



Inquiry into support for Health and Medical Research Funding and Priorities by the WA Education and Health Standing Committee

Response by the RPH Research Foundation

Terms of Reference

The Education and Health Standing Committee will inquire into support for health and medical research funding and priorities. In particular, the inquiry will investigate:

1. Western Australia's small share of national competitive funding.
2. How the State's health and medical research priorities are determined.
3. The impact on specific types of research and areas of need.

Introduction

As a philanthropic Foundation, the RPH Research Foundation's (RPHRF) primary purpose is to fund research that will advance healthcare and medical knowledge in Western Australia and beyond. The Foundation promotes research within East Metropolitan Health Service (EMHS), an extensive healthcare network serving nearly 749,000 Western Australians across a vast 3647 square kilometre catchment area, in collaboration with other research organisations to investigate the cause, prevention, diagnosis, and treatment of all areas of healthcare. The primary purpose is to fund research that will have a positive impact on WA patients.

Our broad priorities include:

- Facilitate and support world-class research happening in Western Australia
- Fund research activities that will make a difference for WA patients especially those attending the EMHS health services.
- Lead a local research agenda that delivers positive health outcomes for Western Australia, Australia and globally.
- Encourage research embedded alongside clinical practice in EMHS' hospitals and health services.
- Bring together health practitioners and scientists and others for the common benefit and scientific discussions and demonstrations particularly in research.
- Focus on translational research into acute and chronic disease.
- Support and foster the development of research leaders to ensure research talent stays in WA.
- Support medical researchers in our jurisdiction so they are better able to compete nationally for funding that will ultimately improve the well-being of Western Australians, Australians, and people world-wide.

In partnership with EMHS, and in collaboration with tertiary institutions, research institutes and funding bodies, the RPHRF distributes approximately \$2M per annum via a range of grant opportunities to clinicians and researchers within the EMHS, and their partnering bodies. Grant programs include:

- Seed funding grants for novel or innovative ideas
- Innovation and Impact grants (mid-career and senior researchers)
- Nursing and Allied Health grants
- Springboard Plus grants (early to mid-career researchers)
- Career Advancement fellowships (mid-career researchers)
- Strategic Projects grants

The RPHRF seeks to strengthen partnerships with government and other stakeholders to meet mutual objectives. In 2024 we are partnering with the Future Health Research and Innovation (FHRI) Fund to deliver a joint Research Innovation & Impact grant program.

In addition to the above, the RPHRF owns and operates a six-storey, research facility located on the Royal Perth Hospital (RPH) campus. Designed as a dedicated research space alongside WA's oldest tertiary hospital, it facilitates translational research for the benefit of WA patients, with the RPHRF making a significant annual investment in building operations.

The building was completed in 1993 and comprises of wet and dry laboratories (including PC2 laboratories), office space and clinical trial beds. Within this 5000m² facility, we bring together researchers from EMHS, Western Australian universities, and others to enable collaborative research on the RPH Campus.

As the primary laboratory space for researchers attached to EMHS, this facility enables us to support bench-to-bedside research giving patients access to the latest research and innovation to improve their outcomes.

The RPHRF is committed to a program of significant forward capital investment in our research facility. Already underway is the development of new PC2 laboratories, in partnership with the FHRI Fund.

The RPHRF will also review the opportunity to partner with EMHS via clinical trial activity within our facility, to mitigate hospital beds that may currently be occupied by clinical trials, including pharma trials.

Response

1. Western Australia's small share of national competitive funding

Over our 40 years, the researchers we have funded have achieved a high rate of success in the national grants space. We have attributed this to our efforts to provide holistic support to the researchers we fund, including infrastructure support and grants (including salaries).

In the past five years, the RPHRF Foundation has distributed \$9.2M in research grants to 33 Early Career Researchers, 13 Mid-Career Researchers and eight (8) Senior Career Researchers. Collectively these research grants have generated over 180 publications.

These researchers have gone on to secure \$31.9M in funding from the National Health and Medical Research Council (NHMRC) and other sources, demonstrating a more than threefold leveraging of our funding.

Pleasingly, our data also reveals that 55% of the researchers we have funded in the past five years are female.

In addition to these successes the RPHRF has been at the forefront of supporting investment in new research therapies, as evidenced in our partnership with EMHS for the location of the Centre for Advanced Therapies in our building.

The RPHRF therefore makes a significant contribution to research capacity building in our State.

However, the Foundation has finite resources to commit each Financial Year. Researchers often seeking additional resource that cannot be provided within the limits of our funding and infrastructure capability, such as clinical spaces for research and collaboration to occur; matched funding for NHMRC grants; time away from clinical activities to undertake research; and additional resources that should be packed around researchers to provide holistic support such as access to equipment; long term data storage etc.

It is important to ensure that the standard we measure ourselves against aligns with the national competitive grants space. The RPHRF ensures that any grant programs of significant value go to external peer review. As far as possible, we also try to ensure we achieve gender balance on our review panels. This is our way of ensuring that our grants are accessible and benchmarked to a high standard. This ultimately supports the researcher in ensuring that their submissions to NHMRC and Medical Research Future Fund (MRFF) are of a high calibre and therefore more likely to succeed.

Recommendation 1a:

The State government review what a holistic research environment should encompass, particularly in respect of the leading public health facilities in our State which is the nexus between research and patients in the medical and health research translation space.

Recommendation 1b:

The State government introduce and coordinate a peer review process for grants that is consistent with the national grants benchmark.

Recommendation 1c:

The State government consider measures to encourage senior Western Australian researchers to take up positions on national research review panels, especially those associated with the MRFF and NHMRC.

2. How the State's health and medical research priorities are determined

On 2 May 2024 the Australian Government announced that it is developing a National Health and Medical Research Strategy to provide national direction.

The aim of the strategy is to better align the work of the NHMRC and MRFF, and to cover the entire sector, including philanthropy.

This is welcomed by RPHRF, and we will review opportunities to align our research agenda with National, State, and EMHS priorities.

The EMHS Research Strategy and Implementation Plan 2024-2028 outlines a commitment to improve its capacity to develop high quality research projects and, identifies ways in which translational research can contribute to health service operation goals.

EMHS' stated focus areas are *Improving Mental Health; Community and Virtual Care; and Improving Outcomes in Major Trauma*.

EMHS is also committed to investing in clinical trials capacity and building an integrated clinical trials program. Since July 2021, EMHS trial teams have worked with 41 pharmaceutical and medical device companies who have funded clinical trials to the value of \$5.86M, and this is forecast to grow.

Additionally, EMHS has identified 10 areas of strength as follows:

- Clinical Trials Specialties
- Cardiology, Hypertension, and Lipid Disorders Research
- Haematology Research
- Anaesthesia and Pain Medicine Research
- Radiology Research
- Critical Care Research in ED and ICU
- Data and Digital Innovation (DDI)
- Health in a Virtual Environment (HIVE)
- Advanced Cell Therapies (CTTWA)
- Health Technology Management Unit (HTMU)

Recommendation 2a:

Areas of need, opportunity and strength within respective health services should be a focus for the State's research agenda.

Recommendation 2b:

The unique challenges and capabilities in Western Australia should underpin the State's research priorities, particularly in reference to – the vastness of our State and the challenge of delivering health outcomes; the stable population which allows longitudinal studies to be undertaken; our proximity to Asia which is an advantage for WA researchers in a national context; and opportunities to establish unique and leading research enquiries attributable to our local expertise and knowledge.

Recommendation 2c:

The State's FHRI Fund provides access to a range of research grant programs including large infrastructure grants, seed funding and fellowships, and targeted funding for specific projects. As far as possible, FHRI grant opportunities should align with areas of opportunity within MRFF and NHMRC grant programs, such as new, undersubscribed, or increased grant funding areas, as one way to build capacity, become recognised as a leader across Australia, and enhance the State's opportunity to compete for and secure funding.

3. The impact on specific types of research and areas of need

State funding opportunities that feed into National priorities provide a pathway for researchers to grow their research and be better placed to secure MRFF and NHMRC funding. In support of National and State priorities, the RPHRF Research Innovation & Impact grant program, a partnership with FHRI Fund, is aimed at enabling multidisciplinary teams to collaborate and generate outcomes that may form the basis of new applications to the MRFF and NHMRC.

A review of the MRFF funding priorities and investment to date sets out those areas where there may be significant capacity to fund research via new funding streams, streams where funding has increased in greater proportion to other streams, or smaller streams that may present particular opportunities.

MRFF released its third 10-year Investment Plan 2024-25 to 2033-34 on 31 May 2024. The plan has four themes:

- Patients: Clinical Trials Activity; Emerging Priorities and Consumer Driven Research; and Global Health.
- Research Missions: Brain Cancer Mission; Cardiovascular Health Mission; Dementia, Ageing and Aged Care Mission; Genomics Health Futures Mission; Indigenous Health Research Fund; Low Survival Cancers Mission; Million Minds Mental Health Research Mission; Stem Cell Therapies Mission; and Traumatic Brain Injury Mission.
- Researchers: Clinician Researchers; Early to Mid-Career Researchers; and Frontier Health and Medical Research.
- Research Translation: Medical Research Commercialisation; National Critical Research Infrastructure; Preventive and Public Health Research; Primary Health Care Research; Rapid Applied Research Translation; and Research Data Infrastructure.

Under these four themes, the following information is provided:

Patients: \$1.434 billion is allocated to patients. Area of least investment since 2016-17 is global health. Priority focus areas for Clinical Trials include rare cancers / rare diseases / unmet need / bringing investigator-led international clinical trials to Australia / effective health interventions. Priority focus areas for Emerging Priorities and Consumer Driven Research include women's health / novel treatments for chronic pain / alcohol and other drugs. Priority focus areas for Global Health include antimicrobial resistance / drug-resistant tuberculosis / health impacts of changes in climate.

Research Mission: \$1.495 billion is allocated to Research Missions. Traumatic Brain Injury Mission is allocated the highest proportion of new funding, with Stem Cell Therapies Mission; Dementia, Ageing and Aged Care Mission; and Cardiovascular Health Mission also receiving a proportionally higher funding allocation. Two new Missions are established – Low Survival Cancers Mission and Reducing Health Inequities Mission. These two Missions have each been allocated \$97.2M.

Researchers: \$1.334 billion is allocated to Researchers. Since 2016-17 the area of least investment is Early to Mid-Career Researchers. With new funding of \$473.8M now allocated to this stream, this represents a more than 90% increase in allocated funds (\$40.2M invested to date) and therefore a significant new opportunity. Clinician Researchers are allocated an additional \$200M (\$112,6M invested to date) and Frontier Health and Medical Research an additional \$700M (\$290M invested to date).

Research Translation: \$2.025 billion is allocated to Research Translation. Areas of least government investment to date include Primary Health Care Research and Research Data Infrastructure with both of these areas receiving a proportionally higher allocation in the 3rd 10-year Investment Plan. For the former, an additional \$100M is allocated for improved service delivery and patient outcomes; access to primary health care through digital health innovation that helps patients monitor and control their own health care; and continuity of care through communication in innovative and timely ways, including with patients in rural or remote locations. For the latter, an additional \$100M is allocated for national research data infrastructure such as data registries, biobanks, and data linkage platforms.

Recommendation 3a:

The RPHRF recommends State government identify key research focus areas relevant to WA need that align with MRFF and NHMRC 10-year plans, and therefore with areas of national grant funding opportunity.

References:

EMHS Research Strategy and Implementation Plan 2024-2028

<https://emhs.health.wa.gov.au/Research/Research-Strategy>

Medical Research Future Fund 3rd 10-year Investment Plan 2024-25 to 2033-34

<https://www.health.gov.au/resources/publications/mrff-3rd-10-year-investment-plan-2024-25-to-2033-34>