



Building the vision

A new era for the Lions Eye Institute begins

The Lions Eye Institute (LEI) has entered a new era with the opening of state-of-the-art research laboratories at the Harry Perkins Institute of Medical Research building on the QEII Medical Centre campus in Nedlands.

The 31st Governor of Western Australia, Malcolm McCusker AC CVO QC officially opened the new research floor in May.

The laboratory fit out was generously supported by the community. Lotterywest and Wesfarmers each provided \$1 million, while the McCusker Charitable Foundation, Stan and Jean Perron, Apache, the Lions Clubs of Western Australia and many donors like you provided the funds needed for the state-of-the-art laboratory.

The \$122 million 10-storey building houses a number of the State's leading medical research bodies, including the Harry Perkins Institute of Medical Research, Heart Research Institute, Lung Institute, the Keogh Institute and others.

LEI Managing Director Professor David Mackey told more than 150 guests at the opening that the co-location of the State's leading medical research institutes would allow for greater collaboration, sharing of equipment and resources and help retain Western Australia's best and brightest scientists and clinicians.

"It creates a unique opportunity to strengthen the communication and relationships between our research areas, drive new collaborations and facilitate fresh research directions for the Institute," he said.



CLOCKWISE FROM TOP – PROF MACKEY AND GOV MCCUSKER UNVEIL THE COMMEMORATIVE PLAQUE; GUESTS TOUR THE FACILITIES; PATRONS STAN AND JEAN PERRON ENJOY THE INAUGURATION CEREMONY.

LEI patients are saving sight too

The LEI is highlighting how the support of LEI patients translates to research outcomes in a new ad campaign running in local newspapers throughout September and October.

The Lions Eye Institute (LEI) was established just over 30 years ago and in its short history has developed a reputation as one of Australia's leading eye research centres.

The brainchild of renowned ophthalmologist Professor Ian Constable, the LEI was structured to ensure its scientific research into the major causes of blindness received a constant income stream from the provision of a wide range of clinical services.

The model was unique for its day and has helped the LEI achieve major scientific breakthroughs, including human gene

therapy, technology to target age-related macular degeneration, new microsurgical techniques to control glaucoma and ultra-microsurgical robotics.

The LEI's clinical services cover the full range of eye care needs, including cataract surgery, glaucoma diagnosis and treatment, immunology, vitreo-retinal surgery, genetics, oculoplastic surgery and laser surgery, while Lions Optics provides a full optometric service including eye testing and referrals to eye specialists. Lions Outback Vision, which provides eye care to rural and remote areas of WA, can also help people travelling north.

Managing Director Professor David Mackey said people who chose the LEI's clinical services were also playing an important part in supporting the LEI's medical research.



YOU'RE
SAVING SIGHT
TOO

The Lions Eye Institute is on a quest to save sight. We offer a full range of eye health care services through our clinic, with profits directly supporting our world-leading medical researchers.

By choosing the Lions Eye Institute, you are helping us in our drive to eradicate blindness.

Visit our website:
lei.org.au



"Without their support, we would not be able to fulfil our vision to prevent and cure blindness and eye disease. So to all our patients, thank you."

Lions Eye Institute

OPEN DAY
Saturday 4 October 2014
11.30am - 4.00pm | 2 Verdun Street, Nedlands

Your opportunity to see first hand the work of our doctors, scientific researchers and clinic staff.

"Alone we can do so little; together we can do so much."
- Helen Keller

For further information call 9381 0777 or visit www.lei.org.au

Your invitation to see the LEI in action

The Lions Eye Institute is extending an invitation to attend an Open Day on Saturday, October 4.

Self-guided tours on the day provide a fascinating behind-the-scenes look at the work of our doctors, scientific researchers and clinical staff. Staff will be available to answer your questions and discuss the work of LEI.

LEI will be open from 11.30am to 4pm. For more information call 9381 0777 or visit www.lei.org.au



CAPTION – L-R OUTGOING CHAIRMAN MR DAVID EISZELE, MANAGING DIRECTOR PROF DAVID MACKEY, NEW CHAIRMAN MR STEPHEN PEARCE

New Chairman has keen interest in Indigenous eye health

The Lions Eye Institute has a new Board Chairman, Fortescue Metals Group Chief Financial Officer Stephen Pearce.

Mr Pearce is only the third Chairman in the LEI's 31-year history and replaces former Western Power Chief Executive David Eiszele in the role. He joined the Board as a Director in April 2012 and has a special interest in Indigenous eye health.

"The work being done by Lions Outback Vision under Associate Professor Angus Turner is

essential if we are to provide high-quality, equitable eye health services to patients living in rural and remote areas of the State," he said.

"Fortescue works closely with indigenous communities in the Pilbara and I'm proud to be involved with another organisation that is changing the lives of Aboriginal people."

LEI Managing Director Professor David Mackey said Mr Pearce would bring strong leadership to the Board during a time of growth and change.



PROFESSORS RAKOCZY AND CONSTABLE, WORKING TOGETHER FOR MORE THAN 20 YEARS

Gene therapy holds promise of new treatment for wet AMD

A new gene therapy being developed at the Lions Eye Institute (LEI) for a common cause of blindness could spell the end of invasive monthly injections into the eye.

The treatment focuses on wet Aged-Related Macular Degeneration (AMD), the most common cause of blindness in the developed world. Wet AMD leads to rapid vision loss and costs up to \$6 billion worldwide each year.

Principal clinical investigator Professor Ian Constable and the LEI clinical team have recruited 38 patients to the trial. Professor Constable said the gene therapy was proving well tolerated and promising in human trials currently under way.

“To date, the safety profile is excellent – we have found no serious adverse effects in the eye – and so far we have promising data on how it works,” Professor Constable said.

Wet AMD occurs when there is an overproduction of the protein vascular endothelial growth factor (VEGF) in the retina. VEGF helps support oxygen supply to tissue when circulation is inadequate. When too much VEGF is produced it can cause disease, including blood vessel disease in the eye.

Current treatment for wet AMD is intensive and intrusive – involving monthly injections of anti-VEGF drugs that limit production of the protein.

“The gene therapy involves a single injection of a modified and harmless version of a virus containing a specific gene that stimulates supply of a protein which then blocks over-production of VEGF,” explained Professor Rakoczy, principal scientific investigator.

The science behind the treatment began more than 20 years ago when Prof Elizabeth Rakoczy came to the LEI as head of the Molecular Ophthalmology team. Prof Rakoczy and her team completed extensive laboratory and preclinical research, progressing to the current trial.

There are very few examples in Australia of a research group taking an idea from the laboratory bench to commercialisation. “This is research of international significance and a huge academic achievement for The University of Western Australia, the Centre for Ophthalmology and Visual Science and the LEI” Professor Constable said.

Eye Injury Study

Every year an estimated quarter of a million children’s eye injuries occur worldwide.

The Lion’s Eye Institute is currently working on a number of research projects to better understand why children’s eye injuries occur and to determine appropriate prevention strategies

Animal related injuries from domestic and wild animals are known to occur, but little data exists about the nature or incidence of these injuries. Dogs, cats, wild birds and rodents are commonly at fault. Local research has suggested that magpie swooping eye injuries are common during nesting season around September each year.

The Genetics and Epidemiology group are undertaking a study to explore the nature and incidence of animal inflicted eye injuries in children in Western Australia. Ophthalmologists, optometrists and general practitioners in Western Australia have been asked to participate by completing an online questionnaire. Information about when and where these injuries occur and who is commonly affected will be gathered.

Other research being undertaken includes:

- WA Eye Injury Study, in collaboration with Princess Margaret Children’s Hospital, to analyse eye injuries in WA’s children
- WA Eye Protection Study, looking at the effects of sun exposure on eye health

We hope to use our study findings as the basis for understanding the health risk of animal inflicted eye injuries and for health promotion initiatives.

For further information Please contact us at: animaleyebites@lei.org.au or telephone the team on 08 9381 0707

Our research into children’s eye injuries is sponsored by the generous bequest of the Joyce Henderson Trust.





PHOTOGRAPHS BY ALAN MCDONALD
COURTESY OF THE FRED HOLLOWES
FOUNDATION.



Teleophthalmology

The Lions Outback Vision (LOV) team, led by Dr Angus Turner, has been able to remove the barriers of geography and distance and deliver timely ophthalmic services to West Australians.

Using available internet connections, teleophthalmology allows ophthalmic consultations regardless of the patient's or ophthalmologist's location.

In between outreach consultancy visits Dr Turner started fielding phone calls from regional doctors and optometrists seeking advice regarding patient eye care. 'It was a natural progression to teleophthalmology,' said Dr Turner. 'It has helped formalise something that I was already doing over the phone.'

Many optometry practices already have state-of-the-art diagnostic imaging equipment. Coupling this with videoconferencing software such as Skype on everyday smartphones, tablets or computers has made teleophthalmology a reality.

Dr Turner has promoted this supplementary form of eye service to primary care practitioners in the regions he and his LOV team visit, including the Goldfields, Pilbara, Southwest and Kimberley regions of WA. He provides up to 30 such teleophthalmology appointments per week.

The potential for teleophthalmology was further demonstrated recently when a flight was chartered to bring surgical cases from the central Pilbara to Port Hedland Hospital. Potential transfer patients were identified by visiting optometrist, Stephen Copeland. Before they were uplifted to Port Hedland they met Dr Turner (who was in Perth) via a videoconference call.

'Teleophthalmology made the whole process more efficient,' commented Stephen. 'It helped identify a case that could be medically managed in the community rather than requiring transfer and actually eased the trepidation of another two patients, who only after the video-consult, consented to take the flight to Port Hedland for surgery with Dr Turner.'



GUESTS SHARE LEI'S VISION

Visionaries Luncheon

This year's annual Visionaries Luncheon was held on 16 June at UWA's University Club. More than 50 bequestors and supporters enjoyed a delicious lunch while they heard from Prof David Mackey and Assoc Prof Angus Turner. Prof Mackey shared an overview on the accomplishments of the LEI. Assoc Prof Angus Turner, Director of Lions Outback Vision (LOV), spoke of the practical and evidence based approach LOV uses to assist patients living in rural and remote areas to access equitable eye health services.

For further information on leaving the LEI a gift in your Will please call Kari Legge direct on 08 9381 0823.



Lions Eye Institute

Help Save Sight

Our vision is to prevent and cure blindness and eye disease.

Donations from the community help us in our drive to eradicate blindness.

Please contact us to unsubscribe to LEI's newsletters.

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