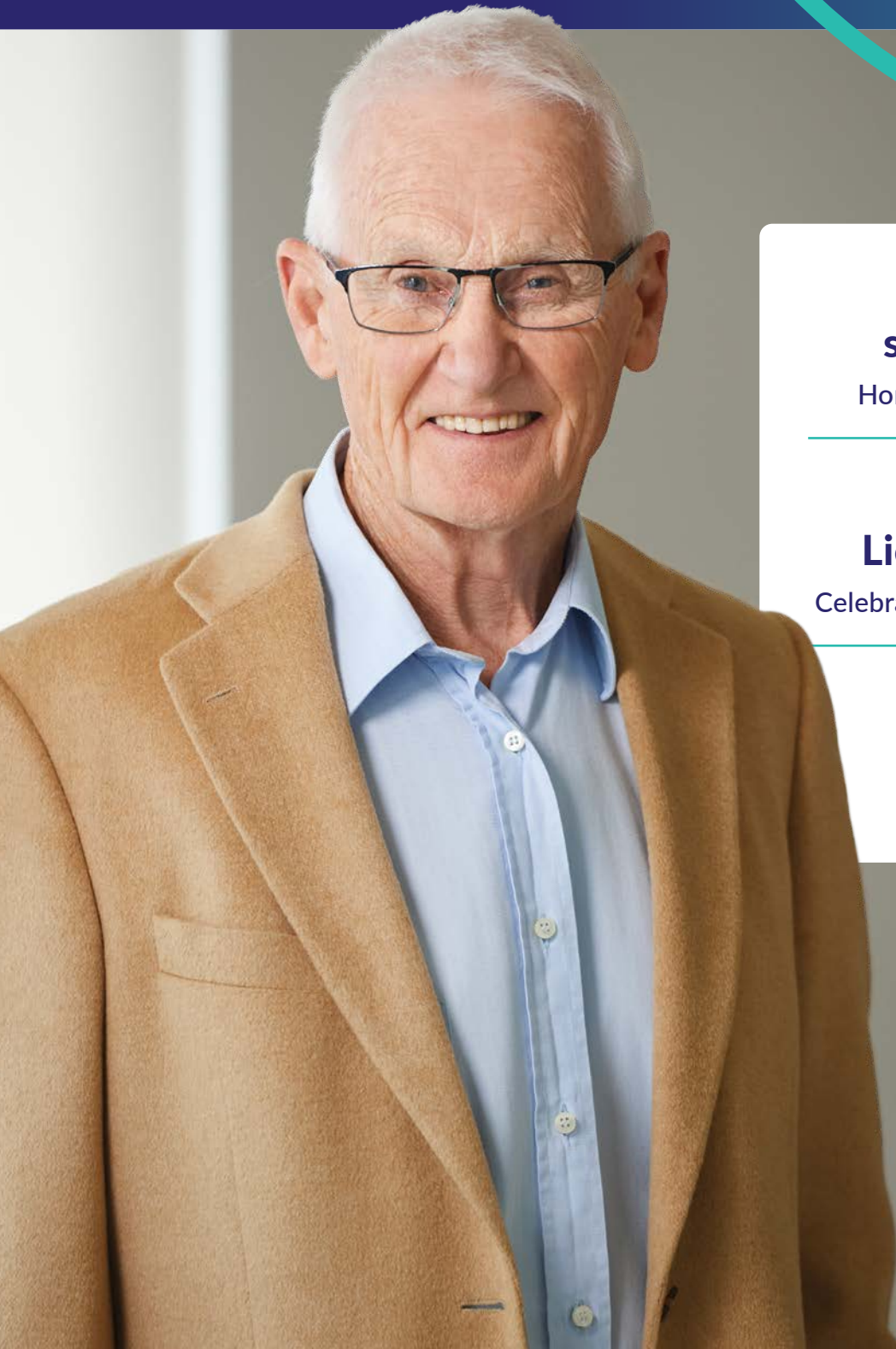


vision News



A legacy of scientific excellence

Honouring our visionary founder

\$5M prize for Lions Outback Vision

Celebrating innovation in healthcare

Lions Eye Bank

Advancing corneal transplants and surgery

Professor Ian Constable AO
Celebrating 25 years of the
Ian Constable Lecture



From the Managing Director

Welcome to the Autumn 2025 edition of Vision News.

We have much to celebrate at the Lions Eye Institute, having achieved several significant milestones. It's been a busy start to the year, and your continued support encourages us in our mission to provide better vision for all.

In February, I had the privilege of joining the Lions Outback Vision Van launch as it embarked on its journey for the year, servicing the Warren-Blackwood region for the first time. We also celebrated 25 years of **The Ian Constable Lecture**,



featuring guest speaker Professor Ian Meredith AM, who spoke on 'Global health challenges: How and why innovative MedTech solutions will make a difference'.

This year also marks a special milestone – 50 years since The University of Western Australia appointed Professor Ian Constable as its inaugural Professor of Ophthalmology. We are deeply grateful for Professor Constable's contributions to our state and the field of ophthalmology.

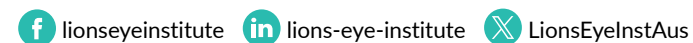
In this edition of Vision News, discover how Lions Outback Vision triumphed in The Pilbara Challenge, winning a \$5 million prize for its groundbreaking approach to delivering eye health care in regional areas – and learn about the exciting next steps on this journey. We also explore the incredible impact of the Lions Eye Bank and how the powerful gift of eye tissue donation restores vision and transforms lives. Plus, read about the innovative projects launching in 2025 to prevent childhood blindness, made possible by the support of the Channel 7 Telethon Trust, and a cutting-edge invention originally developed for astronauts that's set to help children and adults avoid invasive lumbar punctures.

I sincerely appreciate your ongoing support of the Lions Eye Institute. It is only through your generosity that we are able to continue providing world-class clinical care, both in metropolitan areas and remote regions of Western Australia. Your support also empowers our researchers to discover treatments, drugs, and therapies to manage and prevent eye diseases, benefiting Western Australians now and into the future.

Best wishes

Dr Glen Power
Managing Director, Lions Eye Institute

Follow us on social media



Lions Outback Vision Van launches in Manjimup: Bringing vital eye care to regional communities



In 2025, the Lions Outback Vision Van made its inaugural visit to Manjimup and Denmark, delivering critical eye care services to the local community. This state-of-the-art mobile clinic is part of the Lions Eye Institute's commitment to providing equitable access to specialist ophthalmology care for people living in regional and remote Western Australia.

Each year the Vision Van travels 25,000 kilometres and provides nearly 3,000 patient visits.



It is equipped with cutting-edge diagnostic and treatment technology, offers screenings, treatments, and consultations for various eye conditions, including diabetic retinopathy, cataracts, and glaucoma. This mobile service is a lifeline for residents who would otherwise need to travel long distances to receive the care they need.

Professor Angus Turner, McCusker Director of Lions Outback Vision, emphasised the significance of the launch, saying "We're thrilled to bring the Vision Van to Manjimup and Denmark for the first time. It's part of our ongoing mission to reduce preventable blindness and vision impairment by ensuring that everyone, no matter where they live, has access to specialist eye care. This important milestone wouldn't have been possible without the generous support of The Fred Hollows Foundation and Wen Giving. Their contribution has been instrumental in enabling us to expand the Vision Van's reach beyond where we started in 2016 with the support of our founding partners, Lotterywest and WA Country Health Services. It is making a tangible difference in the lives of those

in remote and regional communities. We are deeply grateful to all our partners for their ongoing support."

The Vision Van spent its first day in Manjimup, offering appointments for patients referred by local healthcare providers. This initiative is a crucial step in improving health outcomes and reducing the burden of vision loss in rural Western Australia.

As the Vision Van continues its journey across the state, it will not only bring eye care to Manjimup but also foster stronger relationships with local health professionals, ensuring sustainable, long-term improvements in regional eye health.

Residents are encouraged to contact their local GP or optometrist for more information about the Vision Van's schedule and how to access its services.

The Vision Van is made possible thanks to the generous support of our donors, Lotterywest, The Fred Hollows Foundation, Wen Giving and the Federal and State Governments.



Dr Glen Power aboard the Vision Van with Aboriginal Elder Marilyn Morgan and John Sebire at the launch event

Celebrating the 25th annual Ian Constable Lecture in 2025



The Ian Constable Lecture, a premier scientific event in Perth, Western Australia, marks its 25th anniversary in 2025.

Since its inception in 2000, the lecture series has been dedicated to advancing scientific knowledge and promoting collaboration across disciplines. The event has not only become a highlight in the Lions Eye Institute's annual calendar but also a tribute to the life and work of Professor Ian Constable AO, an esteemed Australian ophthalmologist and the visionary founder of the Lions Eye Institute.

The Ian Constable Lecture brings together world-leading scientists, researchers, and academics to share their groundbreaking work with the local community. Over the past 25 years, the lecture series has featured some of the brightest minds in science, including three Nobel Laureates, whose insights have enriched the field of medicine, vision science, and beyond.

A tribute to Professor Ian Constable AO

Professor Ian Constable's impact on both the field of ophthalmology and the broader scientific community is immeasurable. As the founder of the Lions Eye Institute, he dedicated his career to improving eye health and advancing medical research. His pioneering work has had lasting effects on the diagnosis and treatment of eye diseases. It is fitting that the lecture series established in his honour continues to foster scientific inquiry and inspire the next generation of researchers.

At the 2015 Ian Constable Lecture, Nobel Laureate Professor Elizabeth H. Blackburn talked about telomeres. She is pictured here with Professor David Mackey AO, Nobel Laureate Professor Barry Marshall and Professor Ian Constable AO (L-R)



A journey through 25 years of scientific discovery

Each year, the Ian Constable Lecture has featured a distinguished guest lecturer, offering attendees a unique opportunity to learn about the latest breakthroughs in science and medicine. From tissue engineering to genomics, from the astounding nature of space and time to the evolution of ideas in medicine, the range of topics covered has been as diverse as the lecturers themselves.

Notable past lecturers have included:

2000: Professor Joseph Vacanti (Harvard Medical School) spoke at the inaugural lecture on **Tissue engineering: 21st century tissue repair**, laying the groundwork for the rapidly developing field of regenerative medicine.

2006: Professor Barry Marshall, Nobel Laureate in Physiology or Medicine, shared his revolutionary insights on the 'Ulcer Bug,' helping to transform our understanding of the role bacteria play in gastric ulcers.

2015: Professor Elizabeth Blackburn, Nobel Laureate in Physiology or Medicine, discussed the implications of telomere maintenance in ageing-related diseases, furthering our understanding of cellular ageing and longevity.

2021: Professor Danail Obreschkow (UWA), a theoretical astrophysicist, captivated audiences with his exploration of **The astounding nature of space and time**, bringing the wonders of the universe closer to home.

A legacy of collaboration with The University of Western Australia (UWA)

The partnership between the Ian Constable Lecture and UWA has been central to the success of the event. Hosted annually at UWA's prestigious venues, the lecture series has served as a platform for fostering scientific dialogue and interdisciplinary collaboration. The UWA community has played a vital role in ensuring that the lecture continues to attract global scientific talent, contributing to Perth's growing reputation as a hub for innovation and research.



Professor Danail Obreschkow

Innovating for global health

MedTech innovation was the focus of the Ian Constable Lecture in February 2025, with guest lecturer **Professor Ian Meredith AM** (pictured), a renowned cardiologist and researcher.



With a background in innovative medical technologies, Professor Meredith spoke on **Global health challenges: How and why innovative MedTech solutions will make a difference**.

His presentation focused on the critical role of medical technology in addressing the evolving health challenges faced by communities worldwide, underscoring the importance of research and development in improving health outcomes and how Australia can lead the global effort.

Honouring a legacy of scientific excellence

As we celebrate the 25th anniversary of the Ian Constable Lecture, we reflect on its enduring legacy of scientific excellence, education, and collaboration. This milestone is not just a celebration of the past, but a reminder of the continued importance of scientific inquiry in shaping a better future for all.

The lecture series has continually provided a forum for stimulating ideas and innovation, furthering the mission of the Lions Eye Institute and contributing knowledge to the broader scientific community. Looking forward, the Ian Constable Lecture will undoubtedly continue to inspire generations of researchers, healthcare professionals, and the public to push the boundaries of what is possible in science and medicine.



Celebrating innovation in healthcare: Lions Outback Vision awarded \$5 million prize in The Challenge

We're thrilled to share that Lions Outback Vision has been awarded the \$5 million prize in the Western Australian Government's Pilbara healthcare initiative, 'The Challenge'.

This remarkable achievement not only highlights the power of innovation and collaboration but also promises to transform eye care for communities in the Pilbara region.



Dr Vaibhav Shah operating a novel ultra-lightweight head-mounted laser device called the Norlase Lion

A groundbreaking solution

After a year of hard work, brainstorming, and collaboration, Lions Outback Vision emerged as the standout innovator from a competitive pool of 93 applicants and 10 finalists. Our revolutionary solution is Australia's first mobile retinal camera with fully integrated artificial intelligence. This cutting-edge technology screens for eye diseases like diabetic retinopathy with the sight-threatening disease diagnosed on-the-spot, providing crucial early detection and access to treatment in remote areas. Lions Outback Vision founder and ophthalmologist, Professor Angus Turner said the following.

“We are honoured to be awarded this prize by the Western Australian government and its key funding partners, Rio Tinto and BHP. It's an amazing acknowledgement of all the hard work of our team and the collaborations we have on the ground in the Pilbara.”

Thank you to our incredible partners

We extend our deepest thanks to all our incredible partners who have helped make possible this giant leap from artificial intelligence (AI) into real-world practice, including, WA Country Health Service (WACHS), Royal Flying Doctor Service WA, Diabetes WA, Puntukurnu Aboriginal Medical Service (PAMS), Karratha Central Healthcare, Nintirri and Panaceum.

Thanks also to our funding partners, the Future Health Research Innovation Fund, The McCusker Charitable Foundation, Channel 7 Telethon Trust, Wen Giving and The Fred Hollows Foundation for their unwavering support.

We're proud to collaborate with our research partners Aravind, The University of Western Australia, University College London (UCL), Google and The University of Oxford, alongside our technology partners Optomed and Topcon. Together we are driving change!

Transforming lives in the Pilbara

The deployment of this mobile retinal camera across the Pilbara has already begun to make a significant impact. By improving access to eye screening, we're ensuring that residents don't have to travel long distances for diagnosis and treatment. This innovation is a game-changer for healthcare delivery in the region.



LOV team accepting the award

Words of celebration

Medical Research Minister Stephen Dawson remarked on the importance of this achievement, stating, "Lions Outback Vision's solution stood out for its immediate impact on the local community. I am excited to see how it will further transform healthcare delivery across Western Australia and beyond."

Simon Trott, Rio Tinto Iron Ore Chief Executive, echoed this sentiment, saying, "Our partnerships with health initiatives like The Challenge help ensure great ideas are developed to support better health outcomes for Western Australians."

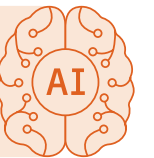
“Seeing these remarkable innovations emerge has been nothing short of inspiring. Well done to all finalists and a big congratulations to our winner!” added Tim Day, BHP Asset President.

A brighter future for eye health in Australia

As we celebrate this milestone, our commitment to advancing healthcare through innovation remains steadfast. We are already developing plans to deploy AI-powered eye screening, addressing the gap in coverage – especially in regional areas – and transforming primary care across Australia.

Regional primary care, particularly GPs and Aboriginal health services will be the initial focus, to maximise screening reach and coverage.

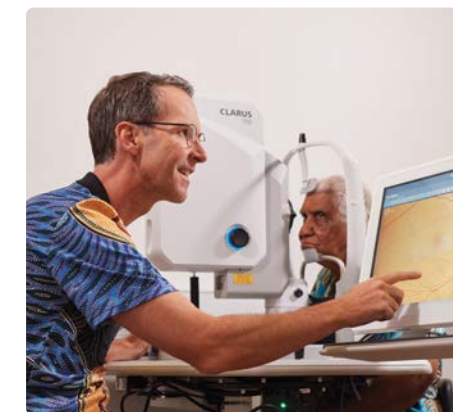
Western Australia will be positioned as a global leader in the implementation of AI-assisted technology for screening.



The future of eye care in Australia is brighter than ever, and we look forward to witnessing the incredible impact this cutting-edge technology will bring.



Patient Melvin receives a telehealth consultation in the Lions Outback Vision Sprinter Van

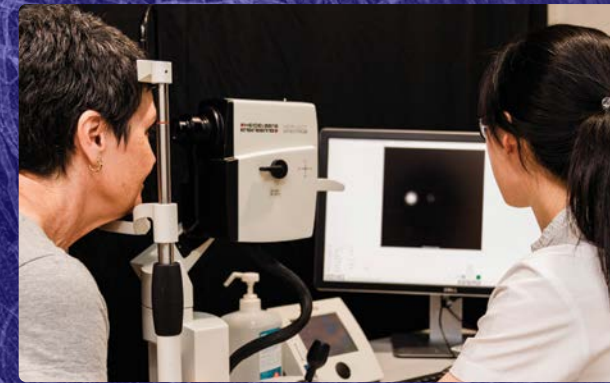


Professor Angus Turner examining a patient's eyes



Lions Outback Vision staff examining a patient using optical coherence tomography with AI integration

Kate's journey sparks a generous gift for glaucoma research



Kate's story is a testament to the life changing impact of eye research – one that inspired Eric to leave a gift in his Will to support future breakthroughs in glaucoma treatment.

There are stories that inspire action, and for Eric, Kate's story was it.



Kate's journey

Kate was born with cataracts, and when she was only nine weeks old, she had them surgically removed. Unfortunately, after the surgery, she began to develop glaucoma, caused by fluid not draining properly from her eyes.

For Kate's ophthalmologist, the Lions Eye Institute's Professor Bill Morgan, the challenge was to manage the glaucoma until her eye developed sufficiently for replacement lenses to be implanted. With the resulting pressure building in her eyes, Kate was facing serious damage to her optic nerve and the prospect of vision loss, even blindness. Through a regimen of medications and eye drops – sometimes 12 times a day – Professor Morgan successfully delayed Kate's surgery for four years.

But when Kate was eight, the pressure in her eyes began to build again. In September 2015, Professor Morgan implanted a drainage system called a Molteno Tube into Kate's left eye, with great success.

Now 18, Kate recently got her driver's licence and is studying for a Bachelor of Science majoring in Biochemistry and Environmental Science at Curtin University. She wears contact lenses and uses eye drops once daily.

“I see Professor Morgan every three months,” she says. “At the moment, the pressure in my eyes is stable.”

With continued management and improvements in glaucoma research and treatments, Professor Morgan hopes that by the time Kate needs replacement lenses, lifelong lenses will be available, eliminating the need for regular replacements.

Eric's inspiration and legacy

Kate's story had a double resonance for Eric. In 2016, he read about Kate's courage and the sight saving treatment she received from the Lions Eye Institute. Having undergone cataract surgery himself at the Institute, Eric knew firsthand the transformative impact of such procedures.

At that moment, Eric became one of the Lions Eye Institute's cherished Visionaries – a special group of people who share the Institute's vision and understand the transformational impact a gift in your Will to the Lions Eye Institute can make on future generations.

“The precision surgery needed in eye care, and the vast improvements it brings to someone's quality of life, made me realise that the Lions Eye Institute is an organisation I wanted to support long-term,” Eric said. “I believe bequests are essential in supporting research because of the importance of future progress and developments.”

Eric has since passed away, leaving the Institute a generous bequest of \$20,000 specifically for glaucoma research and treatment.



Kate (aged 8) after glaucoma surgery

Kate's response when she learned about her role in prompting Eric's gift? “That made me feel good.”

The Lions Eye Institute is incredibly grateful to Eric for his generous support of our sight saving research. His legacy will help advance glaucoma treatment and make a lasting impact on those facing vision loss.



Eric and Kate both benefitted from the Lions Eye Institute's cutting-edge treatment and research.

Eric expressed his gratitude by leaving a gift in his Will for glaucoma research. We are immensely grateful to Visionaries like Eric whose generosity make exciting breakthroughs in eye health research possible.

If you would like to become one of our cherished Visionaries by leaving a gift in your Will and support future sight saving research, please call **Darren** on (08) **6382 0551**.



New Telethon grants vital to advancing children's eye health



The Lions Eye Institute is delighted to announce we are a beneficiary of Channel 7 Telethon Trust, with **four critical programs to receive significant funding in 2025.**

Telethon grants will enable researchers at the Lions Eye Institute to create eye growth charts for children, identify children at high risk of myopia, revolutionise treatments for vision loss related to diabetes and implement crucial screening programs.



Congratulations to the following Lions Eye Institute researchers, whose transformative work will ensure the children of Western Australia receive world-leading treatment and care for blinding childhood conditions.

Delivering a lasting impact

Implementing these four groundbreaking projects will make a lasting impact on eye health in Western Australia. As the Institute continues to innovate and collaborate with local and international partners, it remains dedicated to improving patient outcomes and ensuring that no child is left behind when it comes to eye care.

Telethon's support has been instrumental in turning these visionary projects into reality, and we look forward to seeing the positive changes these initiatives will bring to Western Australians in the years to come.



Professor David Mackey AO

Myopia prevention – Creating eye growth charts for children

Combatting the growing global problem of myopia, or near-sightedness is a significant health challenge. With half the world's population predicted to be affected by 2050, there is a need for further research to prevent blinding conditions. **Myopia often develops in childhood and, if left untreated, can lead to severe complications like retinal detachment and macular degeneration, potentially causing blindness in adulthood.**

Professor David Mackey AO and Dr Samantha Lee will create a new standardised paediatric eye-growth chart to monitor and track the development of myopia in Western Australian children. This project will build upon the existing ORIGINS study and the Raine study, which has been tracking eye health in Western Australian children for over 30 years. By examining eye growth in relation to other factors like height and time spent outdoors, the researchers hope to identify early indicators of myopia and intervene before it progresses to more serious conditions.



Professor Chandra Balaratnasingam

Novel biomarkers of microvascular complications in childhood diabetes

Children with type 1 diabetes are at risk of microvascular complications, including eye and kidney damage. **Nearly every child with type 1 diabetes will eventually develop complications and detecting them early is crucial to preventing long-term damage.**

With funding from Telethon, Professor Balaratnasingam will explore the use of a single biomarker test to assess the severity of these complications. This test could be quickly applied in clinical practice, offering an immediate and accurate measure of the child's condition. The results would enable healthcare providers to intervene early, potentially preventing more severe outcomes.

Professor Balaratnasingam explained, "This biomarker test will revolutionise the way we assess microvascular damage in children with type 1 diabetes. It's a simple yet powerful tool that could prevent costly and unnecessary diagnostic testing and improve outcomes for these children."



Professor Angus Turner

Improving access to paediatric ophthalmic services in the Goldfields

This project will establish a dedicated ophthalmology clinic in Kalgoorlie to address the unique challenges faced by residents in the Goldfields and Esperance regions. In 2024, the Federal Government recognised these areas as an ophthalmic "Area of Need," which means that people in these communities have limited access to eye care services, particularly for children.

With this funding, Lions Outback Vision will expand its outreach services to include comprehensive paediatric eye care. **By increasing the capacity of its team and offering dedicated paediatric clinics, the program will provide free eye exams, diagnosis, and treatment for children in the region.**

The Kalgoorlie-based clinic will serve as a hub for the region's paediatric eye care, with outreach visits extended to communities such as Laverton, Leonora, and Esperance. This model will mirror the successful Broome-based services in the Kimberley and Pilbara regions by bringing essential healthcare closer to home.



Professor Bill Morgan

Non-invasive device to detect raised intracranial pressure in children

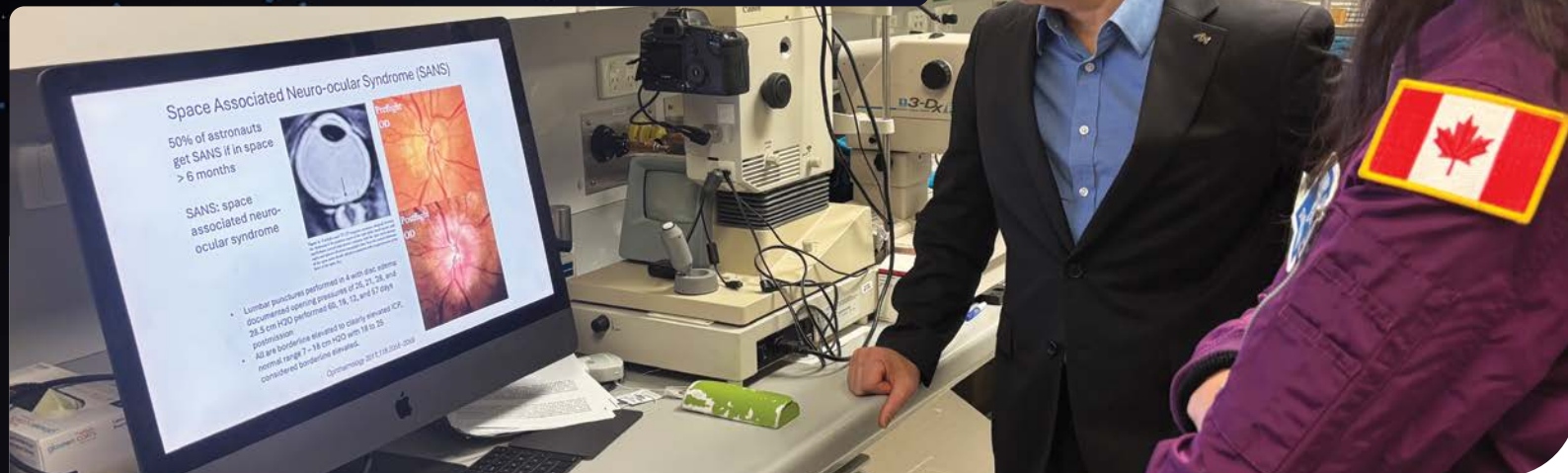
This research involves the development of a world-first portable, non-invasive device designed to detect raised intracranial pressure (ICP) in children, particularly those with hydrocephalus.

Hydrocephalus is a condition that causes fluid buildup in the brain and is typically monitored through invasive methods like lumbar punctures. However, these procedures are often delayed or avoided due to their invasiveness, posing a risk to the patient's health.

The new device, developed by the Lions Eye Institute, will allow healthcare professionals to measure ICP in a non-invasive and more timely manner.

This project has the potential to save lives, reduce anxiety for patients and parents, and offer earlier detection of complications, making it a crucial step in advancing paediatric care.

Astronauts visit to explore groundbreaking research



International astronauts visit to explore groundbreaking research



Masters research student Jasmine Quin-Conroy and Professor Bill Morgan are among the researchers developing cutting-edge diagnostic tools for treating eye conditions on Earth and in space. Photo credit: West Australian Newspapers Limited

Astronauts from around the world recently visited the Lions Eye Institute to see firsthand the groundbreaking research aimed at improving eye health in space and here on Earth. Among the visitors were renowned Canadian astronaut Dr Shawna Pandya, Australian astronaut Katherine Bennell-Pegg and Japanese astronaut Koichi Wakata, who explored cutting-edge diagnostic tools being developed to combat "astronaut blindness" and other related health concerns in space.

The focus of the discussion was pioneering research by scientists at the Institute, which uses advanced imaging of the eye and analytics to measure pressure exerted on the brain and eyes – an issue astronauts commonly face during extended space missions. This technology could have profound implications for both space exploration and improved medical treatments on Earth.

Professor Bill Morgan, an ophthalmologist and key researcher at the Lions Eye Institute, shared his insights on the importance of monitoring the pressure on astronauts' eyes.

“A major challenge for astronauts is that this fluid pressure cannot be easily measured, making it difficult to know if they are developing spaceflight-associated neuro-ocular syndrome (SANS), or whether treatments are effective,” Professor Morgan explained.

Japanese astronaut Koichi Wakata and Canadian astronaut and physician Dr Shawna Pandya



Astronaut blindness

SANS, sometimes referred to as "astronaut blindness," is a condition that affects many astronauts who have been exposed to zero gravity for extended periods. It results from fluid shifts in the body that increase intracranial pressure (brain pressure), causing symptoms such as swelling and, in some cases, vision loss. These effects typically take a long time to resolve once astronauts return to Earth, raising concerns about prolonged exposure to zero gravity and irreversible eye damage.

Oculinx invention offers new hope

One of the main goals of this group of researchers at the Lions Eye Institute is to create a non-invasive, reliable method for measuring intracranial pressure – a task previously requiring highly invasive procedures such as lumbar punctures or even skull drilling. The newly developed portable version, known as the Oculinx device, uses a contact lens with a built-in camera that records a person's retinal blood vessel pulsations, providing real-time data without the need for invasive procedures. This innovative approach could be a game-changer for both space missions and medical diagnostics here on Earth.

Dr Shawna Pandya from Canada and Koichi Wakata from Japan had the opportunity to experience an exclusive demonstration of the state-of-the-art device. During their visit, Professor Morgan explored its potential applications in space with Dr Pandya, a space medicine physician, while Mr Wakata offered valuable insights into how the technology could function in a zero-gravity environment.

While the Oculinx device is still in its early stages, its development could pave the way for improved diagnosis and monitoring of a wide range of conditions, including idiopathic intracranial hypertension, glaucoma, and hydrocephalus. Professor Morgan emphasised the device's potential to impact everyday medical care.

“We believe that building this device with sufficient accuracy, safety, and robustness for space will also make it ready for use in hospitals and clinics for diagnosing and monitoring these conditions.”

Impact in space and on Earth

The Lions Eye Institute's collaboration with astronauts and space agencies underscores the growing intersection of space exploration and medical innovation. As Perth continues to establish itself as a key player in the global space industry, the research emerging from the Institute is set to make a lasting impact on both human health in space and human health on Earth.

With the ongoing developments in this area, the Lions Eye Institute and its partners, including UWA's International Space Centre, are paving the way for a future where space research not only enhances our understanding of the universe but also improves health outcomes for people around the globe.



Australian astronaut Katherine Bennell-Pegg

Understanding the impact of eye tissue donation and how it benefits patients

The gift of eye tissue donation is a powerful act that can restore vision and transform lives.



In Western Australia, the Lions Eye Institute plays a pivotal role in managing the state's only eye tissue bank – the Lions Eye Bank of Western Australia. This service is vital for the identification, retrieval, processing, testing, and distribution of human eye tissue used for corneal transplants and medical research.



What is eye tissue donation?

Eye tissue donation involves the donation of corneal and scleral tissue after a person passes away. The cornea, the transparent front part of the eye, and the sclera, the white portion surrounding the cornea, are the main parts of the eye that can be transplanted.

Eye tissue donations can change the lives of patients suffering from vision impairments caused by conditions like keratoconus, corneal scarring, glaucoma and trauma. Remarkably, **one donated eye can help restore vision for as many as seven people** through various uses of the tissue as well as contribute to sight-saving research.

The Lions Eye Bank of Western Australia, established in 1986 by the Lions Save Sight Foundation, is a member of the Eye Bank Association of Australia and New Zealand (EBAANZ), and serves not only Western Australia but also other member banks to meet demand. Additionally, the Lions Eye Bank is supporting Indonesia in establishing its first hospital retrieval program to help improve access to donated corneas in the region.

The importance of corneal transplants

Corneal transplants are a life-changing procedure for patients with damaged corneas. Whether due to **injury, infection**, or conditions such as **keratoconus**, the cornea may become distorted, clouded, or scarred, leading to vision impairment. The only way to restore sight for these patients is through a donated cornea.

In Australia, approximately 2,500 corneal transplants are performed annually, with over 500 of these surgeries relying on donated corneas from the Lions Eye Bank service. Thanks to advances in surgical techniques, corneal transplants have become more precise, leading to better outcomes for patients. In some cases, surgeons can now replace only the affected portion of the cornea, rather than the entire cornea, which helps to preserve healthy tissue and reduces recovery times.

Innovations in corneal transplant surgery

Corneal surgery has come a long way, and modern techniques offer more options for patients with **keratoconus**, a condition where the cornea degenerates into a conical shape, causing blurred and distorted vision.

Keratoconus causes the cornea to bulge into a cone shape



In early stages, keratoconus can be managed with glasses or contact lenses. However, when these no longer work, surgical interventions become necessary.

New procedures, such as **corneal allogenic intrastromal ring segments (CAIRS)**, are now being used to treat keratoconus patients. CAIRS involves the use of donor corneal tissue to implant custom-shaped ring segments into the patient's cornea. This method not only improves the shape of the cornea but also offers several benefits over traditional plastic implants, including better biocompatibility, stability, and a lower risk of complications like extrusion (where the implant moves out of place).

CAIRS provides more options for patients, including those with severe keratoconus or thinner corneas who may not be suitable candidates for traditional ring segments. It also allows for greater customisation, as surgeons can tailor the implants to the specific needs of each patient.

Lions Eye Bank of Western Australia is the first eye bank in Australasia to provide especially prepared eye tissue to ophthalmologists who perform CAIRS surgery. Previously, ophthalmologists had to prepare the eye tissue themselves.

Eye donation

Whether through corneal transplants or advanced surgical techniques like CAIRS, the impact of donated eye tissue cannot be overstated. By choosing to register as a donor, you can give the gift of sight, ensuring that people around you have access to the life-changing surgeries they need to regain their vision.

If you're considering eye donation, you can source information through:

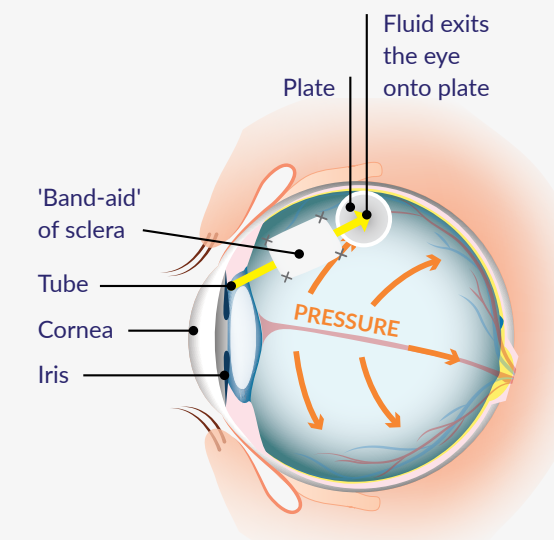
- **DonateLife WA**, who coordinates all organ and tissue donor activities across Western Australia. For more information visit www.donatelife.gov.au.
- **Australian Organ Donor Registration**. You can register as an eye tissue donor and record your consent by phoning **1800 777 203**.
- Information and registration forms available from **Medicare offices** or at medicareaustralia.gov.au.



Fun facts about the eye



- One donated eye can be used to save **seven** people's sight.
- > The **sclera** is divided into **six** sections and used to support glaucoma patients when they have microinvasive **glaucoma** surgery (MIGS). During this type of surgery, a MIGS device is implanted to help with fluid drainage of the eye. Lions Eye Bank provides ophthalmologists with a one-sixth section of sclera (from donated eye tissue) to provide a 'band-aid' over the device.



Sclera used as a 'band-aid' over the MIGS device

- > The rear portion of the eye is unsuitable for transplant, however, no part of a donated eye tissue goes to waste. With permission, this portion of the eye can be used for eye disease research.
- **Corneal transplant** is the most successful form of human transplantation.
- The cornea is only **half a millimetre thick** and has five layers. Surgery can now be conducted on just the diseased portion.
- It is the only part of the human body that has **no blood supply**.
- It is the **fastest healing tissue** in the human body.

Become a Sight Saver today

90% of vision loss is preventable or treatable. Together we can be the solution.

By becoming a Sight Saver, and donating to the Lions Eye Institute each month, you can help uncover research breakthroughs, transform lives and give hope to people facing blindness and eye disease.

Sight Saver members receive:

- research updates
- event invitations throughout the year
- a tax deductible receipt at the end of each financial year

Giving monthly allows the Lions Eye Institute to plan ahead for future sight saving research with the knowledge that your support is ongoing.

Setting up your regular donation is easy.

- You choose the donation amount.
- All donations are tax deductible and a receipt is sent automatically at the end of each financial year.
- You can opt out or change your donation amount at any time.

Please fill out the form below (indicating monthly payment) and return it to our reply paid address, or call Carolyn McAdam in fundraising on (08) 6382 0566 to set up your automatic monthly donation.



Yes I want to save sight

Please accept my donation of \$

Please make my donation monthly, I want to be a Sight Saver

Please find enclosed my cheque money order OR, please debit my Mastercard American Express Visa

Card No: _____ Expiry Date: ____ / ____

Cardholder's Name: Signature:

Tax receipt details:

Name:

Address:

Suburb: Postcode:

Telephone: Email:

I would be interested to learn more about how I can include the Lions Eye Institute in my Will.

I have already provided for the Lions Eye Institute in my Will.

I would like to be included in donor recognition.

We recognise the generosity of donors in materials such as our annual report and recognition boards.

Be a sight saver

Your donation helps eradicate blindness

Mail to:
Lions Eye Institute
Reply Paid 62815
Nedlands WA 6009
(No stamp required)
Or call (08) 9381 0777