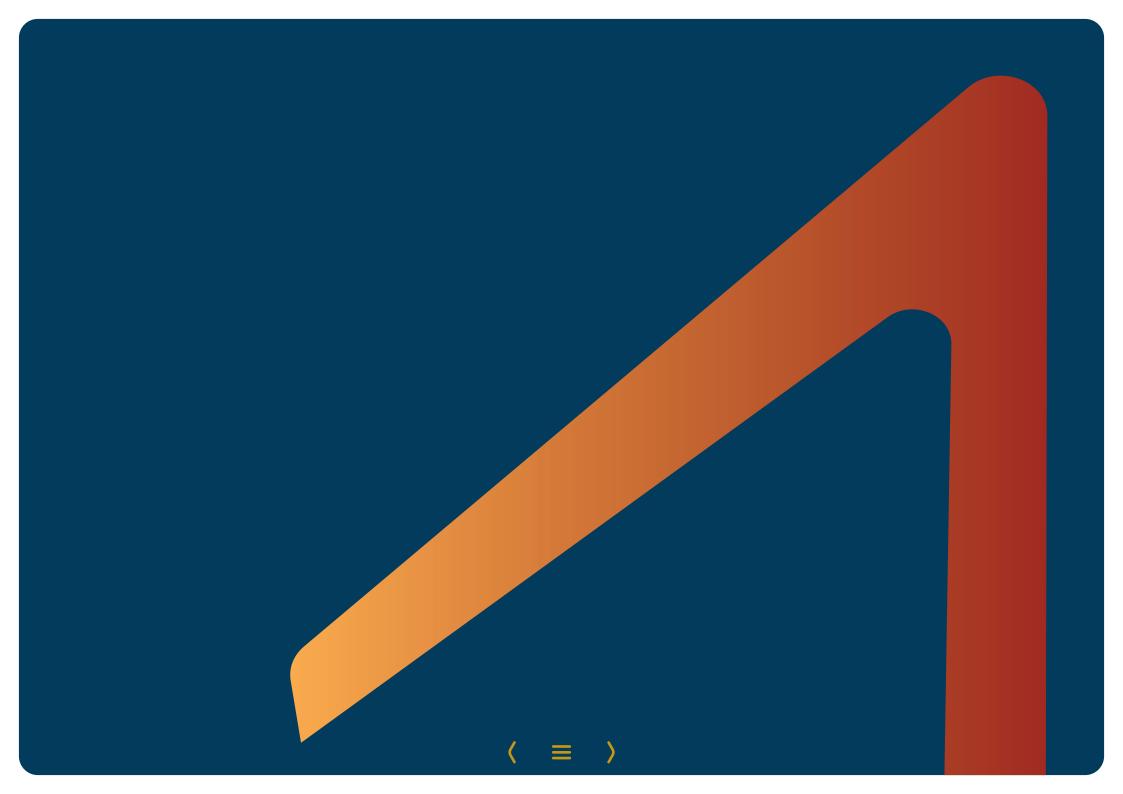


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Western Australian
Future Health Research and
Innovation Fund

Annual Report 2020–21





Statement of submission

Hon Stephen Dawson MLC Minister for Medical Research

Dear Minister

I submit for your information and submission to Parliament the annual report for the Western Australian Future Health Research and Innovation Fund for the financial year 2020–21. This report supplements the Department of Health Annual Report 2020–21, which includes details of how money standing to the credit of the Future Health Research and Innovation Account was applied during the financial year, in accordance with section 4E(6) of the *Western Australian Future Health Research and Innovation Fund Act 2012*.

John Van Der Wielen

Chairperson

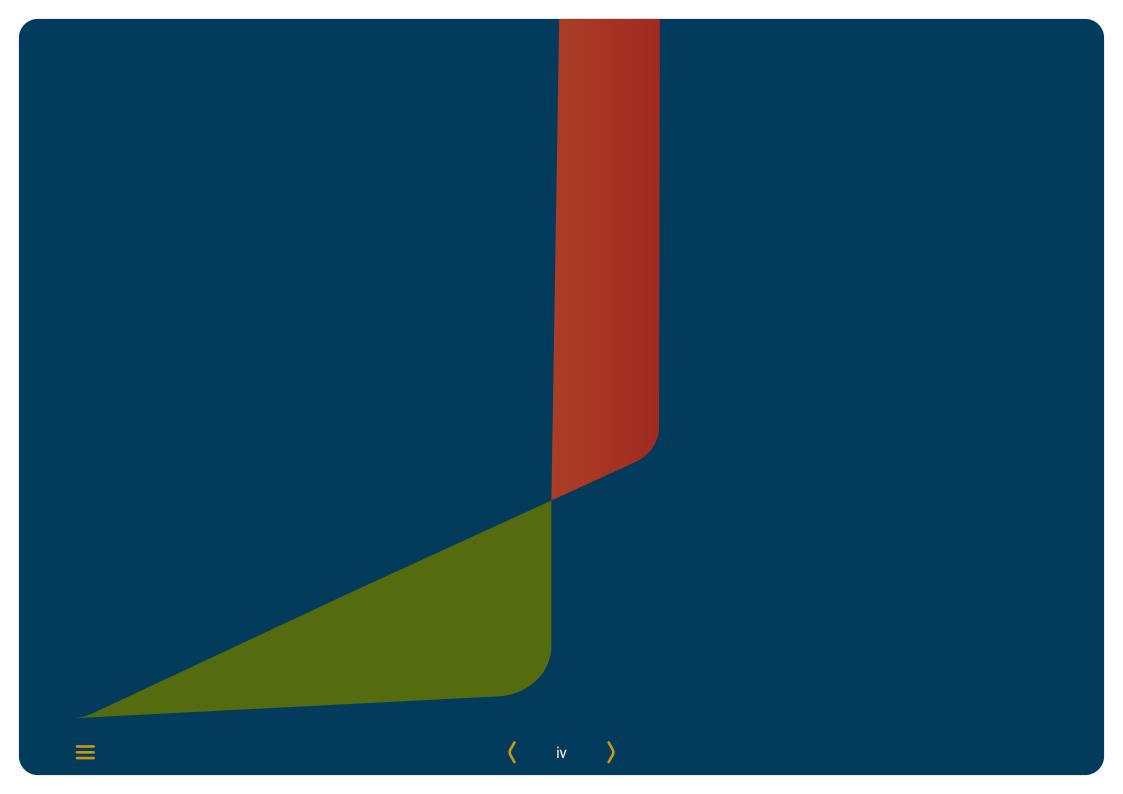
Future Health Research and Innovation Fund Advisory Council





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Chairperson's foreword

I am pleased to report on the activities of the Future Health Research and Innovation (FHRI) Fund for 2020–21.

The FHRI Fund became operational in June 2020, and this inaugural annual report is our opportunity to present the significant contributions of the FHRI Fund to the state's research and innovation sector.

The FHRI Fund provides a secure source of funding to drive WA health and medical research, innovation and commercialisation, and through these activities, improve the health and prosperity of all Western Australians as well as economic diversity to the WA economy.

The establishment of the FHRI Fund Advisory Council and the launch of the WA FHRI Fund Strategy 2020–2022: Activating research and innovation during 2020–21 marked foundational achievements in the evolution of the FHRI Fund.

The 9-member Advisory Council brings together a diverse range of experience and expertise, with representation from health, the medical research and innovation sectors, consumers, Aboriginal¹ and regional health, as well as the not-for-profit and business sectors. I have had the honour to work alongside these dedicated leaders as the council's first Chairperson.

The inaugural Strategy for the period 2020–2022 was developed by the Department of Health after extensive consultation with stakeholders and was released in October 2020, following approval by the Minister for Health. The Strategy provides direction for the FHRI Fund activities and lays the foundation for future strategic investment.

The Advisory Council provided high level advice to the Minister of Health and the Department of Health on health and medical research and innovation and made recommendations regarding FHRI Funding Priorities, Programs and Initiatives. They endorsed 6 research and 5 innovation FHRI Fund Priorities for 2020–21, which were approved by the Minister for Health in December 2020.

These Priorities targeted investment in foundational activities to build the capability and capacity of the WA health and medical research and innovation sectors. An additional Priority, which was defined in the legislation, was for research and innovation related to human coronaviruses with pandemic potential (such as the virus that causes the COVID-19 disease).

The 2020–2022 Strategy and 2020–21 Priorities guided the development of Programs and Initiatives and provided the basis for the Advisory Council's recommendations to the Minister for Health. The Department of Health was then responsible for their implementation and management.

Eleven Programs and Initiatives were implemented with \$23 million awarded from 6 of those Programs and Initiatives by the end of 2020–21.

- Biobank Interim Support Program
- Clinical Trials and Data Management Centre
- Clinician Research Fellowships
- FHRI Focus Grants: COVID-19
- Implementation Science Fellowships
- Medical and Health Research Infrastructure Fund
- National Collaborative Research Infrastructure Strategy National Imaging Facility
- Research Institute Support
- Research Translation Projects
- Translation Fellowships
- WA Near-miss Awards.

¹ Within Western Australia, the term Aboriginal is used in preference to Aboriginal and Torres Strait Islander, in recognition that Aboriginal people are the original inhabitants of Western Australia. No disrespect is intended to our Torres Strait Islander colleagues and community.

These Programs and Initiatives aimed to increase the capacity and capability of the sector including through supporting emerging WA researchers to increase their competitiveness in obtaining national competitive funding, providing co-funding for human research imaging infrastructure, and implementing a co-funding arrangement with the Raine Medical Research Foundation to provide clinician research fellowships.

The first FHRI Fund Program implemented, the FHRI Focus Grants: COVID-19 Program, awarded almost \$6 million to local researchers and innovators to address the diverse health and wellbeing challenges related to the COVID-19 emergency. The funding supported 18 projects to provide critical insights into SARS-CoV-2 infection and broader issues arising from the pandemic.

The value of community and consumer involvement in research and innovation was integral in the development of the Strategy, the Priorities, and the Programs and Initiatives. This was guided by the Consumer and Community Involvement Coordinator in the Research and Innovation Office at the Department of Health, with this role supporting, and advocating for, the involvement of people with lived experiences at all stages of the research and innovation journey.

I would like to take this opportunity to thank all those involved with the FHRI Fund and their ongoing commitment to supporting health and medical research and innovation in WA. The first year of the FHRI Fund has been challenging and rewarding in equal measure, but early successes have been realised and I am confident that a solid foundation has been laid to build upon in years to come.

I hope you enjoy the inaugural FHRI Fund Annual Report and I look forward to sharing more success in the future.

John Van Der Wielen

Chairperson, Future Health Research and Innovation Fund Advisory Council

At a glance



Research and Innovation Priorities approved by the Minister for Health



Introduction

Research and innovation can improve health care and wellbeing through advancements in health and medical knowledge, policy and practice, and by contributing to the attraction and retention of a high calibre health and medical workforce.

The FHRI Fund provides a secure source of funding to support health and medical research, innovation and commercialisation.

The FHRI Fund aims to:

- improve the financial sustainability of Western Australia's health system
- improve the health and wellbeing of Western Australians
- improve WA's economic prosperity
- advance WA to being, or maintaining WA's position as, a national or international leader in research and innovation activities.

Research and innovation often occur together, but this is not always the case, and commercialisation may result from either. Therefore, the FHRI Fund has a broad remit to support the full spectrum of research, innovation and commercialisation activities within WA, but targets Priority areas that have the greatest potential to further the aims of the Fund.

Further information on the FHRI Fund is presented in Appendix 1.

Information on the Department of Health's responsibilities are outlined in Appendix 2.



Governance

Overview

The governance model for the Future Health Research and Innovation (FHRI) Fund has several components.

The essential governance requirements are set out in the *Western Australian Future Health Research and Innovation Fund Act 2012* (the Act). Other governance provisions are outlined in the accompanying governance framework <u>Western Australian Future Health Research and Innovation Fund Governance Framework</u>, while the funding principles guide the design, implementation and measurement of benefits from Programs and Initiatives. Policies and processes guide the day-to-day operation of the FHRI Fund.

The key governance-related provisions in the Act include the following:

- The Minister for Health must establish and maintain an Advisory Council for the FHRI Fund.
- The Minister for Health must seek recommendations from the Advisory Council on how money in the FHRI account is applied and must consider the recommendations the Advisory Council provides.
- There will be a governance framework, which sets out the requirement for a Strategy and Priorities for funding.
- Transparency is assured by requiring that the governance framework, the Strategy and Priorities, recommendations sought and received by the Minister for Health from the Advisory Council, and all funding awarded are tabled in Parliament and published on the FHRI Fund website.
- The Advisory Council must address conflicts of interest and include the steps to be taken if the member has any actual, perceived or potential material conflict of interests.
- overseeing evaluations of the performance and benefits of the FHRI Fund and presenting these to the Minister.

Future Health Research and Innovation Fund Advisory Council

Governance documents

The Future Health Research and Innovation Fund Advisory Council is committed to upholding high standards of integrity. It is guided by the Act, the Governance Framework, its own governing documents and, where applicable, Public Sector Commission policies.

The 4 main Advisory Council governance documents are:

- 1. Advisory Council Charter
- 2. Advisory Council Code of Conduct
- 3. Advisory Council Conflicts of Interest Policy
- 4. Advisory Council Gifts, Benefits and Hospitality Policy.

The Advisory Council's Code of Conduct has been developed in alignment with the Public Sector Commission's <u>Conduct Guide for Public Sector Boards and Committees</u>. The development of the Charter, Conflicts of Interest Policy and the Gifts, Benefits and Hospitality Policy have been based on relevant policies and guidelines published by the Public Sector Commission, the Department of Health's policy, procedures and integrity-related expertise and those for health service providers (HSPs) and other organisations.



Roles and responsibilities

The Act requires the responsible Minister to establish and maintain an independent Advisory Council. The Advisory Council of eminent individuals oversees the FHRI Fund and provides high-level strategic advice to the Minister and the Department of Health. It is responsible for:

- developing the Strategy and the Priorities for the FHRI Fund (noting that the Advisory Council was not formed in time to develop the inaugural Strategy and Priorities)
- developing and implementing assurance measures to ensure that Programs and Initiatives align with the Priorities
- ensuring that funding selection processes are conducted appropriately.

Accordingly, membership of the Advisory Council has been designed to minimise conflicts of interest and comprise a diverse range of experience and knowledge. The Act requires that the Advisory Council consist of the following members:

- a person with experience representing the community
- a person considered to be expert in research
- a person considered to be expert in innovation
- at least 3 other individuals whom, taken together, the Minister considers will provide a suitable blend of expertise and experience
- the Director General of the Department of Health, or nominee (non-voting)
- the Chief Executive Officer, or nominee, of another state government department that the Minister considers is most relevant to the needs of the FHRI Fund (non-voting).

At least one of the Advisory Council members will have experience in dealing with issues related to Aboriginal health. This is in recognition of the complex health issues that currently face Aboriginal people and communities in WA. Under the governance framework, it is preferred that this member will be an Aboriginal person.

At least one member of the Advisory Council will have significant experience in, or knowledge of, country and regional WA health issues.

Membership

In October 2020, the Minister for Health announced the make-up of the Advisory Council for the FHRI Fund.

The 9-member council is chaired by Mr John Van Der Wielen, HBF Health Limited, Chief Executive Officer (CEO).

The other members are:

- Dr Glenn Begley CEO, BioCurate
- Mr Kane Blackman Commission Secretary, Insurance Commission WA
- Professor Sandra Eades Dean of Medicine, Curtin University.
- Associate Professor Dale Fisher CEO, Silver Chain Group, Adjunct Professor at Monash and Swinburne Universities
- Professor Christina Mitchell AO Dean of the Faculty of Medicine Nursing and Health Sciences, Monash University
- Mrs Vicki O'Donnell CEO, Kimberley Aboriginal Medical Services Ltd
- Dr James Williamson Nominee of the Director General of the WA Department of Health (non-voting)
- Professor Peter Klinken AC Nominee of the Director General of the WA Department of Jobs, Tourism, Science and Innovation (non-voting).

The members bring a diverse range of experience and expertise to the Advisory Council with consumer, Aboriginal and regional health representation as well as representation from the not-for-profit, business and health and medical research and innovation sectors.

Biographies of Advisory Council members are available on the <u>FHRI Fund website</u>.



Mr John Van Der Wielen Advisory Council Chair



Professor Sandra Eades Advisory Council member



Ms Vicki O'Donnell Advisory Council member



Dr Glenn BegleyAdvisory Council member



Associate Professor Dale Fisher
Advisory Council member



Dr James Williamson
Advisory Council member (non-voting)
Nominee of the Director General
of the WA Department of Health



Mr Kane Blackman Advisory Council member



Professor Christina Mitchell AO Advisory Council member



Professor Peter Klinken AC
Advisory Council member (non-voting)
Nominee of the Director General of the
WA Department of Jobs, Tourism,
Science and Innovation

Appointment terms

The Minister is responsible for appointing members to the Advisory Council and setting the conditions for a member's appointment. A member may be appointed for a term of up to 5 years and may be reappointed.

The appointment terms for the Advisory Council are shown in Table 2 and range from 2 to 5 years.

Meetings

During 2020–21, the Advisory Council held 3 ordinary meetings, one innovation workshop and one strategic planning day (see Table 1):

- 30 November 2020 Ordinary meeting
- 14 January 2021 Innovation workshop
- 22 February 2021 Ordinary meeting
- 15 April 2021 Strategic planning day
- 28 June 2021 Ordinary meeting

Remuneration

The Act provides that members, other than those who are public sector employees, may be remunerated to an amount, determined by the Minister, based on the recommendation of the Public Sector Commissioner. Such remuneration and all other expenses and costs that are reasonably incurred by the Advisory Council in the performance of its functions are paid for by the Department of Health and is not drawn from the FHRI account.

The total remuneration paid to Advisory Council members for 2020–21 was \$12,952 (Table 2).

Table 1: Attendance

John Van Der Wielen (Chairperson)	Attendance at 3 ordinary meetings, the innovation workshop and the strategic planning day.
Dr Glenn Begley (Member)	Attendance at 2 ordinary meetings, the innovation workshop and the strategic planning day.
Kane Blackman (Member)	Attendance at 3 ordinary meetings, the innovation workshop and the strategic planning day.
Prof Sandra Eades (Member)	Attendance at one ordinary meeting, the innovation workshop and the strategic planning day.
Associate Prof Dale Fisher (Member)	Attendance at 3 ordinary meetings, the innovation workshop and the strategic planning day.
Prof Christina Mitchell AO (Member)	Attendance at 3 ordinary meetings, the innovation workshop and the strategic planning day.
Vicki O'Donnell (Member)	Attendance at one ordinary meeting.
Prof Peter Klinken AC (Member, non-voting February to June 2021)	Attendance at one ordinary meeting and the strategic planning day. Attended as a guest at the innovation workshop.
Richard Sellers (Member, non-voting November 2020 to January 2021)	Attendance at one ordinary meeting and the strategic planning day. Attended as a guest at the innovation workshop.
Dr James Williamson (Member, non-voting)	Attendance at 2 ordinary meetings, the innovation workshop and the strategic planning day. Attended as a guest for the inaugural ordinary meeting.

Table 2. Future Health Research and Innovation Fund Advisory Council terms of appointment and remuneration.

Position	Name	Term of appointment	Period of membership 2020–21	Type of remuneration	Base salary/sitting fees	Gross/actual remuneration ²
Chair	John Van Der Wielen Appointed as Chair and under section 4G(3)(f) of the Act (one of 3 or more members who, taken together, the Minister considers have a suitable variety and level of expertise and experience).	3 years to October 2023	9 months	Sessional	\$1,270 for meetings over 4 hours, \$825 for meetings of 4 hours or less	\$3,745
Member	Dr Glenn Begley Appointed as an expert in innovation under section 4G(e) of the Act.	3 years to October 2023	9 months	Sessional	\$825 for meetings over 4 hours, \$537 for meetings of 4 hours or less	\$2,436
Member	Kane Blackman Appointed as a community representative under section 4G(c) of the Act.	5 years to October 2025	9 months	Not eligible in 2020–21	Not applicable	\$0
Member	Prof Sandra Eades Appointed for her experience in dealing with issues relating to the health of Aboriginal people living in WA and under section 4G(3)(f) of the Act.	5 years to October 2025	9 months	Sessional	\$825 for meetings over 4 hours, \$537 for meetings of 4 hours or less	\$1,899
Member	Associate Prof Dale Fisher Appointed under section 4G(3)(f) of the Act.	3 years to October 2023	9 months	Sessional	\$825 for meetings over 4 hours, \$537 for meetings of 4 hours or less	\$2,436

² A meeting was held at the end of June 2021 but the remuneration was paid after the financial year and is not included in this annual report.





Position	Name	Term of appointment	Period of membership 2020–21	Type of remuneration	Base salary/sitting fees	Gross/actual remuneration ²
Member	Prof Christina Mitchell AO Appointed as an expert in research under section 4G(d) of the Act.	5 years to October 2025	9 months	Sessional	\$825 for meetings over 4 hours, \$537 for meetings of 4 hours or less	\$2,436
Member	Vicki O'Donnell Appointed for her experience in dealing with issues relating to the health of people living in regional WA and under section 4G(3)(f) of the Act.	2 years to October 2022	9 months	Sessional	\$825 for meetings over 4 hours, \$537 for meetings of 4 hours or less	\$0 ³
Member non-voting	Director General, Department of Health or nominee	Ongoing	9 months	Not eligible	Not applicable	\$0
Member non-voting	Director General, Department of Jobs, Tourism, Science and Innovation or nominee (Non-voting appointment who the Minister considers is, apart from the Department of Health, the department most closely involved with research and innovation, or a nominee).	Ongoing	9 months	Not eligible	Not applicable	\$0
	Total				Total	\$12,952

³ Due to an administrative error, a payment was made in relation to the January 2021 meeting. The overpayment was recovered in the 2021–22 financial year. This payment amount is not included in Table 3.

Evaluation

A high-level evaluation framework was prepared by the Research and Innovation Office to encompass the evaluation of the Strategy, Priorities, Programs and Initiatives and the FHRI Fund Program overall.

Objectives of the evaluation framework are to:

- set out a defined structure for the way evaluations are planned, conducted and implemented that is evidence-based, measurable and relevant
- use evaluation findings to inform decision-making and assess whether the FHRI Fund allocations are appropriate, effective and efficient
- ensure a transparent and coordinated approach to evaluations
- outline the roles and responsibilities relating to evaluations
- support accountability, inform improvements and prioritise investments.

The following thematic areas have been identified, for which key metrics will be sought or developed for evaluation of the FHRI Fund:

- patient and community outcomes
- academic outcomes
- research and innovation workforce benefits
- translation and implementation outcomes
- health system benefits
- commercial and financial benefits.

Strategic direction

Strategy

To fully realise the aims of the FHRI Fund, a coordinated, strategic approach is required.

The inaugural <u>WA FHRI Fund Strategy 2020–2022</u>: <u>Activating research and innovation</u> (the Strategy) provides a vision for the FHRI Fund, and strategic themes that should be targeted to achieve this vision.

The Strategy was developed through extensive research, analysis of national and international best practice, alignment with relevant reports and other strategies, and substantial stakeholder consultation. The Strategy was tabled in both Houses of the WA Parliament on 3 November 2020.

Development of the inaugural Strategy was undertaken by the Department of Health, but the Advisory Council will lead development of future strategies. Strategies are approved by the responsible Minister.

The vision of the Strategy is to be a global centre for research and innovation excellence, advancing the health and prosperity of the WA community.

The Strategy lays the foundations for strategic investment that can contribute to the growth of the WA health and medical research and innovation ecosystem.

Disbursements from FHRI Fund investment income will be via Programs and Initiatives which are developed in accordance with the Strategy and the defined Priorities. This ensures that public money will be effectively applied to support health and medical research and innovation.

The importance of involving consumers and the community has been recognised in the development of the Strategy, the Priorities and the Programs and Initiatives. The development of the inaugural Strategy and Priorities has included input from consumers, the community and the consumer and community involvement (CCI) coordinator. The CCI coordinator is based in the Research and Innovation Office, Department of Health, and aims to better connect health consumers to research and innovation. Consumers and the community play a key role in ensuring that research and innovation is translatable to the needs of people who use, or otherwise interact with, the WA health system or will benefit from health promotion policies.

The inaugural Strategy does not seek to identify diseases, conditions, population groups or disciplines but rather includes themes and objectives that are of relevance to increasing the capability and capacity of the WA health and medical research and innovation sector.

Themes

The 4 strategic themes are:

- 1. People
- 2. Partners
- 3. Platforms
- 4. Policy

Objectives have been identified within each theme that are of strategic significance to contemporary research and innovation in WA (See Figures 1 to 4).

Figure 1: Theme 1 People

Build capability through education and training that will enable WA researchers and innovators to perform at the highest level, and that will involve consumers and the community Provide opportunities for researchers BI and innovators to build long, productive and diverse careers in WA Theme 1: Support and empower outstanding and emerging researchers and innovators People to achieve sustained excellence and to drive the research and innovation agenda in WA Enable pathways for exchange among health, academic, community, commercial and public sectors to identify D new research and innovation initiatives and contribute to evidence-based health care and disease prevention

- Boost research and innovation skills and opportunities for the health and medical workforce.
- Support the development of consumer and community involvement in research and innovation.
- Promote uptake of education and training programs to ensure maximum benefit to the academic, health and community sectors.
- Enhance skills in innovation, commercialisation, data analytics, software programming, information technology, artificial intelligence and machine learning.
- Provide research and innovation career opportunities for all interested health and medical professionals.
- Identify and support non-academic career pathways for highly skilled technicians and support staff.
- Increase pathways for researchers and innovators to forge careers in private industry, the non-government sector and the public service.
- Incentivise WA researchers and innovators to hone their skills in leading international institutions and bring these skills back to the State.
- Encourage emerging researchers and innovators to be coordinating principal investigators on funding applications.
- Develop and implement selection processes that ensure early- and mid-career researchers and innovators are competitive for funding.
- Identify policies that ensure early- and mid-career researchers have opportunities to drive the research and innovation agendas in WA.
- Support mentorship opportunities for WA health and medical researchers and innovators.
- Support the development of WA research and innovation leaders.
- Target high-performing researchers and innovators in WA and abroad to boost long-term capacity in strategically important areas.
- Identify systems or processes that facilitate exchange among sectors in a way that is sustainable in the long term.
- Identify opportunities to embed researchers, innovators, consumers and the community in policy, practice and industry environments and vice versa.

Figure 2: Theme 2 Partners

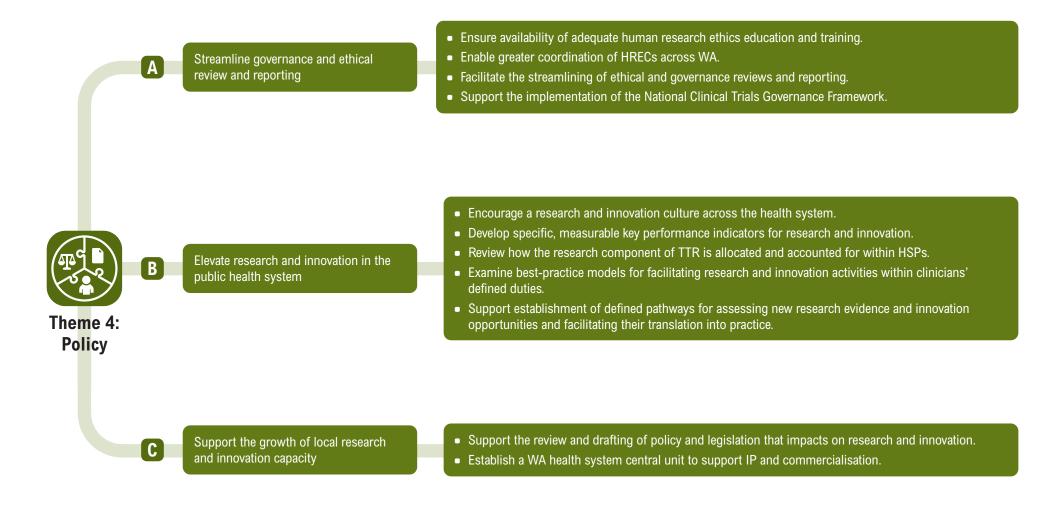


Figure 3: Theme 3 Platforms



Biobanking.

Figure 4: Theme 4 Policy



Priorities

The Strategy provides a high-level vision and objectives for research and innovation in WA and forms the basis from which the Priorities are derived. A Priority is an approach, need or opportunity that has been determined to be critical to achieving the vision of the Strategy.

The Priorities are developed by the Advisory Council and approved by the responsible Minister. The Advisory Council also provides advice on how investment income will be allocated across the Priorities.

In 2020–21, potential Priorities related to the Strategy were prepared by the Department of Health based on extensive consultation. After due consideration the Advisory Council provided recommendations which were approved by the Minister for Health.

The 6 approved research Priorities for 2020–21 were:

- Provide cash commitments for submission to major competitive co-funding Programs, making WA-led applications more competitive and, therefore, increasing the state's share of national and international competitive funding.
- 2. Support research translation to foster a vibrant research translation culture in the public health system, facilitate quantifiable buy-in from health system leadership and improve patient care and outcomes.
- Build capacity in the collection, analysis and communication of health data to facilitate translational research projects aimed at producing health benefits for individuals and their families and improving the health system.
- 4. Provide opportunities for all clinicians to undertake research, helping them to build a long-term research career and provide opportunities to rapidly translate findings into better healthcare.
- 5. Determine a biobank model that meets WA research and innovation needs and that represent international best practice.
- 6. Enhance clinical trial capacity and expertise to improve the quality of clinical trials in WA and make the state more attractive to funders of clinical trials (grant funding and commercial sponsors).

The 5 approved innovation Priorities for 2020–21 were:

- Establish an innovation seed fund to support early stage ideas, which will attract at least 1:1 co-funding from other partners and will enable these innovative ideas to secure follow-on funding from commercial and/or other funders.
- 2. Provide funding for innovation partnerships that include health system employees, to encourage projects focused at health system Priorities and aid the quicker translation into clinical and diagnostic practice.
- 3. Target high-performing innovators in WA to secure the state's long-term prominence in strategically important areas.
- 4. Provide mentoring support for early and mid-career innovators, helping them to achieve independence more quickly and improving the quality and capacity of innovation in WA.
- 5. Enhance skills in innovation (including commercialisation), which will advance the quality and capacity of innovation in WA and help innovators to obtain funding to support their work.

In addition, for the 2020–21 financial year, the legislation provided that special Priority be given to research and innovation related to human coronaviruses with pandemic potential (such as the virus that causes the COVID-19 disease). Programs and Initiatives developed to fulfil this provision did not need to align with the FHRI Fund Strategy or Priorities.

Programs and Initiatives

A Program or Initiative is a mechanism through which funding is directed to a specific purpose and contributes to achieving one or more of the Priorities.

Programs and Initiatives are approved by the responsible Minister based on the recommendation of the Advisory Council.

The Department of Health is responsible for developing, implementing and managing Programs and Initiatives, with assistance from Expert Committees as appropriate. The Advisory Council will oversee the Programs and Initiatives and assure they have been developed and implemented appropriately and align with the Priorities.





As 2020–21 was the inaugural year for provision of funding from the FHRI Fund, the Advisory Council recommended to the Minister that previous Department of Health Programs continue for 2020–21 to provide the opportunity for the Advisory Council to consider evaluation data and to decide if they would continue, be modified or cease from 2021–22.

Further Programs and Initiatives were recommended by the Advisory Council

and approved by the Minister to address 2020–21 FHRI Fund Priorities (See Table 3).

In total, 13 Programs and Initiatives were approved by the Minister for Health, with 11 of these implemented in 2020–21 and 2 deferred to 2021–22.

The FHRI Focus Grants: COVID-19 was the only Program implemented in 2020–21 in accordance with the legislated coronavirus Priority.

Table 3: Programs and Initiatives developed in response to Priorities

Program or Initiative	Priority
Biobank Interim Support Program	Determine a biobank model that meets WA research and innovation needs and that represents international best practice
Clinical Trials and Data Management Centre	Previous Department of Health Program (approved as a transitional measure)
Clinician Research Fellowships	Previous Department of Health Program (approved as a transitional measure)
Consumer and Community Involvement in Research Data Scheme (not implemented in 2020–21)	Build capacity in the collection, analysis and communication of health data to facilitate translational research projects aimed at producing health benefits for individuals and their families and improving the health system
FHRI Focus Grants: COVID-19	Defined in legislation
Implementation Science Fellowships	Support research translation to foster a vibrant research translation culture in the public health system, facilitate quantifiable buy-in from health system leadership and improve patient care and outcomes
Major External Grants Support Program (not implemented in 2020–21)	Provide cash commitments for submission to major competitive co-funding Programs, making WA-led applications more competitive and, therefore, increasing the state's share of national and international competitive funding
Medical and Health Research Infrastructure Fund	Previous Department of Health Program (approved as a transitional measure)
National Collaborative Research Infrastructure Strategy – National Imaging Facility	Provide cash commitments for submission to major competitive co-funding Programs, making WA-led applications more competitive and, therefore, increasing the state's share of national and international competitive funding

Program or Initiative	Priority
Research Institute Support	Previous Department of Health Program (approved as a transitional measure)
Research Translation Projects	Previous Department of Health Program (approved as a transitional measure)
Translation Fellowships	Support research translation to foster a vibrant research translation culture in the public health system, facilitate quantifiable buy-in from health system leadership and improve patient care and outcomes
WA Near-miss Awards	Previous Department of Health Program (approved as a transitional measure)

Sustainable Health Review

The Sustainable Health Review (SHR): Final Report was released in April 2019 to guide the WA health system to deliver patient-orientated, innovative and sustainable health care into the future.

The SHR provides a blueprint for the development of our health system over the coming years and recognises the importance of research and innovation in addressing that challenge.

The SHR Final Report identifies 8 Enduring Strategies to progress the WA health system's sustainability agenda. These are:

- 1. Commit and collaborate to address major public health issues.
- Improve mental health outcomes.
- Great beginnings and a dignified end of life.
- Person-centred, equitable, seamless access.
- Drive safety, quality and value through transparency, funding and planning.
- Invest in digital health care and use data wisely.
- Culture and workforce to support new models of care.
- Innovate for sustainability.

In total, 30 recommendations for how the Enduring Strategies can be addressed are identified. Of these, 2 recommendations have an explicit research and innovation focus. These are:

- 1. **Recommendation 28** Establish a systemwide network of innovation units in partnership with clinicians, consumers and a wide range of partners to quickly develop, test and spread Initiatives delivering better patient care and value.
- 2. **Recommendation 29** Ensure that future research activities and investments are linked to the Priorities of the WA health system and are actively translated into practice.

The FHRI Fund is identified as a critical vehicle to achieve the aims of the WA Government SHR Recommendations 28 and 29.

Programs and Initiatives

Selection processes

In 2020–21, 11 Programs and Initiatives were developed and implemented, with grants awarded for 6 of these within the 2020–21 period. As applicable for each Program or Initiative, one of the following selection processes was utilised to determine recipients of funding:

- Selection based on assessment criteria: Applicants apply in an open process that has fixed opening and closing dates. Eligible applications are reviewed by Expert Committees against defined assessment criteria with this informing the selection of funding recipients.
- Selection based on measures of excellence: Applicants apply via an open process that has fixed opening and closing dates. Eligible applications receive funding based on a 'research excellence' measure, such as the amount of nationally and internationally competitive, peer-reviewed, grant income they have received.
- Direct selection: An opportunity is identified where a specific institution is the suitable provider.

Expert Committees

The Research and Innovation Office establishes Expert Committees to support the Advisory Council, the Minister and the Department of Health, as required.

During 2020–21, Expert Committees were established to provide advice on specific issues on an as needed basis for Programs and Initiatives and the assessment of proposals for funding (review panels). Expert Committees are normally time-limited and each has a clearly defined scope, as well as more general terms of reference related to conflicts of interest and ethical conduct.

The following Expert Committees were active during 2020–21:

- FHRI Fund Prioritisation Expert Panel
- Innovation Expert Advisory Group
- Review Panels:
 - FHRI Focus Grants: COVID-19 Review Panels
 - · Research Translation Projects Review Panel.

The names and institutional affiliation(s) of committee members are shown in Appendix 3. The specific activities in which individuals participated have not been disclosed to preserve the independence of the selection processes. Individuals who have not provided consent for their name and affiliation to be published in this Annual Report have not been included in the list. It is noted that some individuals may have participated in more than one committee.

FHRI Fund Prioritisation Expert Panel

The purpose of this group was to identify potential funding Priorities for the FHRI Fund, which were subsequently considered by the Advisory Council. The group was comprised of researchers, academics, HSPs and consumer representatives.

Innovation Expert Advisory Group

The purpose of the Innovation Expert Advisory Group is to provide advice to the Research and Innovation Office, based on their innovation knowledge and expertise, in the development of innovation activities relevant to the operation of the FHRI Fund. The term of membership is for a period of 3 years.

Review panels

Review panel Expert Committees are required for FHRI Fund Programs and Initiatives which provide grants on a competitive basis. To assist with identifying suitable panel members, nominations are sought from people who are interested in being a reviewer in an application assessment process via the FHRI Fund <u>registration page</u>.

There are no prerequisites for nominating, other than having an active interest in health and medical research and innovation. People with lived experience (consumer representatives) are encouraged to nominate, as are researchers, innovators, clinicians and policymakers.

In 2020–21, 248 people registered their interest in contributing to FHRI Fund peer review processes.

When a competitive review process is required for a FHRI Fund Program or Initiative, the FHRI Fund website nominees are considered to determine those who have the skills and experience best suited to the opportunity and selected nominees are contacted to confirm their availability. Where specialist expertise is required, persons may also be approached by the Research and Innovation Office to invite participation.

Factors such as gender, career stage and employing organisations are taken into consideration when selecting nominees to ensure diversity and fair representation across review panels to mitigate the impact of bias.

Consumer representatives who participate in a review process may be eligible to be paid an honorarium, however other members are not paid for this activity.

In 2020–21, 2 review panels were established. Further information on each is provided below:

FHRI Focus Grants: COVID-19 Review Panels

The purpose of these panels was to review and score applications to the FHRI Focus Grants: COVID-19 Program. There were 3 peer review panels formed, with panel members having experience in fields such as epidemiology, virology, immunology, mental health, innovation, basic science and the consumer perspective.

Research Translation Projects Review Panel

The purpose of this panel was to select successful applicants to the Research Translation Projects Program. The panel comprised experienced researchers, experts and consumer representation.

Grants awarded

A total of \$22,725,406 in FHRI Fund grants was awarded in the 2020–21 financial year.

A breakdown of the outcomes for the relevant Programs and Initiatives is shown in Table 4. For other 2020–21 Programs and Initiatives the grant recipient selection processes were still in progress at the end of 2020–21 and these details will be included in the 2021–22 report.

Appendix 4 provides a further breakdown of the grants for the different Programs and Initiatives.

Table 4. FHRI Fund grants awarded in the 2020–21 financial year

Program/Initiative	Grants	Funding
Biobank Interim Support Program	Not awarded in 2020–21	Not awarded in 2020–21
Clinical Trials and Data Management Centre	1	\$212,500
Clinician Research Fellowships	Not awarded in 2020–21	Not awarded in 2020–21
FHRI Focus Grants: COVID-19	18	\$5,988,011
Implementation Science Fellowships	Not awarded in 2020–21	Not awarded in 2020–21
Medical and Health Research Infrastructure Fund	126	\$6,425,466
NCRIS – National Imaging Facility	1	\$2,311,407
Research Institute Support	6	\$2,754,655
Research Translation Projects	Not awarded in 2020–21	Not awarded in 2020–21
Translation Fellowships	Not awarded in 2020–21	Not awarded in 2020–21
WA Near-miss Awards	45	\$5,033,367
Total		\$22,725,406

An outline of the aims of the Programs and Initiatives with grants awarded in 2020–21 is provided below.

Clinical Trials and Data Management Centre

A grant of \$212,500 was provided to the WA Health Translation Network Clinical Trials and Data Management Centre to support its activities. The Centre aims to enhance clinical trials and management of related data in WA including building the research capacity of clinical trial researchers.

FHRI Focus Grants: COVID-19

Nearly \$6 million was awarded to local researchers and innovators in an open and competitive selection process, to address health and wellbeing challenges related to the COVID-19 emergency.

The funding was awarded to 18 projects across 3 separate streams:

- Research Grants 10 projects valued at \$2,107,830
- Innovation Grants 3 projects valued at \$147,420
- Infrastructure Grants 5 projects valued at \$3,732,761.

The successful applications highlighted the wide range of research underway across WA with the potential to provide important new insights into the SARS-CoV-2 virus, and challenges arising from the COVID-19 emergency.

Medical and Health Research Infrastructure Fund

Grants totalling \$6.4 million were awarded to 126 high-performing WA researchers from 14 administering institutions under this Program.

The Medical and Health Research Infrastructure Fund aims to promote excellence in health and medical research by funding high-performing researchers.

Funding was awarded to eligible applicants in accordance with a measure of excellence based on success in securing grants, above a defined threshold amount, from the National Health and Medical Research Council (NHMRC), or funding bodies of a similar standing.

The grants are used to help cover the indirect expenses associated with research, which could include the costs of operational expenses, equipment or administrative support.

National Collaborative Research Infrastructure Strategy – National Imaging Facility

The FHRI Fund contributed \$2.31 million, as a direct grant, to a successful statewide bid for cutting-edge human research imaging infrastructure from the <u>National Imaging Facility</u> (NIF).

The NIF is a collaborative network, funded under the <u>Australia Government's National Collaborative Research Infrastructure Strategy</u>, that provides state-of-the-art imaging and analysis capabilities for humans, animals, plants and materials.

The FHRI Fund contribution was leveraged to secure approximately \$7 million in NIF infrastructure, including a positron emission tomography/computed tomography instrument (PET/CT, often referred to as a 'PET scanner') and good manufacturing practice (GMP)-level radiochemistry facilities dedicated to research.

It is anticipated that this new capacity will enable translational research in fields such as precision medicine and immuno-therapeutic imaging and make the state more competitive for national research funding.

Research Institute Support

Under the Research Institute Support (RIS) Program, almost \$2.8 million in funding for the indirect costs of research was awarded to 6 medical research institutes that met defined eligibility criteria.

Funding was awarded to eligible institutes in accordance with a measure of excellence based on each institute's researchers' success in obtaining competitive grant income.

This funding enables institutes to secure resources essential for supporting quality research.

WA Near-miss Awards

Grants totalling \$5,033,367 were awarded to 45 recipients with the 4 top-ranked NHMRC Investigator Grants near-miss applicants awarded fellowships.

The WA Near-miss Awards (WANMA) Program targets emerging WA researchers who narrowly missed receiving recent NHMRC grants. For emerging researchers, securing a NHMRC grant is a critical career milestone, paving the way for further competitive funding.

Funding was awarded to eligible applicants in accordance with a measure of excellence based on the NHMRC score received.

This funding assists recipients to enhance their application for resubmission to a future NHMRC selection round.

Grants pending

Other Programs and Initiatives that were implemented in 2020–21 but where grants have not been awarded by the end of 2020–21 will have outcomes included in the 2021–22 Annual Report.

An outline of the aims of these Programs and Initiatives is provided below.

Biobank Interim Support Program

Biobanks are generally large collections of human biological materials linked to relevant personal and health information and held specifically for use in health and medical research.

Funding recipients will be selected in accordance with a measure of excellence which considers research grant income, PhD students and engagement with consumers and the community.

Clinician Research Fellowships

The CRF Program is designed to support WA public health system clinicians to pursue research while continuing to perform some of their clinical duties. It enables high-quality research that will ultimately provide better healthcare outcomes in WA's public health system. Health experts involved in clinical duties, including allied health and health sciences, dental, medical, nursing and midwifery professions, are eligible to apply for the Program. The Initiative covers the costs of back-filling a proportion of the fellows' clinical work time and can be for up to 3 years in duration, depending on the research proposal.

Implementation Science Fellowships

The aim of this Program is to identify strategies for the successful implementation of research findings into policy and practice in the WA public health system in 2 streams: Aboriginal health issues and country and regional WA health issues.

Research Translation Projects

This Program seeks to support high-quality research projects that have the potential to demonstrate improved cost effectiveness and/or efficiencies within the WA public health system, and that can potentially be translated to improved healthcare policy and practice. This Program primarily aims to enhance the quality and sustainability of healthcare delivery by the WA public health system.

Translation Fellowships

This Program aims to support translation research in 2 streams: Aboriginal health issues and country and regional WA health issues. Applications for these fellowships opened on 30 June 2021.

Expenditure

Of the \$22,725,406 funding awarded during the 2020–21 financial year, \$18,831,185 was expended on Programs and Initiatives as shown in Table 2. The financial statements for the FHRI account are shown on page 27.

Table 5. FHRI account expenditure in the 2020–21 financial year

Program	Funding expended
Biobank Interim Support Program	\$1,499,999
Clinical Trials and Data Management Centre	No expenditure in 2020–21
Clinician Research Fellowships	\$320,000
FHRI Focus Grants: COVID-19	\$1,760,695
Implementation Science Fellowships	No expenditure in 2020–21
Medical and Health Research Infrastructure Fund	\$6,376,481
NCRIS – National Imaging Facility	\$2,311,407
Research Institute Support	\$2,754,655
Research Translation Projects	No expenditure in 2020–21
Translation Fellowships	No expenditure in 2020–21
WA Near-miss Awards	\$3,807,948
Total	\$18,831,185

Clarification notes to explain differences to Table 4 (awarded grants):

- Biobank Interim Support Program although expenditure occurred for the majority of grants in 2020-21, the final awarded total for this Program was not included in Table 4 as the final grant was awarded in July 2021. As such the final awarded value will be in the 2021–22 Annual Report.
- Clinician Research Fellowships the grant with the Raine Medical Research Foundation was finalised in 2020-21 and some expenditure occurred in this same year however the fellowships associated with this Program were awarded in 2021–22. To simplify future reporting the 'awarded' date will be the date the grant is executed with Raine, i.e., will not be based on the fellowship recipient awarding.
- Clinical Trials Data Management Centre the grant was awarded in 2020–21 however expenditure fell in 2021–22 and will be included in the 2021–22 Annual Report.



Case studies

The provision of FHRI Fund grant funding in 2020–21 resulted in the support of a significant number of high-quality research and innovation activities.

TRANSFORM – Building for the WA research future

Professor Merrilee Needham, from the South Metropolitan Health Service, was awarded \$879,661 to build a digital state-wide research platform, known as 'TRANSFORM', which will provide access to quality, real-time prospective data on COVID-19 patients for a range of research purposes. Adopting digital technology in research will be inclusive, facilitate innovation in the delivery of patient care and create system efficiencies.

The proposal involves building the digital infrastructure to streamline access to high quality real-time prospective data on COVID-19 positive patients wherever they are within WA Health. This will facilitate clinical research projects from both established and new researchers across medical, nursing and allied health fields, as well as increase opportunities for patient engagement.

With increasing appreciation of post-COVID-19 complications and a need to track efficacy and safety when a vaccine is available, a platform that supports real-time monitoring across the health system is essential. TRANSFORM will provide this platform and in addition can be used for the collection of WA community data and quality of life measures through integration with other systems. It will also provide the infrastructure for WA Health to enable the capture of detailed data on other disease groups to enable WA to lead national and international registries.

With systematic population-level data collection, this platform will ultimately provide opportunities to prevent disease and inform relevant public health campaigns. It can address real-time WA Health issues by providing relevant and up-to-date information about the conditions that are most commonly presenting to WA Health. It will also be attractive to industry sponsors, which in turn will provide Western Australians early access to the newest treatments.

Coronavax 3: Helping the hard-to-reach

Associate Professor Katie Atwell, from the University of Western Australia, was awarded \$224,964 for the project 'Coronavax 3: Helping the hard-to-reach'. Coronavax 3 prepares communities and governments for a COVID-19 vaccine, focusing on population groups that remain challenging to reach and at risk of being 'left behind' during mainstream rollout.

Building on knowledge from routine and pandemic vaccination and the recently commenced 'Coronavax 1-2: Preparing Community and Government', Coronavax 3 asks what hard-to-reach groups need in terms of government communication and information regarding a COVID-19 vaccine. How do their attitudes compare to other vaccines? What are their concerns? How do they want government to speak to them? How can government best motivate or assist these groups to get vaccinated? The project seeks to link the community voice with the ears of government, using interviews, social media analysis and dialogue to best ensure vaccine uptake.

To answer these questions, Coronavax 3 employs qualitative methodologies and obtains rich interview data from groups including urban Aboriginal Western Australians, regional and remote residents, adults with comorbidities, and culturally and linguistically diverse populations.

The social media platforms used by WA residents are simultaneously monitored to stay abreast of real time concerns or controversies. A distinct overarching study will analyse how governments can ensure uptake of the COVID-19 vaccine based on their own resources. Stakeholder consultation with WA and national government departments and other organisations will assist in determining the most appropriate communications and prompts for each population sub-group.

The COVID-19 vaccine will help restore our freedom and way of life. However, the health system has never dealt with such an anticipated vaccine and will face novel challenges in delivering it effectively. This project will assist government to understand community needs, triages preparedness with groups at risk of being 'left behind' and prepares empirically informed recommendations about how to best communicate the vaccine rollout. This knowledge will help maximise uptake of the vaccine in hard-to-reach populations while fostering public trust.

Financial report

The FHRI Fund is administered by the Treasurer. In accordance with Part 3 of the Act, the FHRI Fund Annual Report is to contain information about the operation of the FHRI Fund during the financial year.

The certification of financial statements for the FHRI Fund for the year ending 30 June 2021 and the financial position as at 30 June 2021 is provided in the Department of Health Annual Report 2020–21.

Estimate of FHRI Fund investment income

Under section 4B of the Act, each financial year the FHRI Account is to be credited with an amount equal to the forecast investment income for the financial year from the FHRI Fund.

If the State Budget Papers for the financial year have not been handed down before the commencement of the financial year, the Act provides that an estimate of investment income must be tabled in Parliament, before the start of the financial year.

The 2020–21 State Budget Papers were expected to be handed down in October 2020. Consequently, on 25 June 2020, the Treasurer tabled in each House of Parliament the estimate of income from the investment of FHRI Fund money for the year ended 30 June 2021 to be \$33.9 million.

The Treasurer's statement noted that an amount equal to the estimate of income derived will be charged to the FHRI Fund and credited to the FHRI account in the 2020–21 financial year.

Financial statements for the FHRI Account

In June 2020, the FHRI Account, an agency special purpose account under the *Financial Management Act 2006* section 16, was established by the Act.

The purpose of the special purpose account is to provide a secure and long-term source of funding in support of health and medical research and innovation that contribute to the health of Western Australians, the sustainability of the WA health system, the prosperity of the state and/or to advance WA's standing as a leader in research and innovation.

Relating to the financial statements for the FHRI Account, balances for the financial year ending 30 June 2021 are presented below.

	2020–21 \$'000	2019–20 \$'000
Balance at end of period	-	-
Receipts:	33,980	-
Payments:	(18,831)	-
Balance at end of period	15,149	-

Appendix 1. FHRI Fund overview

Introduction

The FHRI Fund became operational in June 2020, enabled by the *Western* Australian Future Health Research and Innovation Fund Act 2012 (the Act).

Amendments to the Act repurposed the Western Australian Future Fund to establish the FHRI Fund scheme. The Western Australian Future Fund was established with seed capital from the Royalties for Regions Fund with the purpose of setting aside and accumulating a portion of the state's mining royalties for use by future generations of Western Australians.

The FHRI Fund is a sovereign wealth fund, a State-owned fund consisting of a pool of money set aside from the state's normal accounts. The purpose of the FHRI Fund is to improve, through research and innovation, the health and prosperity of Western Australians, the sustainability of the health system and to advance the state's standing as a leader in research and innovation.

The FHRI Fund receives annual credits of one per cent of the state's forecast royalty income so that the capital in the FHRI Fund will continue to grow. To ensure the longevity of the FHRI Fund, its capital will be preserved in perpetuity and only the annual forecast investment income will be applied to support health and medical research, innovation and commercialisation.

The Act

The Act was created to establish the FHRI Account and the FHRI Fund and for related purposes. The responsible Minister has overall responsibility for the Act but the Treasurer is responsible for those sections related to the management and investment of the capital.

Object of Act

The object of the Act is to provide a secure source of funding to support qualifying activities that contribute (directly or indirectly) to one or more of the following:

- improving the financial sustainability of Western Australia's health system
- improving the health and wellbeing of Western Australians
- improving WA's economic prosperity
- advancing WA to being, or maintaining WA's position as, a national or international leader in any qualifying activities.



Legislative context

The Act sets out the overarching objective for the FHRI Fund scheme, which is to provide a secure source of funding to support research and innovation. Other important provisions in the Act include to:

- establish 2 accounts:
 - 1. The Treasury FHRI Fund (also known as the FHRI Fund) which is the capital-holding account
 - 2. The FHRI Account which is the operational account that is used to support Programs and Initiatives
- establish and maintain an Advisory Council to provide advice to the Minister and the Department of Health regarding how moneys in the FHRI Account are applied
- prepare and maintain a governance framework that includes provision for:
 - · a Strategy to be prepared and maintained
 - the setting of Priorities
- record disclosed conflicts of interest from Advisory Council members.

Governance framework

The Western Australian Future Health Research and Innovation Fund Governance Framework (governance framework) provides guidance in relation to key features of the FHRI Fund scheme that support its effective and responsible operation and promotes accountability and transparency of decision-making.

The governance framework defines the roles and responsibilities of decision-makers and advisers, sets out strategic instruments that will guide how the FHRI Fund scheme supports research and innovation, and describes the reporting, debiting and crediting arrangements for the accounts established under this scheme.

Roles and responsibilities of decision-makers and advisers are designed to support the purpose of the governance framework, thereby:

- promoting consistency in the structure and function of the governance framework's components over the long-term
- reducing duplication of roles
- preventing scope creep in the decision-makers' and advisers' roles
- incorporating consideration of risk in all elements of the governance structure.

The governance framework includes information regarding:

- an Advisory Council
- an operational structure that efficiently supports the Advisory Council, Expert Committees, application and selection processes and post-award grant management
- transparent and competitive peer-reviewed selection processes
- effective communications policies and tools to ensure funding processes and decisions are available to all stakeholders
- an evaluation framework based on national and international best practice.

The State Government has roles and responsibilities in the FHRI Fund scheme governance structure. These roles are subject to legislation applicable to government agencies, which in the context of the FHRI Fund scheme may include the *Financial Management Act 2006*, the *Public Sector Management Act 1994*, the *Auditor General Act 2006*, the *State Records Act 2000* and the *Freedom of Information Act 1992*, among others.

The FHRI Fund scheme has a mandate to strategically pursue fulfilment of the object set out in its enabling legislation. As previously discussed, the 3 main instruments available to the FHRI Fund scheme to assist in determining where funding support should be focused include (See Figure 5):

- 1. The Strategy
- Priorities
- **Programs and Initiatives**

Figure 5: Strategic Instruments

Western Australian Future Health Research and Innovation Fund Act 2012

FHRI Fund

- Financially sustainable health system
- · Improved health and wellbeing
- · Economic prosperity
- Health and medical research and innovation leader

Strategy

Strategy developed by the Advisory Council and approved by the Minister

Priorities TBD

Priorities developed by the Advisory Council and approved by the Minister

Programs and Initiatives TBD

P&Is developed by the Department of Health and approved by the Minister, with consideration to recommendations from the Advisory Council

Strategy

Under the governance framework, the Advisory Council leads development of the Strategy, the extensive consultations that inform this process and recommends the Strategy to the responsible Minister for approval.

The inaugural Strategy was developed and approved by the Department of Health, prior to establishment of the Advisory Council. The inaugural Strategy applies to a 3-year period.

Consultations to inform the inaugural Strategy included consumers, private industry, investors, philanthropists, policymakers, research and innovation funders, research and innovation organisations, researchers, innovators and educators. The inaugural Strategy was also informed by extensive research, analysis of national and international best practice, and reports and strategies relevant to research and innovation.

The Research and Innovation Office was responsible for the development of the inaugural Strategy, including coordinating and organising the consultations.

Priorities

The Advisory Council is responsible for developing the Priorities, other than the inaugural Priorities. All Priorities require approval by the responsible Minister.

The Act provides that the Priorities will be tabled in both Houses of Parliament and published online. The Priorities were tabled in each House of Parliament on 27 January 2021. The Act also provides that in 2020-21, the first year of the FHRI Fund scheme, the Minister will give Priority to qualifying activities that relate to human coronaviruses with pandemic potential. Such coronavirus-related Priorities are not required to be aligned to the Strategy and are not subject to a recommendation by the Advisory Council before FHRI Account moneys may be applied to them.

The funding proportions recommended by the Advisory Council will determine the funding amount made available to Programs and Initiatives for that Priority. The full proportion of funding allocated to a Priority will only be committed if the applications received are of a suitable quality.

Programs and Initiatives

Programs and Initiatives are approved by the responsible Minister based on a proposal by the Director General. However, the Act provides that the Minister must seek a recommendation from the Advisory Council before making or applying FHRI Account moneys to research and innovation arrangements in the financial year.

In practice, the Advisory Council will consider the Programs and Initiatives proposed by the Director General and provide a recommendation on whether the Minister should approve them.

The Department of Health is responsible for developing and implementing Programs and Initiatives and managing them post-award. However, the Advisory Council provides oversight and assurance that the Programs and Initiatives have been developed and implemented appropriately and in alignment with the Priorities.

FHRI Fund financial structure

The FHRI Fund is supported by 2 accounts established in the Act: a Treasurer's special purpose account, the Treasury FHRI Fund and a Department of Health agency special purpose account, the FHRI Account. The Department of Treasury and the Department of Health are each responsible for the management of their respective accounts in accordance with relevant accounting standards and legislation.

Treasury FHRI Fund

The Treasury FHRI Fund is the capital-holding account of the FHRI Fund scheme. It is maintained as a long-term sovereign wealth fund, the investment income from which will provide the financing stream for research and innovation. By enshrining this financing stream in legislation, a long-term funding source for research and innovation has been secured, with the ultimate aim of improving the health of Western Australians and the prosperity of the state.

Department of Health FHRI Account

The FHRI Account is the operational account of the FHRI Fund scheme. The FHRI Account is credited annually with moneys equivalent to earnings forecast from investing the Treasury FHRI Fund. Moneys credited to the FHRI Account are held there until expended or the Minister and the Treasurer agree that surplus moneys be returned to the Treasury FHRI Fund.

The budget for the FHRI Account is approved through standard State Government budget processes. The budget submission endorsed by the Minister will be consistent with the Strategy and Priorities. The FHRI Account can only be applied to support research and innovation activities through approved Programs and Initiatives. Administrative costs, such as those incurred by the Advisory Council, the Research and Innovation Office and Expert Committees, are met by the Department of Health.

Appendix 2. Department of Health responsibilities

Department of Health

The Department of Health assists the responsible Minister to administer the Act and is the State Government agency responsible for managing and/or supporting the decisionmakers and advisers of the FHRI Fund scheme.

The Director General performs a central coordination role for the FHRI Fund scheme and administers the FHRI Account on behalf of the Minister. The Director General recommends the Programs and Initiatives to the Minister and is also a non-voting member of the Advisory Council.

The Research and Innovation Office, a unit within the Department of Health, provides administrative and operational support to the FHRI Fund and reports to the Director General.

Research and Innovation Office

The Research and Innovation Office supports the FHRI Fund operations as well as providing policy and funding support for health and medical research and innovation for both the WA public health system and the wider WA health and medical research and innovation sector.

The Research and Innovation Office is funded by the Department of Health and not from the FHRI Account. The Department of Health ensures that the Research and Innovation Office has sufficient resources to support the FHRI Fund scheme.

The Research and Innovation Office is responsible for:

- supporting the Advisory Council to develop the Strategy and Priorities
- developing and maintaining the governance framework and evaluation framework for the FHRI Fund scheme
- implementing FHRI Fund scheme Programs and Initiatives and managing them post-award

- providing secretariat support to the Advisory Council
- assembling Expert Committees to support the Advisory Council, the Minister and the Department of Health, as required.

The Research and Innovation Office works with CCI Coordinator, Mr Ben Horgan, to ensure the FHRI Fund embeds best practice consumer and community engagement in its activities. Mr Horgan develops, assesses and reviews the Research and Innovation Office's community involvement and its impact. He also supports health research to link with consumers ensuring the research question is appropriate, the methodology supports participation and the results can be translated in better health care.

FHRI Fund delegation schedule

The Minister for Health issued an Instrument of Delegation under the Act on 13 October 2020, to delegate functions of the Act to the Director General, Department of Health.

The Director General has delegated functions delegated to him under the Act to a public service officer within the FHRI Account Department, Department of Health. This was carried out as it would be administratively burdensome for the Director General to provide a range of required approvals and to sign contracts with low monetary values, of which there may be many in a financial year. Department of Health officers listed in the Director General's instrument of delegation are:

- the Assistant Director General, Clinical Excellence
- Chief Finance Officer, Executive Director, System Finance
- Executive Director, Clinical Leadership and Reform
- Director, Research and Innovation Office.



Appendix 3. Expert Committee members

Table 6

No.	Name
1	Professor Marcus Atlas
2	Doctor Carlo Bellini
3	Ms Pip Brennan
4	Professor Jonathan Carapetis AM
5	Associate Professor Aron Chakera
6	Professor Jim Codde
7	Doctor Gary Colley
8	Professor Hugh Dawkins
9	Doctor Liz Dallimore
10	Mr Anthony Dolan
11	Professor Pat Dudgeon
12	Professor Peter Eastwood
13	Mr Paul Forden
14	Professor Lin Fritschi
15	Professor Gary Geelhoed

No.	Name
16	Doctor Darren Gibson
17	Doctor Jemma Greene
18	Associate Professor Delia Hendrie
19	Associate Professor Graham Hillis
20	Professor Anne Marie Hill
21	Professor Sean Hood
22	Mr Ben Horgan
23	Associate Professor Allison Imrie
24	Professor Matthew Kemp
25	Doctor Brendan Kennedy
26	Professor Nigel Laing AO
27	Ms Debra Langridge
28	Professor Peter Leedman AO
29	Doctor Simon Lenton
30	Professor Ryan Lister

No.	Name
31	Doctor Neil Lynch
32	Professor David Mackey
33	Ms Elizabeth MacLeod
34	Associate Professor Daniel McAullay
35	Professor Peter McEvoy
36	Ms Kerry Maclaurin
37	Doctor Helga Mikkelsen
38	Doctor Hannah Moore
39	Professor Merrilee Needham
40	Professor Robert Newton
41	Mr Cao Nguyen
42	Doctor Kristen Nowak
43	Mr Arthur Ong
44	Professor Kevin Pfleger
45	Ms Maxine Pollard
46	Professor David Preen
47	Professor Christopher Reid
48	Professor Peter Richmond
49	Professor Suzanne Robinson

No.	Name
50	Professor Bruce Robinson
51	Mr Lindsay Rowe
52	Ms Robyn Sermon
53	Ms Carli Sheers
54	Professor David Smith
55	Doctor Samantha South
56	Professor Steve Webb
57	Professor Lisa Whitehead
58	Doctor Tracey Wilkinson
59	Doctor James Williamson
60	Ms Briony Williams
61	Professor Steve Wilton
62	Professor Fiona Wood
63	Anonymous 1*
64	Anonymous 2*
65	Anonymous 3*
66	Anonymous 4*



^{*}Consent not provided for name to be published.

Appendix 4. FHRI Fund grants awarded during 2020–21

Table 7: Grants awarded

Program/Initiative	Administering institution	Grant title	Grant amount
Clinical Trials and Data Management Centre	Curtin University	Support the activities of the CTDMC which aims to enhance clinical trials and management of related data in WA including building the research capacity of clinical trial researchers.	\$212,500
		Total Clinical Trials and Data Management Centre	\$212,500
FHRI Focus Grants: COVID-19	Biotome Pty Ltd	Precision-immunology assisted by on-chip machine learning to create a test for neutralizing antibodies to SARS-CoV-2	\$225,000
FHRI Focus Grants: COVID-19	CSIRO's Australian e-Health Research Centre	Artificial intelligence technology for automated detection of tooth decay from mobile dental photographs	\$50,000
FHRI Focus Grants: COVID-19	Curtin University	Quantifying contact networks for COVID-19 outbreak preparedness	\$223,741
FHRI Focus Grants: COVID-19	East Metropolitan Health Service	Infrastructure to test current and innovative PPE and other medical devices	\$322,282
FHRI Focus Grants: COVID-19	Edith Cowan University	Development and evaluation of a novel gamified education package enhancing pandemic preparedness for frontline healthcare response staff and students	\$224,446
FHRI Focus Grants: COVID-19	Murdoch University	Optimisation and validation of a rapid biomarker screening assay for identifying COVID-19	\$47,420
FHRI Focus Grants: COVID-19	PathWest Laboratory Medicine WA	Western Australian COVID-19 Immunity Collaborative (WACIC)	\$788,436
FHRI Focus Grants: COVID-19	South Metropolitan Health Service	TRANSFORM - Building for the WA Research Future	\$879,661
FHRI Focus Grants: COVID-19	The University of Western Australia	An advanced digital monitoring and engagement platform for at-risk and confirmed COVID-19 individuals	\$880,000

Program/Initiative	Administering institution	Grant title	Grant amount
FHRI Focus Grants: COVID-19	The University of Western Australia	Analytics to determine effective and cost-effective responses to infectious disease epidemics and pandemics, with application to COVID-19	\$224,586
FHRI Focus Grants: COVID-19	The University of Western Australia	Coronavax 3: Helping the hard-to-reach	\$224,964
FHRI Focus Grants: COVID-19	The University of Western Australia	COVIDexpress: High-throughput platform for screening of drugs to treat COVID-19 and rapid diagnosis	\$862,382
FHRI Focus Grants: COVID-19	The University of Western Australia	COVID-19 Vaccine Safety Monitoring in Community Pharmacy (COVID-19 VIP)	\$217,505
FHRI Focus Grants: COVID-19	The University of Western Australia	Determinants of human milk-mediated protective immunity against COVID-19	\$223,047
FHRI Focus Grants: COVID-19	The University of Western Australia	Humanized Neutralizing Antibodies to SARS-CoV-2	\$221,902
FHRI Focus Grants: COVID-19	The University of Western Australia	Influences of cardiometabolic risk factors and testosterone on risk of SARS-CoV-2 infection in men	\$97,639
FHRI Focus Grants: COVID-19	The University of Western Australia	Tele-screening for tooth decay in early childhood during COVID-19 pandemic	\$50,000
FHRI Focus Grants: COVID-19	The University of Western Australia	Western Australia-driven COVID-19 countermeasures	\$225,000
		Total FHRI Focus Grants: COVID-19	\$5,988,011
Medical and Health Research Infrastructure Fund	Curtin University	NA	\$224,741
Medical and Health Research Infrastructure Fund	Dental Health Services	NA	\$25,440
Medical and Health Research Infrastructure Fund	Ear Science Institute Australia	NA	\$50,255

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Program/Initiative	Administering institution	Grant title	Grant amount
Medical and Health Research Infrastructure Fund	Edith Cowan University	NA	\$246,452
Medical and Health Research Infrastructure Fund	Harry Perkins Institute of Medical Research	NA	\$1,064,813
Medical and Health Research Infrastructure Fund	Institute for Respiratory Health	NA	\$552,226
Medical and Health Research Infrastructure Fund	Lions Eye Institute	NA	\$274,278
Medical and Health Research Infrastructure Fund	Murdoch University	NA	\$55,377
Medical and Health Research Infrastructure Fund	Perron Institute	NA	\$205,946
Medical and Health Research Infrastructure Fund	Royal Perth Hospital	NA	\$23,545
Medical and Health Research Infrastructure Fund	Telethon Kids Institute	NA	\$2,283,313
Medical and Health Research Infrastructure Fund	University of Western Australia	NA	\$1,245,301
Medical and Health Research Infrastructure Fund	WA Sleep Disorders Research Institute	NA	\$26,647
Medical and Health Research Infrastructure Fund	Women and Infants Research Foundation	NA	\$147,132
		Total Medical and Health Research Infrastructure Fund	\$6,425,466
NCRIS – National Imaging Facility	The University of Western Australia	Co-investment to the National Imaging Facility node in Western Australia	\$2,311,407
		Total Contribution to National Imaging Facility	\$2,311,407

Program/Initiative	Administering institution	Grant title	Grant amount
Research Institute Support	Harry Perkins Institute of Medical Research	NA	\$647,832
Research Institute Support	Institute for Respiratory Health	NA	\$335,974
Research Institute Support	Lions Eye Institute	NA	\$166,871
Research Institute Support	Perron Institute	NA	\$125,298
Research Institute Support	Telethon Kids Institute	NA	\$1,389,165
Research Institute Support	Women and Infants Research Foundation	NA	\$89,515
		Total Research Institute Support	\$2,754,655
WA Near-miss Awards	Curtin University	Determining the effects of post-translational modification on phosphate and tensin homologue (PTEN) in P13K inhibitor resistant breast cancer	\$74,000
WA Near-miss Awards	Curtin University	Determining prenatal and postnatal environment exposures that alter lung function in early life.	\$74,000
WA Near-miss Awards	Curtin University	Developing a bioprinting solution for treating human skin loss	\$74,000
WA Near-miss Awards	Curtin University	Facilitating the diagnosis of speech sound disorders through automatic facial tracking and speech processing: A tool for speech language pathologists	\$74,000
WA Near-miss Awards	Curtin University	Improving Recurrent Ovarian Cancer Outcomes by Targeting the Phosphoproteome	\$74,000
WA Near-miss Awards	Curtin University	Increasing the pace of change to equity in Aboriginal perinatal health: Evidence for advocacy and Intervention	\$74,000
WA Near-miss Awards	Curtin University	Investigating diet and risk of onset and progression of multiple sclerosis	\$74,000
WA Near-miss Awards	Curtin University	Optimising antimalarial treatment strategies for children	\$74,000
WA Near-miss Awards	Curtin University	Prenatal reProgramming of respiratory epithelial progenitors and early postnatal respiratory disease.	\$74,000

Program/Initiative	Administering institution	Grant title	Grant amount
WA Near-miss Awards	Curtin University	Restoration of myelination in the central nervous system via the provision of specific dietary bioactive lipids	\$74,000
WA Near-miss Awards	Curtin University	Unravelling the mechanisms underpinning lung function decline for survivors of very preterm birth	\$74,000
WA Near-miss Awards	Curtin University	What defects in Tyrosine Kinase Signalling predict drug resistance in Ovarian Cancer?	\$74,000
WA Near-miss Awards	Edith Cowan University	A novel machine-learning approach to reducing falls and their burden in older Australians	\$74,000
WA Near-miss Awards	Edith Cowan University	Nitrate and human health – villain or superhero?	\$74,000
WA Near-miss Awards	Edith Cowan University	Reducing falls and their burden in older Australians	\$74,000
WA Near-miss Awards	Edith Cowan University	The interaction of genetic and lifestyle factors affecting progression in neurodegenerative disorders	\$74,000
WA Near-miss Awards	The University of Western Australia	A 3D multilayered blood vessel-on-a-chip model to investigate vascular dysfunction in sepsis	\$74,000
WA Near-miss Awards	The University of Western Australia	Al- and XR- enabled Virtual Doctor for respiratory disease	\$74,000
WA Near-miss Awards	The University of Western Australia	Allo-antibody in kidney transplant recipients: is this the missing link for heart disease (AN-INSPIRE study)	\$74,000
WA Near-miss Awards	The University of Western Australia	Benefits, harm or no effect on cardiometabolic risk? Comparing the effects of low and high daily vitamin D supplementation with sun exposure in community-dwelling Australian adults with mild vitamin D-deficiency	\$74,000
WA Near-miss Awards	The University of Western Australia	Boosting platelet supply for transfusion: Cellular reProgramming approach	\$74,000
WA Near-miss Awards	The University of Western Australia	Bordetella pertussis colonisation and influenza infection in the upper respiratory tract: Implications for pertussis resurgence	\$74,000

Program/Initiative	Administering institution	Grant title	Grant amount
WA Near-miss Awards	The University of Western Australia	Creating a geospatial 'Food Atlas' to map, measure and monitor food access	\$74,000
WA Near-miss Awards	The University of Western Australia	Defining melanoma subtypes based on interactions of germline variants and somatic mutations	\$74,000
WA Near-miss Awards	The University of Western Australia	Early Life Prevention of Childhood Obesity and Lifelong Non-Communicable Diseases	\$74,000
WA Near-miss Awards	The University of Western Australia	Fatty airway remodelling – the missing link in comorbid asthma and obesity	\$74,000
WA Near-miss Awards	The University of Western Australia	Harnessing single cell technology to understand abnormal human cortical development	\$74,000
WA Near-miss Awards	The University of Western Australia	Improving outcomes in children with cystic fibrosis and bronchiectasis lung disease	\$74,000
WA Near-miss Awards	The University of Western Australia	Improving the physical health outcomes of people with severe mental illness; translating research into clinical practice	\$74,000
WA Near-miss Awards	The University of Western Australia	Oral Cancer chemoprevention using a novel synergised nanotechnology and personalised medicine-based approach	\$74,000
WA Near-miss Awards	The University of Western Australia	Personalised analytics to improve diagnostic rates in clinical sequencing	\$74,000
WA Near-miss Awards	The University of Western Australia	Pregnancy diet, antibiotic use and their effects on microbial signatures and immune health	\$74,000
WA Near-miss Awards	The University of Western Australia	Sewers to cures: Bacteriophage biology to guide future therapeutics	\$74,000
WA Near-miss Awards	The University of Western Australia	Stiffness in the heart: Expanding cardiac mechanobiology to 3 dimensions	\$74,000
WA Near-miss Awards	The University of Western Australia	The Park Life PPGIS Project: A new idea for evaluation green space morphologies and policies designed for optimal health benefits	\$74,000

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Program/Initiative	Administering institution	Grant title	Grant amount
WA Near-miss Awards	The University of Western Australia	The role of BCG induced epigenetic changes in the protection from neonatal sepsis	\$74,000
WA Near-miss Awards	The University of Western Australia	The Western Australian Lewy Body Study	\$74,000
WA Near-miss Awards	The University of Western Australia	Unravelling the (epi)genomic and physiological regulatory mechanisms governing memory processes to understand cognitive decline in aging.	\$74,000
WA Near-miss Awards	The University of Western Australia	Unravelling the male/female immune imbalance: mapping immune changes following gender transformation.	\$74,000
WA Near-miss Awards	The University of Western Australia	Validating novel treatments for cone-mediated vision loss	\$74,000
WA Near-miss Awards	The University of Western Australia	"Yarn with Me": Implementing Clinical Yarning Communication in Aboriginal Health Care	\$74,000
WA Near-miss Awards – Emerging Leaders Fellowships	The University of Western Australia	Determining factors that underpin poor health outcomes related to progression of nonalcoholic fatty liver disease and abdominal pain from adolescence into adulthood – a longitudinal cohort study	\$231,208
WA Near-miss Awards – Emerging Leaders Fellowships	The University of Western Australia	Healthy Ears for Healthier lives: Tackling ear disease and preventable hearing loss in Indigenous Australian children	\$749,063
WA Near-miss Awards – Emerging Leaders Fellowships	The University of Western Australia	Preventing blindness from retinal degeneration: from clinic to bench to trials.	\$688,557
WA Near-miss Awards – Emerging Leaders Fellowships	The University of Western Australia	Sex Hormones as Immune Modulatory Drivers in Transgender People	\$330,538
		Total WA Near-miss Awards	\$5,033,367
		Grand total	\$22,725,406

