating online. Visit [qei.org.au](http://qei.org.au) or call 07 3239 50 50.

Your donation today will help the QEI Foundation save sight through its research, education and clinical care.

Yes, I want to help the QEI Foundation.

Enclosed is my donation of:  \$15  \$25  \$50  Own choice (please specify amount): .....

Please find enclosed a:  cheque  money order (made payable to Queensland Eye Institute Foundation).

Please debit my card:  Visa  Mastercard  Amex

Card Number:                      Expiry:   /

Name on card:

Signature:

Please send me information on leaving a gift in my will

I intend on leaving a gift to the QEI Foundation in my will

Please send me information on joining 'SightFund', QEI's monthly giving program

Please send me information on joining QEI's Workplace Giving Program for immediate pre-tax donations via payroll

**Thank you! Your gift of \$2 or more is tax deductible. Please complete this form and return it in the reply paid envelope. Please help us keep our records up to date by making any changes below:**

Phone: .....  Mobile: .....  Email: .....

I would prefer to receive all future updates and campaigns from the QEI Foundation via email

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