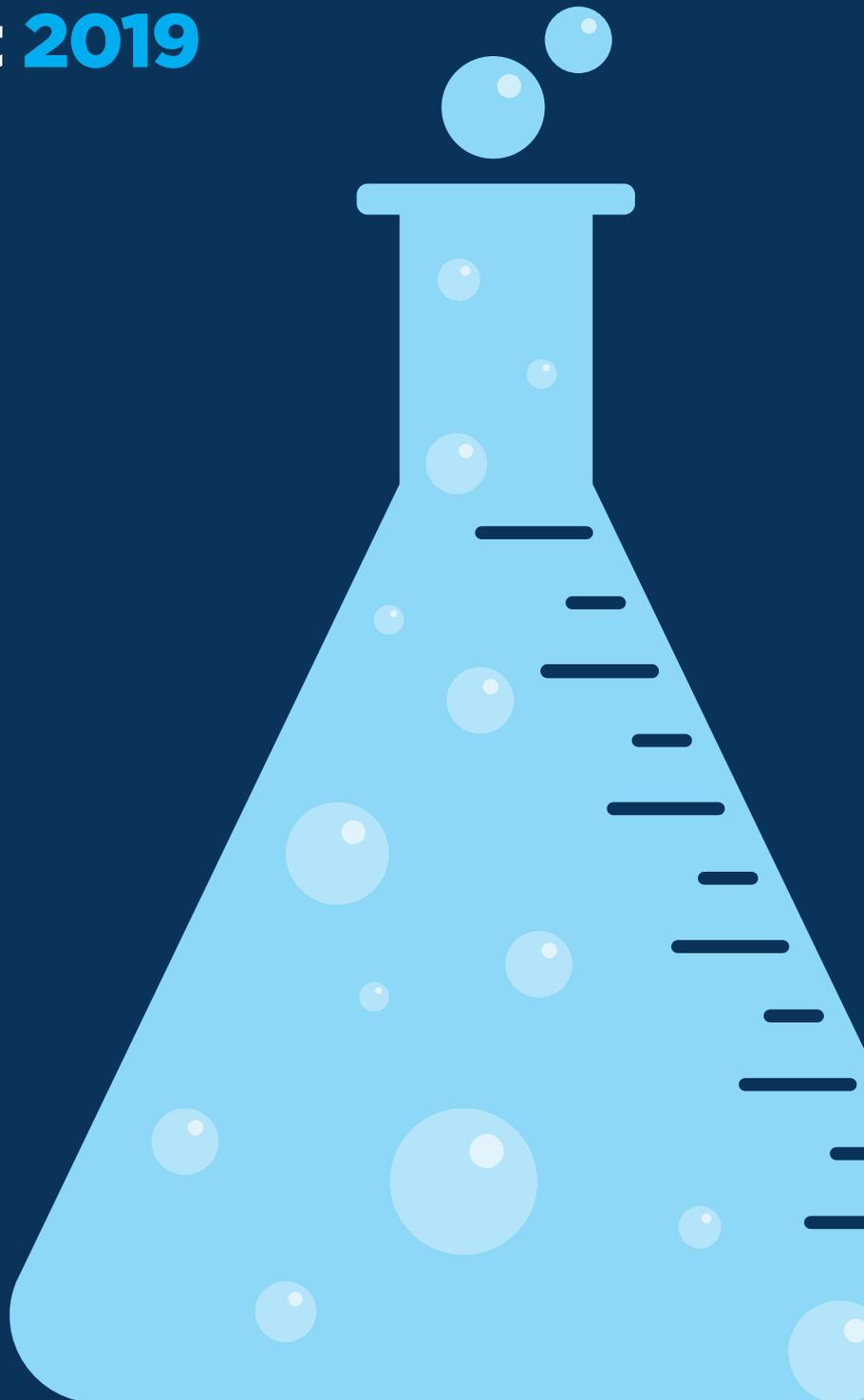


DRIVING DISCOVERY AT THE PERKINS

Annual Report **2019**



HARRY PERKINS INSTITUTE
OF MEDICAL RESEARCH

The Perkins in 2019



Our shared mission

Together, we're creating better health outcomes for the community in which we all live.



The Perkins at a glance

21 years of driving discovery.

Investigating more than 15 major disease types impacting our community.

450+ research and trial staff.

20 dedicated research laboratories.

7 specialised research centres and facilities.



Local focus, global impact

The Harry Perkins Institute of Medical Research is a proudly West Australian organisation, with three facilities co-located on major teaching hospital campuses:

- Perkins North
QEII Medical Centre, Nedlands
- Perkins South
Fiona Stanley Hospital, Murdoch
- Royal Perth Hospital



Research areas



Cancer



Heart disease



Diabetes



Rare genetic diseases



Turning discoveries into better treatments

Clinical trials are a vital step in the pathway toward better medicines. Perkins' wholly owned clinical trials facility, Linear Clinical Research Ltd, delivers world-class end-to-end clinical research, investigating whether treatments are safe, effective and better than existing medicines.

Specialising in first-in-human and early-phase clinical trials, Linear is accelerating the translation of discoveries made at the bench to the bedside. The 32-bed centre is WA's only dedicated and Australia's most advanced early phase clinical trials facility. Linear is a demonstration of the Perkins' commitment to accelerate the delivery of groundbreaking new treatments to the people who need them most.



Inspiring the next generation of researchers

The Lotterywest BioDiscovery Centre at the Perkins is a state-of-the-art teaching laboratory and a program to nurture bright young minds. With classes for high school students, specialist programs for gifted students and school holiday activities, the BioDiscovery Centre helps cultivate a passion for science and discovery in thousands of young West Australians every year. Run by real medical researchers, with classes that support the Australian curriculum, the BioDiscovery Centre is a landmark program for budding science enthusiasts in our State.



Our community

It's thanks to the contributions of our supporters that Perkins research can continue tirelessly. Together with you, generous individuals and community groups, we are spearheading bold projects to address big health problems. As a charity, the Perkins relies upon research grants and donations to continue its vital work towards keeping families together longer. We will never stop researching until we have answers.

Community events

MACA Cancer 200 Ride for Research
Hawaiian Walk for Women's Cancer
Hike for Health
Steps to Better Health
Perth Running Festival

Sharing knowledge

Wesfarmers Harry Perkins Oration
Community Q&A forums
Discovery Day
Talks and tours
Community presentations

Chair's Report



Thank you for supporting the Harry Perkins Institute of Medical Research in 2019.

This year we celebrated our landmark 21st year since the Institute was established. In 1998 the Perkins was founded as the Western Australian Institute for Medical Research (WAIMR) in laboratories at Royal Perth Hospital.

Thanks to founding Chairman, Mr Harry Perkins and his team, the Perkins was able to begin making breakthrough discoveries toward better health for the WA community. Now, 21 years on, the Perkins has expanded into a major multi-campus institute, with hundreds of research staff and a reputation as a global leader in life-changing medical research. I'm sure that Harry would be proud to see the Institute today and grateful to know that West Australians have championed its work for 21 years.

At the heart of any strong organisation is its people. The researchers at the Perkins represent some of the best scientists in their field globally. I am exceptionally proud of the world-class discoveries that have been made in the past year.

From discovering new disease genes, to making a link between heart failure and micro gut imbalance, to using gene editing technology to turn off cancer cells, to developing a new biomaterial to help fill areas after an aortic dissection – breakthroughs like these are what makes the Perkins a truly incredible asset to medical research. None of this would be possible without our generous funders at a National and State level as well as the strong philanthropic support we receive from our corporate partners, grants, individuals and trusts and foundations.

Finally, I would like to acknowledge our donors. Your support is crucial to our future sustainability. Thank you for being our partners in research now and in the future.

I'd also like to acknowledge the extensive collaborations with global health leaders that Perkins researchers have fostered. These networks demonstrate the importance of WA researchers contributing to large-scale international research projects, but they also position Perth at the forefront of scientific endeavours. It's with your support and investment in research that the Perkins is able to remain innovative and world leading. You have played a vital role in enabling discovery here in Western Australia and for that I speak for everyone at the Perkins when I say thank you.

Wayne Martin AC QC
Chair, Harry Perkins Institute of Medical Research

Director's Report



It is my great privilege to report to you on the achievements of the Perkins in its 21st year.

As director, I am grateful to our research teams for undertaking work that improves our understanding of human health, which puts WA at the forefront of global research efforts and, most importantly, that creates new hope for our friends and family facing disease. Medical research is a rapidly moving field and the ability to be innovative and pursue new and rewarding avenues of discovery is dependent upon high quality facilities and support. It's thanks to your generous contributions that the Perkins can continue to make breakthroughs that deliver new treatments and drugs for the major diseases affecting our community.

I have always found it exciting to hear about the pioneering work that our researchers are doing and seeing that effort pay off and result in new answers for families. Some of these results include a new technology that delivers a way to determine risks associated with widespread deadly diseases, the identification of the genetic mutation that causes a muscle weakening disease, the identification of a new familial risk gene for sarcoma, and two new clinical studies for a new drug that aims to ease the symptoms of chronic kidney disease. You can read about more of the research breakthroughs that you have made possible on upcoming pages.

Supporters like those who walk and ride in our annual flagship events, the MACA Cancer 200 Ride for Research and the Hawaiian Walk for Women's Cancer, play a vital role in enabling discovery at the Perkins. Similarly, every West Aussie who generously donates, takes part in a trial or volunteers their time is helping facilitate our world-class research.

Each achievement highlighted in this document began with a supporter like you, so on behalf of everyone at the Perkins – thank you.

I would also like to thank our Division Heads, Laboratory Heads, researchers, students and staff for their unwavering passion and accomplishments in 2019. Thanks as well to our research support and executive leadership who have this year continued to work hard to make the Perkins a fantastic and remarkable place to work and visit.

Finally I would like to warmly thank our Board of Directors and our Chair, Wayne Martin AC QC, who volunteer their time and expertise in guiding the Perkins towards realising its vision to keep families like yours and mine together for longer.

Professor Peter Leedman
Director, Harry Perkins Institute of Medical Research

Perkins year in review

Here's what you've helped to achieve in 2019.

January The Centre for Diabetes Research developed their Advanced Genetic Diagnostics technology through the CSIRO ON Accelerate program. The project offers a new way of analysing genetic data to determine the risks associated with widespread deadly diseases.

Perkins laboratory head Professor Kevin Pflieger was appointed WA Director Stakeholder Engagement for MTPConnect.

February Perkins researcher Nikhilesh Bappoo established a bioengineering framework to better understand how evolving blood flow affects the developing structure and function of placenta vessels during pregnancy.

In a study led by Dr Gina Ravenscroft, Perkins researchers and colleagues at PathWest examined primary chronic intestinal pseudo-obstruction in patients and discovered that 40% of cases are caused by a gene known to affect gut muscle.

Rekhati Abhayawardana from the Molecular Endocrinology and Pharmacology lab was awarded funding for her investigation into treatments that could save patients from the life-threatening complications that can accompany type 2 diabetes.

March Research teams at the Perkins collaborated with researchers in Spain and Sweden to successfully identify the genetic mutation for the late-onset muscle weakening disease Myoglobinopathy.

Perkins clinical trials facility, Linear Clinical Research, ran a world-first study into the potential use of a cheap prescription drug to cure addiction.

A panel of special guests presented on breast cancer treatment, prevention and research at the Perkins Community Q&A 'Breast Cancer: The Full Story.'

April Perkins clinical trials facility, Linear Clinical Research, took part in a groundbreaking study on a potential new treatment for Alzheimer's disease.

May Perkins laboratory head Professor Girish Dwivedi and his team uncovered a link between heart failure and gut microbiome imbalance.

The Perkins Laboratory for Neurogenetic Diseases made a breakthrough in a lethal muscle disease Arthrogryposis Multiplex Congenita, finding that babies with the condition are paralysed and don't survive because nerves aren't signalling to the patient's muscles.

A major clinical study involving 5,000 patients commenced to determine whether the gout medication colchicine can also be used to reduce heart attacks in patients.

Nearly 500 women and men took to the streets for the 2019 Hawaiian Walk for Women's Cancer, raising almost \$850,000 for breast and ovarian cancer research at the Perkins.

While congenital muscular dystrophies most often present at birth, Perkins researcher Dr Macarena Cabrera-Serrano found that a muscular dystrophy caused by a mutation in the GMPPB gene can appear as a late onset condition, affecting adults with no abnormalities of the brain.

Nine wonderful 2019 Hike for Health participants walked 50km of the Great Wall of China to raise funds for medical research at the Perkins.

June Associate Professor Pilar Blancafort and Professor Anna Nowak were awarded funding for their research into gene editing technology as a means of turning off genes that can repair damage in cancer cells.

July In a study led by Cell Signalling laboratory head Associate Professor Evan Ingley, researchers identified a new sarcoma familial risk gene.

A promising drug that aims to turn off two cellular receptors that cause inflammation in the kidney was trialled in two new clinical studies at Linear Clinical Research. The drug was discovered by Professor Kevin Pflieger and his team and developed by Perkins spinout company Dimerix.

A panel of female doctors and researchers described their experiences working in science at the Perkins Community Q&A 'Wonder Women in Science.'

The annual Wesfarmers Harry Perkins Oration was held with special guest Professor Nadia Rosenthal giving a presentation entitled 'Regenerative medicine and the end of ageing'.

August Perkins laboratory head Dr Barry Doyle collaborated with researchers and biomedical engineers to develop a biomaterial to fill the problem area in type B aortic dissections.

September A team of Perkins researchers helped synthesise a missing enzyme in rare genetic condition McArdle's disease, which makes exercise hurt.

Perkins Community Q&A 'Genetic Diseases: Breaking the Code' was held with special guests discussing carrier screening, genetic counselling and the discovery of new disease causing genes.

October The Perth Running Festival entered its second year, starting and finishing at Optus Stadium, with the Perkins as sole charity beneficiary.

The 2019 MACA Cancer 200 Ride for Research saw nearly 1,000 incredible cyclists raise over \$5 million for cancer research at the Perkins.

November Perkins laboratory heads Professor Aleksandra Filipovska and Professor Oliver Rackham were appointed to leading roles in the new ARC Centre of Excellence in Synthetic Biology.

Perkins researcher Dr Juliana Hamzah and her team developed a new, non-toxic drug that can break down the stiff scar tissue around some cancers.

Vascular engineer Nikhilesh Bappoo from the Perkins VASCLab collaborated with researchers to design an imaging technique that can help doctors more successfully cannulate patients with difficult vascular access.

The Perkins Nedlands building opened its doors to visitors for the 2019 Open Day, 'Discover the Perkins.'

December Cancer Epigenetics laboratory head Associate Professor Pilar Blancafort was awarded a NHMRC Ideas Grant to develop a new approach to treat several types of unresponsive breast cancers.

Researchers at the Perkins helped to make a fundamental discovery about the regulation of genes in mitochondria, providing new insights into potential drug targets for diseases that involve energy loss.

The Perkins won two awards at the FIA WA end of year conference - the Marketing and Fundraising team were awarded FIA WA Fundraising Team of the Year, and Fundraising Manager Lauren McDermott was awarded FIA WA Young Fundraiser of the Year.

A combined effort

Our teams are working with researchers from all over the world to find new and better ways to improve health for our families and yours. Thank you for contributing to this important work.

Collaborating with cities in

Argentina, Australia, Austria, Belarus, Belgium, Brazil, Canada, China, Cyprus, Denmark, Finland, France, Germany, Greece, India, Ireland, Israel, Italy, Japan, Korea, Malaysia, The Netherlands, New Zealand, Norway, Pakistan, Poland, Portugal, Saudi Arabia, Serbia, Singapore, Spain, Sweden, Switzerland, UAE, UK and USA.



Collaborators in
145 cities
36 countries
5 continents.

Research highlights and achievements

Here's a snapshot of what you helped us to achieve in 2019.



128

investigations and discoveries published



17

new research grants & fellowships awarded



951

collaborations with international research talent



16

consumer buddies were actively involved in research projects



2,900

volunteers screened by our clinical trials staff



63,000

samples processed in groundbreaking clinical trials



800

clinical trial participants helping test new medicines



34

medical research seminars held to share knowledge



196,000

kilometres cycled by participants in the MACA Cancer 200 Ride for Research



21 million

steps to defeat breast and ovarian cancer in the Hawaiian Walk for Women's Cancer



29

community talks, teas and tours held



3

community Q&A presentations



2,885

students attended BioDiscovery classes



145

inspiring science workshops were held for young minds

Board of directors



The Hon Wayne Martin AC QC
Chair

Wayne Martin AC QC joined as Chair of the Perkins in December 2018. Mr Martin became the 13th Chief Justice of the Supreme Court of Western Australia in 2006. In 2012, he was appointed a Companion in the General Division of the Order of Australia. He has held many positions as Chair or Patron, and was also the Lieutenant Governor of Western Australia. He was appointed inaugural Chair of the Judicial Council on Cultural Diversity in 2013 and served in that capacity until 2017. He retired from the office of Chief Justice in July 2018.



Professor Peter Leedman
Director

Professor Leedman became Director of the Perkins in early 2014. He is head of the Laboratory for Cancer Medicine, Professor of Medicine at The University of Western Australia, an endocrinologist at Royal Perth Hospital, and is Chair of Linear Clinical Research Ltd. He is a graduate of the Australian Institute of Company Directors.



Mr Laurence Iffla

Mr Iffla has served as Non-Executive Director since March 2005 and was Chair of the Board from May 2009 to December 2018. He is a partner in the legal firm Iffla Wade and practices primarily in the area of commercial property law, State taxes and trusts, and joint ventures. Larry is the Non-Executive Deputy Chair of Perron Group.



Dr Stephen Davis

Dr Davis joined the Board in 2012. He is a Radiologist and Partner of Perth Radiological Clinic. He is a medical graduate of UWA, a Member of the Royal College of Physicians UK, and Fellow of the Australian and New Zealand College of Radiologists.



Mrs Jan Stewart PSM

Mrs Stewart joined the Board in February 2015. She was of CEO of Lotterywest from 1992 until December 2014. Mrs Stewart is a social worker by profession, having graduated from UWA with a Bachelor of Arts and a Master's Degree in Social Work. She is a graduate of the Australian Institute of Company Directors.



Mr Roger Port

Mr Port joined the Board in April 2015. He is Chair of the Perkins Audit and Risk Committee. He has 30 years' experience in financial analysis, company and business valuations, transaction due diligence and mergers and acquisitions, and led the PwC Perth Deals team for seven years. He is a Fellow of the Australian Institute of Company Directors, a Senior Fellow of the Financial Services Institute of Australasia and a Fellow of the Australian Institute of Company Directors. Roger is the Chair of Council of Guildford Grammar School and a board member of M G Kailis Holdings Pty Ltd and Eagle Mountain Mining Limited.



Mr John Barrington AM

Mr Barrington joined the board in 2019. Mr Barrington is co-founder and Executive Chairman of applied Artificial Intelligence healthcare company, Artrya. He is also Chair, Curtin School of Management Advisory Board and a Director of Creative Partnerships Australia and John Curtin Gallery. He recently stepped down from the Perth International Arts Festival Board which he chaired from 2015. He has more than 10 years' experience in the information technology industry as well as a sound knowledge of start-ups and commercialisation, which is particularly pertinent for the translation of research at the Harry Perkins Institute of Medical Research.



Professor Steve Wesselingh

Professor Wesselingh joined the Board in 2018. Professor Wesselingh is an Infectious Diseases Physician and researcher in Neurovirology, HIV and vaccine development. In October 2011 Professor Wesselingh took up the position as the inaugural Executive Director of the South Australian Health and Medical Research Institute (SAHMRI). Professor Wesselingh was previously Director of the Burnet Institute, an independent medical research institute specialising in infectious diseases, immunology and public health. He also served as Dean of the Faculty of Medicine, Nursing and Health Sciences at Monash University.



Professor Simon Biggs
Alternate Director

Professor Simon Biggs joined the Board in 2018. He is Senior Deputy Vice-Chancellor of The University of Western Australia (UWA), a role he commenced in March 2018. His portfolio responsibilities include Science; Health and Medical Sciences; Engineering and Mathematical Sciences; Arts, Business, Law and Education; Human Resources; and Innovation and Industry Engagement.

Ex-officio members

Professor Peter Thompson AM
Deputy Director

Mr Tony Spezzacatena
Chief Financial Officer

Ms Diana Forsyth
Chief Operating Officer

Ms Paige Gibbs
Chief Marketing Officer

Statement of Comprehensive Income

for the year ended 31 December 2019

OPERATING REVENUE	2019 (\$)	2018 (\$)
Event income	5,832,236	4,972,837
Facilities income	5,466,299	6,305,706
Operating grants and subsidies	5,851,744	5,022,698
Other operating income	1,833,251	1,176,014
Donations	3,314,571	1,261,061
Other income	51,313	158,735
	22,349,414	18,897,051
OPERATING EXPENSES		
Administrative, events and utilities expenses	(13,585,672)	(13,195,721)
Laboratory services expenses	(5,384,105)	(4,462,630)
Depreciation and amortisation	(6,620,638)	(7,322,434)
	(25,590,415)	(24,980,785)
Operating deficit	(3,241,001)	(6,083,734)
Finance income	504,086	590,914
Finance costs	(32,223)	(11,197)
Net deficit before taxes	(2,769,138)	(5,504,017)
Income tax expense	—	—
Net deficit after taxes	(2,769,138)	(5,504,017)
Other comprehensive loss		
Gain/(loss) on financial assets at FVOCI	111,663	(103,814)
Total comprehensive loss for the year	(2,657,475)	(5,607,831)

Statement of Financial Position

as at 31 December 2019

ASSETS	2019 (\$)	2018 (\$)
Cash and cash equivalents	28,170,853	25,386,219
Trade and other receivables	3,967,666	5,858,473
Prepayments	377,116	210,144
Inventories	53,130	40,194
	32,568,765	31,495,030
NON-CURRENT ASSETS		
Investment properties	862,424	862,424
Financial assets at fair value through OCI	1,473,061	1,348,931
Property, plant and equipment	112,125,323	117,213,393
Right-of-use assets	308,862	—
Investment in subsidiary	1	1
	114,769,671	119,424,749
TOTAL ASSETS	147,338,436	150,919,779
LIABILITIES		
Trade and other payables	(2,791,042)	(5,513,165)
Interest-bearing liabilities	(118,292)	—
Contract liabilities	(1,132,307)	(1,819,122)
Grants held in trust	(15,943,125)	(13,668,857)
Provision for employee entitlements	(550,399)	(436,832)
Non-interest bearing loans	(55,397)	(225,000)
	(20,590,562)	(21,662,976)
NON-CURRENT LIABILITIES		
Loan from related entity	(1)	(1)
Interest-bearing liabilities	(201,466)	—
Provision for employee entitlements	(86,040)	(83,563)
Non-interest bearing loans	—	(55,397)
	(287,507)	(138,961)
TOTAL LIABILITIES	(20,878,069)	(21,801,937)
NET ASSETS	126,460,367	129,117,842
Accumulated surplus	126,269,247	129,038,385
Asset revaluation reserve	191,120	79,457
TOTAL EQUITY	126,460,367	129,117,842

The Statement of Financial Position provided above, together with the attached Statement of Comprehensive Income, have been extracted from the audited special purpose financial statements of the Harry Perkins Institute of Medical Research and its controlled entities. The summary financial information reflects the activities of the Association only and does not include all the information and notes normally included in an audited financial report. The audited special purpose financial report can be obtained upon request to the Chief Financial Officer.

The audited financial report (from which the summary financial information has been extracted) has been prepared in accordance with the requirements of the *Associations Incorporation Act 2015*, *Australian Charities and Not-for-Profits Commission Act 2012* and *Regulations 2013*, Australian Accounting Standards and other authoritative pronouncements of the Australian Accounting Standards Board.

Thank you for your support in 2019.

Together, we are reaching toward the incredible medical solutions we know are possible and bringing them closer.

Harry Perkins Institute of Medical Research

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