

A photograph of three scientists in a laboratory setting. A woman on the left, wearing glasses and a white lab coat, is smiling and holding a pipette. A man in the center, also wearing glasses and a white lab coat, is looking down at the pipette. A woman on the right, wearing safety glasses and a white lab coat, is looking on. They are all working with laboratory equipment, including a pipette and a small vial.

2021 Annual Report

Better vision for all

Message from our Chair and Managing Director



Peter Forbes and Professor Bill Morgan

We are pleased to present to you the Lions Eye Institute's **2021 Annual Report**.

2021 was a year in which **COVID-19** continued to impact on our organisation in various ways, although in Western Australia we were largely cushioned from major disruptions to activities.

The second full year of the pandemic highlighted to us that the changes to processes and procedures we made throughout the Institute would be in place for the long term. Our enhanced focus on hygiene, as well as on patient and staff safety and wellbeing, is a permanent fixture. More broadly, risk management around health, financial and operational challenges continues to be a core priority.

COVID-19 did not deter us from recording a number of significant milestones in 2021, with strong achievements in our clinical services, research activities and community outreach.



Clinical services

The first full year of the **Care Centre**, housed within our Nedlands clinic, was a great success, facilitating significant improvements in the way we interact with our patients and referrers. We completed the majority of our **transition to digital medical records**, which will help to facilitate research and clinical trials outcomes.

We welcomed a new clinician, **Dr Geoffrey Chan**, to the Institute. Dr Chan is an expert in all forms of medical, laser and surgical treatments for glaucoma, as well as the modulation of wound healing after ocular surgery. He is conducting research into advancing minimally invasive surgical techniques and the imaging of lymphatic and eye fluid drainage pathways.

During 2021, we progressed with our **plans for a new community eye health clinic in Midland** to service Perth's eastern corridor and surrounding regions. This will help to address the chronic shortage of affordable and accessible eye health services in the area.





Research

A number of important research projects commenced in 2021, including the **Perron Paediatric Retinopathy Initiative**, which involves the screening of children and adolescents with diabetes, and research into the development of new therapies to reverse sight-threatening complications due to diabetic retinopathy.

The generosity of our supporters towards our research goals knew no bounds. We were thrilled to accept \$750,000 from **Mrs Rhonda Wyllie**, through **Telethon**, to help us purchase a **Stem Cell Robot**, which will be life changing for children with inherited retinal diseases such as retinitis pigmentosa.

We are proud to be a foundational partner of the **International Space Centre**, which was launched at The University of Western Australia. The Centre will see world-leading space research conducted in Perth, with the Institute contributing through research into intracranial pressure in astronauts that can lead to vision loss.



Stem
Cell
Robot

We are well on our way to introducing **three new Professorial Chair positions**, having confirmed The Lions Eye Institute UWA Chair in Optometry Research and Lions Curtin Chair in Ophthalmic Big Data during 2021. The former two roles will be filled by Professor Allison McKendrick and Professor Andrew Turpin, respectively, in 2022. Alongside the Ian Constable Chair in Discovery and Translational Ophthalmic Science, they will provide a boost to our research capacity and capability.

Many more of our research achievements are highlighted in the Institute's **inaugural Impact Report**, available on our website.



Community

The first year of the **Optometry School at The University of Western Australia** was most successful. An inaugural cohort of 42 students commenced their Doctor of Optometry studies, which included observational clinical placements at the Institute.

The **Lions Outback Vision Kimberley Hub** in Broome opened, after the completion of stage one renovations. The hub is staffed by a dedicated team who are providing vitally needed eye health services throughout the Kimberley and Pilbara regions. Stage two renovations will be finished during 2022, and the hub – the first dedicated ophthalmology clinic in the state outside of the Perth metropolitan area – will be officially opened later in the year.

Work is underway on the establishment of a **centre of research excellence in Broome**. This will have a particular focus on Aboriginal and rural eye health.

The Institute launched its first '**Innovate**' **Reconciliation Action Plan (RAP)**, a critical part of our commitment to improving health outcomes among Aboriginal and Torres Strait Islander peoples.

The **Lions Eye Bank celebrated 35 years** of saving people's sight. The eye bank facilitates the performance of more than 200 corneal transplants each year.



Governance

During 2021, we welcomed **Chief Executive Officer, Dr Glen Power**, who is providing strong operational and clinical leadership to the Institute. Dr Power has held senior roles within the Australian health sector across Australia.

We continued our focus on organisational governance, embedding a **new Board Committee framework** and commissioning an external Board review. The recommendations from this review are being implemented.

We thank our **staff and volunteers** for their ongoing support and flexibility during the tumultuous pandemic years. Thank you also to our Board of Directors, who consistently give so generously of their valuable time.

Finally, we want to **express our gratitude to our many donors and supporters**, who make it all possible to do the work we do.

Peter Forbes
Chair

Professor Bill Morgan
Managing Director



Our vision and values

At the Lions Eye Institute, we make a difference to people's lives through **exemplary patient care** and by pushing the frontiers of science to discover **new treatments and cures** for eye disease.

The first of its kind in Australia, the Lions Eye Institute is a not-for-profit centre of excellence combining the best of medical research and clinical care for our patients. Every day, we work towards our goal of preventing and curing blindness and eye disease.



Clinical services

World-class ophthalmology services including eye examinations, treatment and day surgery in our Nedlands, Murdoch, Midland and Broome clinics. Western Australia's first laser vision centre, Lions Laser Vision. Comprehensive optometry services through Lions Optics. An active Clinical Trials Centre based right here in Perth.

Research

Five priority areas of translational research.

- 1 Glaucoma
- 2 Diabetic and vascular retinopathies
- 3 Indigenous eye disease and community eye research
- 4 Genetic eye disease, gene therapies and macular degeneration
- 5 Cornea, ocular surface and ocular immunology

Education and community

Delivering quality specialist eye health care to rural, remote and Indigenous communities through Lions Outback Vision. Sharing our expertise with global and local partnerships, particularly in Indonesia. Supporting eye tissue donation with Lions Eye Bank.

Vision

Better vision for all

Values



Integrity: we do what we say we're going to do, and are accountable, transparent and responsible in our actions.



Care: we consider and respect our patients, collaborators and each other.



Curiosity: we ask questions, are interested and never stop learning.



Impact: we make a positive difference to the lives of others and the communities in which we operate.



Unity: we support each other and work as one to achieve common goals.

Year in review

2021

JANUARY

Dr Jason Charng was awarded the Ophthalmic Research Institute of Australia (ORIA) Perth Eye Foundation Grant to develop a machine learning based platform for gene therapy research.

We were one of several hosts for the **Scitech Future Health Professionals program**, where some of WA's best and brightest students spent a week learning about career opportunities in health care (pictured right).



FEBRUARY

Dr Jessica Mountford (pictured above) joined the Lions Eye Institute as our newest Brian King Fellow, to investigate the impact of COVID-19 and lockdown on myopia in children.

We launched a new **Consumer and Community Advisory Panel**. Members include people with lived experience of low or no vision, and the panel provides crucial guidance on clinical services, clinical trials, research, communications and more.

Our metropolitan clinics returned to normal operations after a **brief COVID-19 lockdown** in January.

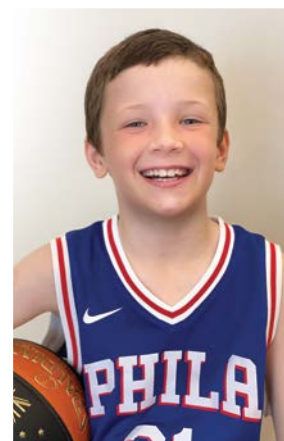
MARCH

The International Glaucoma Genetics Consortium, chaired by **Professor David Mackey AO**, published the largest ever study on the genes that cause glaucoma.

Professor Ian Constable AO was interviewed by Gareth Parker on 6PR's "West Aussie Greats" segment, the first listener-nominated interviewee on the show.

We were incredibly grateful to **Channel 7 Telethon Trust** for naming the Lions Eye Institute as one of 65 beneficiaries of Telethon 2020, with the funds to be used for research into inherited retinal diseases, the leading cause of childhood blindness.

Together with Perth Children's Hospital, we announced the **Perron Paediatric Retinopathy Initiative** (pictured right is **Ben**, a 9 year old participant), a new eye clinic to screen, assess and treat children for diabetic retinopathy. The initiative also includes a significant research project looking at new therapies.





Our first Kimberley Hub patient, Peter, with Dr Vaibhav Shah

APRIL

The **Lions Outback Vision Kimberley Hub**, located in Broome, opened its doors to patients after two years of careful planning. Special thanks to Wen Giving Foundation for donating the land and buildings, and the Australian Government for supporting the refurbishment.

MAY

We were overwhelmed at the generosity of Rhonda Wyllie in donating \$750,000, via Channel 7 Telethon Trust, towards the purchase a **Stem Cell Robot**, a game-changing piece of equipment for our researchers.

We shared Melissa's story of **living with Stargardt disease**, the primary cause of childhood blindness in Australia and around the world. Thanks to our generous supporters whose donations ensure the continuation of Associate Professor Fred Chen's research into inherited retinal diseases like Stargardt disease.

Melissa at the Lions Eye Institute



JUNE

We welcomed **Dr Glen Power** as our first-ever Chief Executive Officer, to support our strategic growth plan. Dr Power works alongside Managing Director, Professor Bill Morgan.

A **COVID-19 lockdown** resulted in a number of metropolitan clinic appointments being rescheduled, while after a maintenance break the Vision Van (pictured left) was back on the road.

We recognised **National Reconciliation Week** by learning about what reconciliation means to some of our Indigenous employees.

JULY

The **Lions Eye Bank** celebrated **35 years** of saving sight through the collection and distribution of corneal and sclera tissue for procedures such as corneal transplants (*pictured right*).

We announced a new partnership with Curtin University and the Lions Save-Sight Foundation to create the **Lions Curtin Chair in Ophthalmic Big Data**. The position will use big data to improve eye health outcomes.

We celebrated **NAIDOC Week** by inviting a local Whadjuk artist to facilitate the creation of a staff collaborative canvas, which now hangs proudly in our Nedlands clinic.



AUGUST

After being postponed twice due to COVID-19, we finally celebrated the launch of our first **'Innovate' Reconciliation Action Plan**. Thanks to Mungart Yongah Dance Group for performing a traditional smoking ceremony and Welcome to Country (*pictured above*).

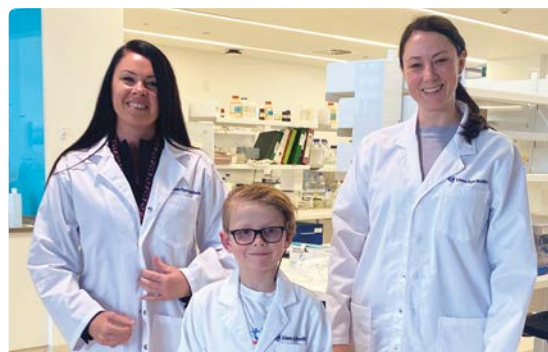
We were excited to be part of the **launch of the Association of Australian Medical Research Institutes WA (AAMRI WA)**, a united voice for the state's world-class medical research institutes.

Professor Graham Barrett was recognised for his contribution towards the development of RayOne EMV, an intraocular lens for cataract patients that uniquely extends a patient's range of vision.

SEPTEMBER

In collaboration with The University of Western Australia (UWA), we announced the creation of a **new Lions Eye Institute UWA Chair in Optometry Research**. The position will develop and lead a strategy to reduce preventable blindness, working closely with the UWA Optometry School.

We invited **Channel 7 Perth** into our research lab to interview some of our world-class researchers about their ground-breaking work to save the sight of children like 2020 Little Telethon Star (and Lions Eye Institute patient), Eamon. Eamon has Usher syndrome and is pictured below with Dr Carla Mellough and Dr Livia Carvalho.



OCTOBER

Professor Danail Obreschkow (*pictured right*), delivered a mesmerising talk on space time, black holes and spaghettification for our **22nd annual Ian Constable Lecture**.

We were excited to be part of the **2021 Telethon Festival** at Optus Stadium, where we introduced our new mascot for eye health, Iris, to hundreds of Western Australian children.

Work began on **stage two of the Lions Outback Vision Kimberley Hub**.



Professor Bill Morgan with the Hon John Quigley MLA

NOVEMBER

The Lions Eye Institute was invited to **Parliament House** to discuss future plans for our research and clinical services. We also showed ministers how to perform eye surgery using a XEN® gel stent (*pictured above*).

We were delighted with the news that Vision Pharma (a joint venture between the Lions Eye Institute and PYC Therapeutics) was the **overall winner of the 2021 Western Australia Innovator of the Year Awards** for its work developing a treatment for retinitis pigmentosa 11.

Dr Rabab Rashwan was one of only three recipients of a **2022 Retina Australia medical research grant**. The funds will support Dr Rashwan's research into broad-based treatment approaches for retinitis pigmentosa.

DECEMBER

Associate Professor Kris Rallah-Baker was selected to deliver the **second annual Barry Jones Vision Oration**. Associate Professor Rallah-Baker became Australia's first Indigenous ophthalmologist while working on the Lions Outback Vision Van.

We welcomed ophthalmologist **Dr Geoffrey Chan** (*pictured below left*) to the Institute. Dr Chan specialises in cataract, pterygium and glaucoma surgery.

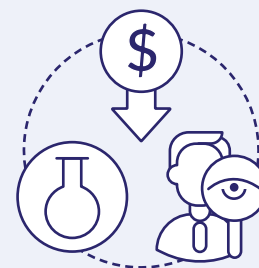
Our incredible supporter Jon Williams (*pictured below right*) swam, rode and ran in the **Busselton Ironman** to raise vital funds for research into eye disease at the Institute.

VisAbility band Grand Delusions entertained patients and staff in our Nedlands clinic by playing Christmas carols. A fitting tribute to celebrate the end of a very interesting, yet successful year.



Grants

Funding received through grants enables **certainty and continuity** for many of our medical research programs.



Australian Competitive



GRANT	CHIEF INVESTIGATOR/S
NHMRC Centre of Research Excellence	Mackey, D et al
NHMRC Ideas	Chen, F Fletcher, S McLenachan, S Cunningham, P
NHMRC Investigator	Yu, D-Y
NHMRC MRFF CDF	Chen, F
NHMRC Partnership	He, Mingguang Turner, A Keel, S Zhang, Lei
NHMRC Practitioner Fellowship	Mackey, D
NHMRC Program	Mackey, D et al
NHMRC Project	Morgan, B
NHMRC Project	Mackey, D Chen, F Milne, E
ORIA	Charng, J
ORIA	Mellough, C
Retina Australia	Chen, F
RANZCO	Turner, A

International



GRANT	CHIEF INVESTIGATOR/S
Artema Therapeutics Inc	Carvalho, L
Dr Sjakon Tahija	Carvalho, L
Google LLC	Turner, A
Topcon Healthcare	Turner, A

Government



GRANT	CHIEF INVESTIGATOR/S
Australian Government Department of Health	Turner, A
Australian Government Department of Health	Turner, A
WA Country Health Service	Turner, A
WA Government Department of Health	Carvalho, L
WA Government Department of Health	N/A
WA Government Department of Health	N/A

Other



GRANT	CHIEF INVESTIGATOR/S
Allergan	Morgan, B
Channel 7 Telethon Trust	Carvalho, L
Channel 7 Telethon Trust	Chen, F
Channel 7 Telethon Trust	Chen, F
Channel 7 Telethon Trust	Turner, A
Channel 7 Telethon Trust	Turner, A
Lions Save-Sight Foundation (WA) Inc	N/A
Perth Eye Foundation	Turner, A
Perpetual Limited	Degli-Esposti, M
Perpetual Limited	Mackey, D
Stan Perron Charitable Foundation	Yu, D-Y Balaratnasingam, C
The Fred Hollows Foundation	Turner, A
The University of Western Australia	N/A

Grants active in the 2021 calendar year.

Our supporters

We are incredibly grateful to our **generous and loyal supporters**. Your support ensures we can continue our sight-saving research, which in turn helps us to provide world-class treatment and care to our patients.

Corporate



Broome
International Airport
Carl Zeiss Pty Ltd
Essilor Australia
GKMI Pty Ltd
Google LLC
Hawaiian
Mandurah Murray Mayday
Novartis Pharmaceuticals
Australia Pty Ltd
Oxford Compounding
Topcon Healthcare

Foundations, trusts and not-for-profit



Bill and Jean Henson Trust
Bowen Foundation
Carcione Foundation
Channel 7 Telethon Trust
Constantine Family Foundation
H & H Cohny Foundation
Idle Acres Foundation
Jimfan Foundation
Joyce Henderson Trust
Lions Club of Boddington Inc
Lions Club of Brunswick Junction Inc
Lions Club of Capalaba Inc
Lions Club of Dunsborough Inc
Lions Club of Wellington Inc
Lions Save-Sight Foundation (WA) Inc
McCusker Charitable Foundation
Perth Eye Foundation
Stan Perron Charitable Foundation
The Fred Hollows Foundation
The Harry & Margaret Kerman Trust Fund
The John and Beryl May Henderson Foundation
The Lindsay and Heather Payne Medical
Research Charitable Foundation
The Patrick Foundation
Wen Giving Foundation

Health and government



Australian Government
Department of Health
RANZCO
Rural Health West
WA Country Health Service

Bequests



Estate of the Late Oona Borlaug
Estate of the Late Anthony Carson
Estate of the Late Edward Cawse
Estate of the Late Jean Gilbert
Estate of the Late Muriel Lundgren
Estate of the Late Margaret and
Neil McArthur
Estate of the Late Eileen Noton-Dale
Estate of the Late Henrietta Ivy Sharpe

Individuals



Mrs Ann Ashbrook
Mr David Bailey
Mr & Mrs Robert and Gay Branchi
Dr William Brogan
Mr & Mrs Paul and Wilma Depiazzi
Dr Andrew Dowse
Mr Jono Farmer
Mr & Mrs Vernon and Ann Fountain
Mr John Giles
Mr Jeffrey Hay
Mr & Mrs Norman and Freda Hogg
Mr & Mrs Merv and Judy Kemp
Ms Sharon Leung
Mr & Mrs Milenko and Frances Mihaljevich
Mr Walter Millstead
Mr & Mrs Brad and Carolyn Miocevic
Professor Bill Morgan
Mr Carlo Orlando
Mr & Mrs John and Lee Saleeba
Dr Erica Smyth
Mr Keith Spence
Mrs Nora Susac
Mr & Mrs Joe and Helen Sweet
Mr Joseph Tan
Mr Peter Thackray
Mr & Mrs Eric and Margaret Trueman
Mrs Susan Watson
Mr Reginald Watts
Mrs Rhonda Wyllie

Support received in the 2021 calendar year.

Board of Directors



Peter Forbes Chair

Peter Forbes joined the Board of the Lions Eye Institute in 2014 and was elected Chair in 2017. He is a Fellow of Chartered Accountants Australia and New Zealand and a Fellow of the Australian Institute of Company Directors. He is board member of the East Metropolitan Health Service, Chair of the Local Government Indemnity Scheme, and external member of the Law Society of WA's Professional Indemnity Insurance Management Committee.



Professor William (Bill) Morgan Managing Director

Professor William (Bill) Morgan has been an ophthalmologist at the Lions Eye Institute for 25 years and was appointed Managing Director in July 2019 after joining the Board in 2018. He is a consultant ophthalmologist at Royal Perth and Perth Children's Hospitals, Director of the Centre for Ophthalmology and Visual Science at UWA, a visiting professor at the University of Udayana, Indonesia and Co-Director of the Lions Eye Institute's McCusker Glaucoma Centre.



Richard Alder

Richard Alder joined the Board of the Lions Eye Institute in 2017. Richard is a Fellow of the Australian Institute of Company Directors and has worked in the securities industry since 1965. He was employed by JBWere for 31 years, consulted to Australia's largest ASX-listed investment company, Australian Foundation Investment Company, and was Employer Director on the Government Employees Superannuation Board.



Dr Margaret Crowley Deputy Chair

Dr Margaret Crowley joined the Board of the Lions Eye Institute in 2016. She is an experienced Chief Executive Officer and Board Director and a graduate of the Australian Institute of Company Directors. She has held senior executive positions in state and national governments, universities and the not-for-profit sector – including 15 years as Chief Executive Officer of the Association for the Blind of WA Inc. She has served on state and federal health boards and regulatory authorities over the last five years.



Tony Joyner

Tony Joyner joined the Board of the Lions Eye Institute in 2013. He has more than 30 years' experience as a commercial and corporate lawyer and for nine years was the Managing Partner of the Perth office of international law firm Herbert Smith Freehills, where he is currently employed as a partner and Global Head of Technology. He sat on the global board of the firm for nine years, and chaired its Risk Management and Audit Committee. He is also a board member of the WA Chamber of Commerce and Industry.



Rudolf Brunovs

Rudolf Brunovs is a Fellow of the Institute of Chartered Accountants and the Australian Institute of Company Directors and holds a Masters of Business Administration. He retired as a partner of the chartered accounting firm Ernst & Young (now EY) after 27 years in a number of their offices. He is currently a Director and the Principal of Mainstay Consulting Pty Ltd and Non-Executive Director of Deep Yellow Limited. He joined the Board of the Lions Eye Institute in 2005.



Dr Erica Smyth AC

Dr Erica Smyth AC joined the Board of the Lions Eye Institute in 2019. She is a Fellow of both the Australian Institute of Company Directors and the Academy of Technological Science and Engineering. She has 45 years' experience in the mineral and petroleum industries. She is currently a Non-Executive Director of the MinEx Co-operative Research Centre and is a member of the Advisory Board of the UWA Oceans Institute Foundation.



Professor Grant Waterer

Professor Grant Waterer joined the Board of the Lions Eye Institute in 2018. He is a Fellow of the Royal Australasian College of Physicians and the American College of Chest Physicians. He is Professor of Medicine at UWA and Director of Clinical Services at Royal Perth Bentley Group. He holds a PhD focused on pneumonia and a Master of Business Administration.



Professor Ian McAllister

Professor Ian McAllister joined the Board of the Lions Eye Institute in 2010. He is a consultant ophthalmologist at the Lions Eye Institute and the Royal Perth Hospital. He is actively involved in research for cures for vitreoretinal disorders, especially retinal vascular disorders. He has been involved for many years in statewide diabetic retinopathy screening and treatment and was Vice-Chair of the Ophthalmic Research Institute of Australia and Chair of the Research Board.



Professor Jane den Hollander AO

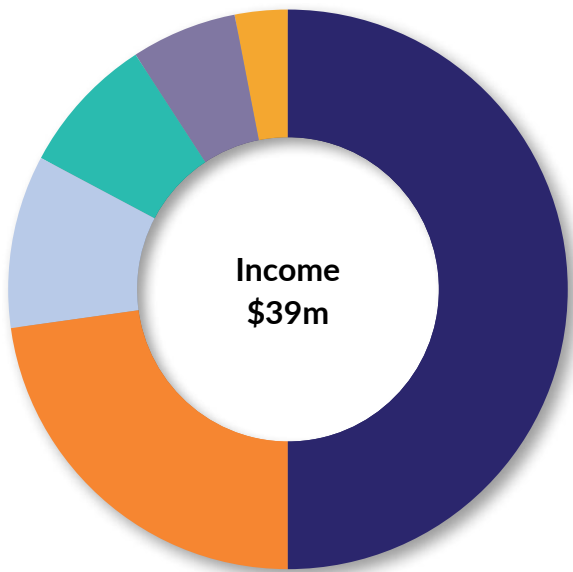
Professor Jane den Hollander AO joined the Board of the Lions Eye Institute in 2020. She received an Order of Australia for her distinguished service to tertiary education in the 2017 Australia Day Honours. She is currently a Director and Trustee of UniSuper Limited and Chair of its Remuneration Committee. She is also Chair of the Australian Global Health Alliance Board, Chair of the Centre for Stories Board and a Director of the Breakthrough Victoria Pty Ltd Board.

Financial report

Income

Commercial income continued to be the major source of funding, contributing \$19.7 million in 2021. The remainder was sourced through grants, contracts, philanthropy and investment returns.

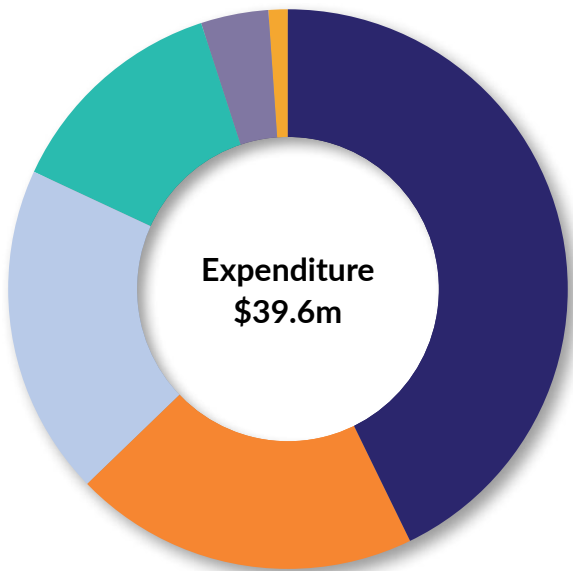
Commercial	50%
Public grants and contracts	23%
Investment returns	10%
Donations and bequests	8%
Philanthropic and other grants	6%
Other	3%



Expenditure

The Lions Eye Institute's expenditure of \$39.6 million included an extraordinary, one off research investment of \$2.5 million to set up the Lions Eye Institute UWA Chair in Optometry Research.

Direct operating expenses	43%
Research	20%
Administration (including employment)	19%
Materials, supplies and consumables	13%
Occupancy	4%
Other	1%



Statement of comprehensive income

	\$m
Income	
Revenue from ordinary activities	34.2
Other	4.8
Expenditure	
Direct operating expenses	(17.1)
Research	(8.0)
Administration (including employment)	(7.5)
Materials, supplies and consumables	(5.1)
Occupancy	(1.5)
Other	(0.4)
Net deficit	(0.6)

Statement of financial position

	\$m
Assets	
Financial assets	31.4
Cash and cash equivalents	22.3
All other assets	20.9
Total	74.6
Liabilities	
Trade and other payables	(11.7)
Provisions	(3.1)
All other liabilities	(2.2)
Total	(17.0)
Net assets	57.6

To access our audited financial reports, please visit lei.org.au/publications



Fat Cat with Mrs Tonya McCusker AM and our patient, 2020 Little Telethon Star, Eamon.
Photo courtesy of The West Australian

Snapshot 2021



We acknowledge the traditional owners and people of the lands on which we operate, and honour their elders past, present and future.



277 employees

79% female **21%** male
17 highly experienced clinicians
44 dedicated researchers
45 students

63,749 consultations

across our Midland, Murdoch and Nedlands clinics

10,551 surgeries and minor procedures
183 telehealth consultations
15 volunteers in the clinic concierge program
95% happy or very happy with clinic services



97 research papers published

20 professional education forums

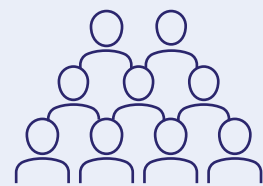
5 patents



75 active clinical trials

45 external **30** sponsored
plus **12** investigator initiated

9 new trials activated
60 new patients enrolled in trials
80 Perron Paediatric Retinopathy Initiative patients screened
662 clinical trial patient visits



13,889

total patients treated by
Lions Outback Vision

8,939 outreach patients
2,827 injections, lasers and other minor procedures
1,825 pairs of spectacles dispensed
1,401 telehealth consultations
927 eye surgeries conducted
375 Vision Van driving hours
32% Indigenous outreach patients

36 grants



Lions Eye Bank celebrated 35 years



256 corneal transplants

24 corneas exported interstate or overseas

137 sclera

transplanted by
Lions Eye Bank

683 frames
1,933 lenses
sold by Lions Optics



1,279

Lions Optics
eye examinations



4,245 gifts
received worth

\$5M



\$0.5M received from
10 bequests