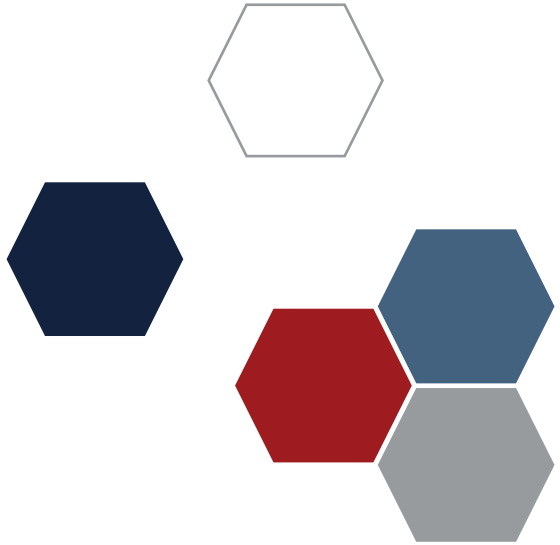
Australian Government
Department of Health



Medical Research Future Fund

MRFF Webinar

12 April 2022

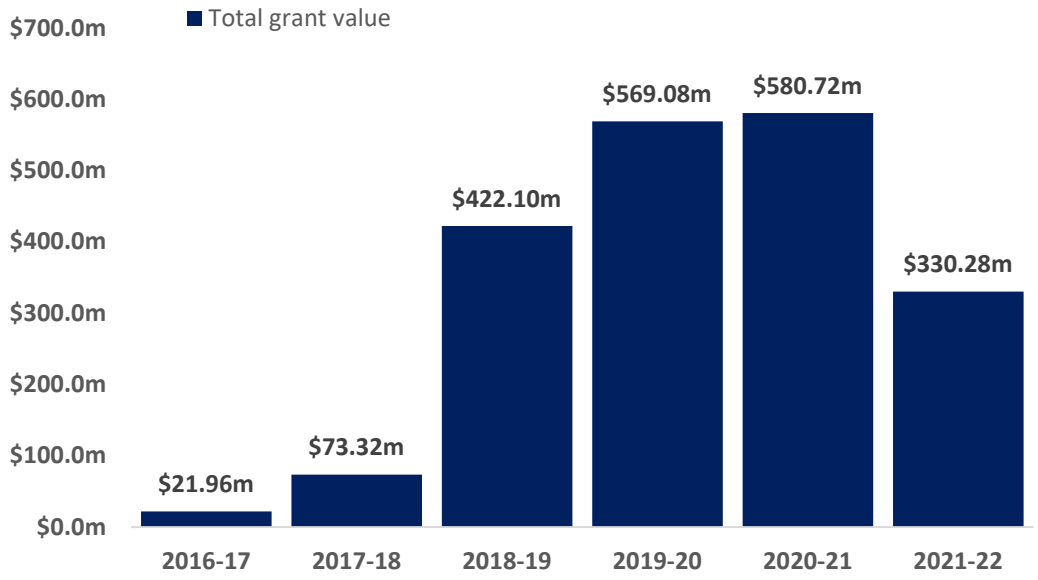
Dr Masha Somi, CEO of Health and Medical Research Office
Ms Sue MacLeman, Chair of MTPConnect Board

Medical Research Future Fund

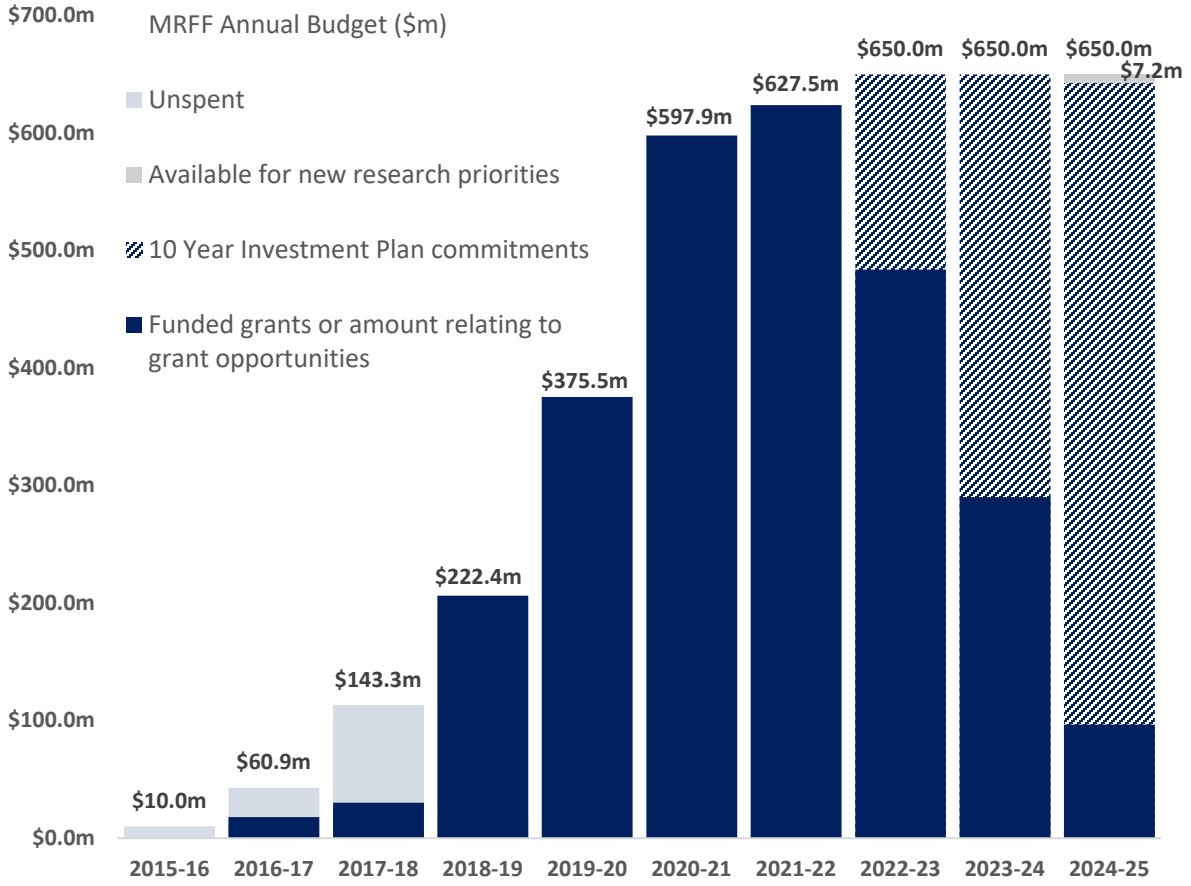
Contents

MRFF grants awarded

- $2 billion across a total of 742 grants already funded (as at 6 April 2022)
- Funds are available in future years for allocation to priorities



MRFF budget and expenses



Budget and expenses current as at 28 Feb 2022

2nd MRFF 10-year Investment Plan

- **$6.3 billion over 10 years** (2022-23 to 2031-32).
- Retains and carries forward all funding allocated from existing 1st 10-year Investment Plan (2018-19 to 2027-28).
- Retains the current **4 funding themes** and **20 initiatives**.
- The new 10-year Investment Plan is available at https://www.health.gov.au/campaigns/mrff

Australian Government
Department of Health

Medical Research Future Fund
2nd 10-year Investment Plan
2022-23 to 2031-32

OVERVIEW

The Australian Government has committed $6.3 billion for health and medical research through the 2nd 10-year Investment Plan (the 2nd Plan) for the Medical Research Future Fund (MRFF). The 2nd Plan provides funding for 21 initiatives between 2022-23 and 2031-32, to support lifesaving research, create jobs, strengthen the local industry base for commercialising research and innovation, and further grow Australia's reputation as a world leader in medical research.

The 2nd Plan builds on investments (actual and committed) made through the 1st 10-year Investment Plan, which was announced in the 2019-20 Budget and totalled $5.1 billion from 2018-19 to 2027-28. Commitments made in the 1st 10-year Investment Plan will be carried forward and remain available for expenditure as part of the 2nd Plan. The 2nd Plan provides flexibility for the MRFF to continue to be responsive to emerging health challenges while maintaining focus on addressing key health challenges. The 2nd Plan continues a strong focus on funding activities that will stimulate health and medical research across the entire research, translation and commercialisation pipeline.

CONTEXT

Developing new drugs, devices, treatments and cures can take more than a decade. The 2nd Plan gives researchers and industry certainty and direction so that they can address areas of unmet need and excel in collaborative and transformative research.

MRFF activities are based on national priorities identified by the Australian Medical Research Advisory Board following a national consultation process. Activities put patients at the core and focus on translating research into practice so that all Australians can benefit.

FUNDING THEMES AND INITIATIVES

MRFF funding is directed into 4 themes:

Patients	This theme aims to bring benefits to patients, including supporting life-changing clinical trials, funding innovative treatments and advanced health care and medical technologies
Research Missions	MRFF Research Missions (Missions) are large programs of work that bring together key researchers, health professionals, stakeholders, industry partners and patients to tackle big health challenges
Researchers	This theme aims to support Australian researchers, including to help build their skills and capacity, support their research in priority areas and assist them to develop and bring new research discoveries to the market
Research Translation	This theme aims to translate research outcomes into practice by building the evidence base to support the adoption of best practice care into health care delivery

There are 21 initiatives under these themes, funded over 10 years to harness innovation, provide vital infrastructure, improve patient outcomes, and generate jobs and economic growth.

Today's research is tomorrow's health care. There is no better way to ensure Australians receive the highest quality health care than by investing in Australian medical research.

Update to 10-year Investment Plan (2nd Plan)

- Includes one new initiative and an **additional $3.1 billion** funding:
  - **$384.2** million for a new MRFF initiative:
    - supporting early to mid-career researchers to enable them to work on greatest health challenges
  - **$1.2 billion** for enhancing and expanding existing MRFF initiatives:
    - Clinical Trials Activity initiative
    - Preventive and Public Health Research initiative
    - Primary Health Care Research initiative
    - Medical Research Commercialisation initiative
  - **$1.5 billion** for extending existing MRFF initiatives from 2028-29 to 2031-32:
    - $944 million for extension:
      - Emerging Priorities and Consumer Driven Research initiative
      - Global Health initiative
      - Frontier Health and Medical Research initiative
      - Clinician Researchers initiative
      - Rapid Applied Research Translation initiative
      - National Critical Research Infrastructure initiative
      - Research Data Infrastructure initiative
    - $590.8 million for extending existing MRFF Missions that demonstrate outcomes, or creating new Missions to address emerging priorities.

Australian Government
Department of Health

Medical Research Future Fund
2nd 10-year Investment Plan
2022-23 to 2031-32

OVERVIEW

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Update to 10-year Investment Plan (2nd Plan)

- The 2nd Plan includes a section on *Alignment with the MRFF Strategy and Priorities*.
- This is a high-level overview of how the MRFF initiatives:
  - align with and contribute to the strategic objectives of the current 2021-26 Strategy.
  - align with the current 2020-22 Priorities (and also the new draft Priorities).

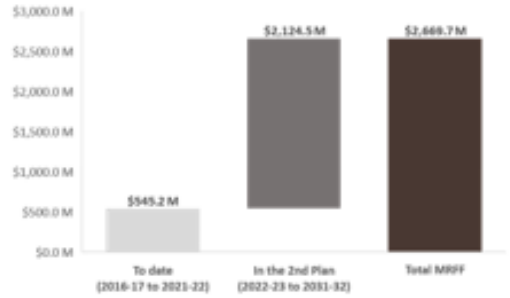
2020-2022 priorities	21 MRFF initiatives
Consumer-Driven Research	• Emerging Priorities and Consumer-Driven Research • Preventive and Public Health Research
Translational Research Infrastructure	• Early to Mid-Career Researchers • National Critical Research Infrastructure • Research Data Infrastructure • Frontier Health and Medical Research • Medical Research Commercialisation • Genomics Health Futures Mission • Researcher Exchange and Development within Industry • Stem Cell Therapies Mission • Rapid Applied Research Translation
Comparative Effectiveness Research	• Clinical Trials Activity • Preventive and Public Health Research
Public Health Interventions	• Preventive and Public Health Research • Million Minds Mental Health Research Mission • Cardiovascular Health Mission • Australian Brain Cancer Mission • Clinical Trials Activity
Primary Care Research	• Primary Health Care Research
Clinical Researcher Capacity	• Clinician Researchers • Early to Mid-Career Researchers • Frontier Health and Medical Research • Researcher Exchange and Development within Industry
Aboriginal and Torres Strait Islander Health	• Indigenous Health Research Fund
Ageing and Aged Care	• Dementia, Ageing and Aged Care Mission
One Health – Antimicrobial Resistance	• Global Health
Global Health and Health Security	• Global Health • Emerging Priorities and Consumer-Driven Research
Drug Repurposing	• Australian Brain Cancer Mission • Preventive and Public Health
Digital Health Intelligence	• National Critical Research Infrastructure • Research Data Infrastructure • Traumatic Brain Injury Mission

Update to 10-year Investment Plan (2nd Plan)

- The 2nd Plan includes snapshots of descriptions for each **MRFF funding theme**, including:
  - funding allocated to date (2016-17 to 2021-22)
  - funding allocated from 2022-23 to 2031-32
  - total funding from inception of the MRFF through to 2031-32.

MRFF FUNDING THEME - RESEARCH TRANSLATION

This theme aims to translate research outcomes into practice by building the evidence base to support the adoption of best practice care in to health care delivery.



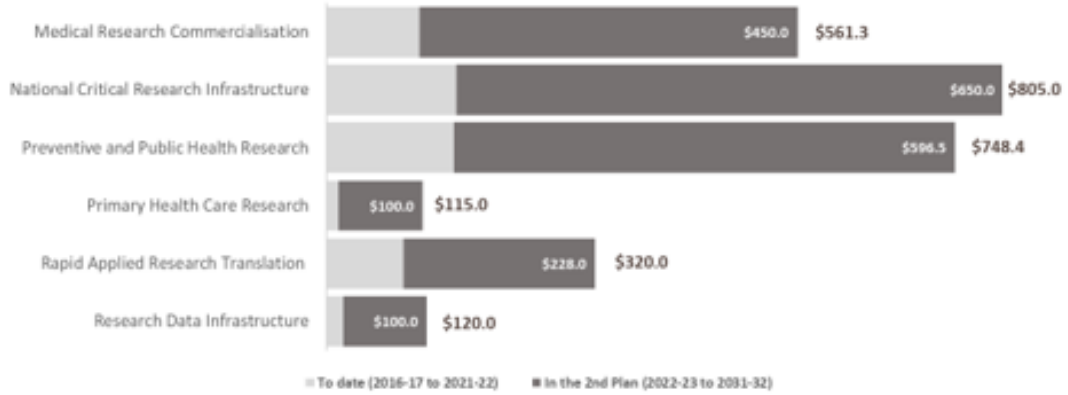
The $2.125 billion allocated for the Translation theme under the 2nd Plan (2022-23 to 2031-32) builds on the funding already provided since the inception of the MRFF.

Overall, $2.670 billion has been made available from 2016-17 to 2031-32.

There are 6 initiatives under this theme:

- Medical Research Commercialisation
- National Critical Research Infrastructure
- Preventive and Public Health Research
- Primary Health Care Research
- Rapid Applied Research Translation
- Research Data Infrastructure

Funding allocation under the MRFF 10-year Investment Plan, since 2016-17 (million)



Update to 10-year Investment Plan (2nd Plan)

- The 2nd Plan includes snapshots of descriptions for each **MRFF funding initiative**:
  - funding allocated to date (2016-17 to 2021-22)
  - funding allocated from 2022-23 to 2031-32
  - total funding from inception of the MRFF through to 2031-32
  - objectives of each initiative
  - grant activities supported to date (as of 21 January 2022) from each initiative

MRFF FUNDING INITIATIVE

Medical Research Commercialisation

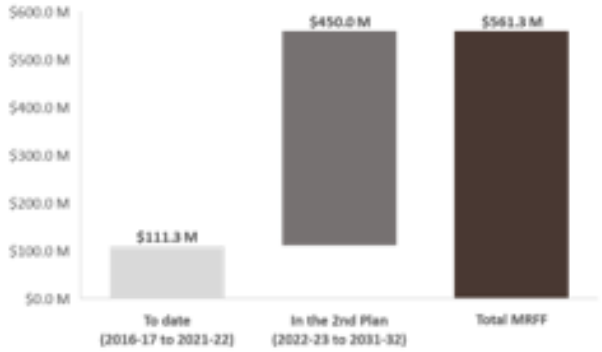
Objectives

The objective of this initiative is to support early-stage health and medical research and innovation in Australia through to proof-of-concept and beyond, providing opportunities for commercialisation.

This initiative will build on previous support for projects with commercial potential (particularly from small and medium-sized enterprises), with a focus on supporting research discoveries, including for novel or repurposed drugs (preclinical and clinical), devices and digital health technologies, as they progress from proof of concept through to clinical implementation.

Early investments through the 2nd Plan include an 'incubator' style funding model that will be used to support and nurture early-stage medical research and medical innovation projects with commercial potential.

Funding allocation



Grant activities supported to date

4 grant opportunities were completed

7 grants valued at

$146.3 million were awarded or announced*

Key alignment with Priorities

- Translational Research Infrastructure

2nd Plan: Snapshots of Updates – Patients

Theme: Patients	Changes to initiative's focus
Clinical Trials Activity: • $750m over 10 years • Increase: $62.6m pa to $75m pa from 2022-23 to 2027-28 • Continuation: 4 years extension 2028-29 to 2031-32 ($300m)	• Expanded focus through a new stream, **effective health interventions**, to enable funding of research projects focused on any disease or condition that meets the objective specified in each grant opportunity (focus in 1st 10-year Plan was on rare cancers, rare diseases, and unmet needs).
Emerging Priorities and Consumer-Driven Research: • $613m over 10 years • Increase: Nil • Continuation: 4 years extension 2028-29 to 2031-32 ($240m)	• Nil
Global Health: • $30m over 10 years • Increase: Nil • Continuation: 4 years extension 2028-29 to 2031-32 ($12m)	• Nil

2nd Plan: Snapshots of Updates – Research Missions

- Current Missions will continued to be implemented in alignment with Missions' Roadmaps and Implementation Plans.
- **$590.8 million** has been earmarked in the 2nd Plan for extending existing MRFF Missions that demonstrates outcomes, or creating new Missions to address emerging priorities.

		2022–2023 $m	2023–2024 $m	2024–2025 $m	2025–2026 $m	2026–2027 $m	2027–2028 $m	2028–2029 $m	2029–2030 $m	2030–2031 $m	2031–2032 $m	Total over 10 years
Research Missions	**Missions theme total**	**161.9**	**148.0**	**148.0**	**138.0**	**138.0**	**153.0**	**153.0**	**153.0**	**153.0**	**153.0**	**$1,498.9 million**
	Australian Brain Cancer Mission[1]	5.0	5.0	5.0	5.0	5.0	Extension subject to evaluation					$25.0 million
	Cardiovascular Health Mission	24.0	25.0	20.0	20.0	20.0	20.0	20.0	Extension subject to evaluation			$149.0 million
	Dementia, Ageing and Aged Care Mission	17.5	17.5	17.5	17.5	17.5	17.5	17.5	Extension subject to evaluation			$122.5 million
	Genomics Health Futures Mission	54.9	50.0	50.0	50.0	50.0	41.2	Extension subject to evaluation				$296.1 million
	Indigenous Health Research Fund	12.5	12.5	12.5	12.5	12.5	12.5	12.5	Extension subject to evaluation			$87.5 million
	Million Minds Mental Health Research Mission	25.0	15.0	20.0	10.0	10.0	5.0	Extension subject to evaluation				$85.0 million
	Stem Cell Therapies Mission	18.0	18.0	18.0	18.0	18.0	18.0	Extension subject to evaluation				$108.0 million
	Traumatic Brain Injury Mission	5.0	5.0	5.0	5.0	5.0	5.0	5.0	Extension subject to evaluation			$35.0 million

1 The total allocation to the Mission since 2018-19 is $136.66 million (including $76.4 million in philanthropic contributions and $10.26 million from other MRFF initiatives).

2nd Plan: Snapshots of Updates - Researchers

Theme: Researchers	Changes to initiative's focus
Clinician Researchers: • 200m over 10 years • Increase: Nil • Continuation: 4 years extension 2028-29 to 2031-32 ($80m)	• Nil
Early to Mid-Career Researchers: • $384.2m over 10 years • New Initiative	• Dedicated funding stream to support early to mid-career researchers (EMCRs) ○ **$84 million** for **early career researchers** to develop and test the feasibility of novel solutions to challenging health issues ➢ **New incubator model** for early-stage small-scale research projects ○ **$206 million** for **mid-career researchers** to allow large interdisciplinary teams to devise and implement research to improve health care/health system effectiveness ➢ **New accelerator model** for large-scale programs of work ○ **$95 million** for **accelerated research translation** to allow EMCRs to lead co-funded projects that accelerate translation of research outcomes ➢ A **targeted call for research** model for research-industry collaboration and translation into practice.
Frontier Health and Medical Research: • $700m over 10 years • Increase: Nil • Continuation: 4 years extension 2028-29 to 2031-32 ($280m)	• Nil
Researcher Exchange and Development within Industry: • $4m over 1 year • Increase: Nil • Continuation: No	• Nil

2nd Plan: Snapshots of Updates – Research Translation

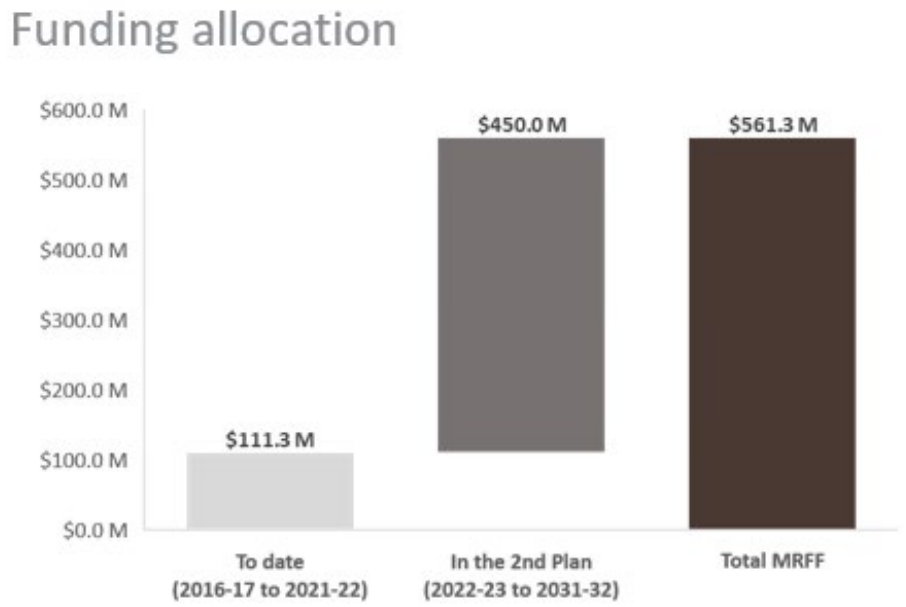
Theme: Research Translation	Changes to initiative's focus
Medical Research Commercialisation: • $450m over 10 years • Increase: $35m pa to $45m pa • Continuation: 4 years extension 2028-29 to 2031-32 ($180m)	• Building on supporting projects with **commercial potential** (particularly from small and medium-sized enterprises), with a focus on supporting **research discoveries**, including for novel or repurposed drugs (preclinical and clinical), devices and digital health technologies, as they progress **from proof of concept through to clinical implementation**. • Includes **'incubator' style** funding model for early-stage medical research and medical innovation projects with commercial potential.
National Critical Research Infrastructure: • $650m over 10 years • Increase: Nil • Continuation: 4 years extension ($50m pa) 2028-29 to 2031-32 ($200m)	• Focussed on: o innovation enablers o digitisation of health care o co-investment partnerships o mRNA technology enablers
Preventive and Public Health Research: • $596.5m over 10 years. • Increase: $274.9m from 2022-23 to 2027-28 (year-on-year increases are variable) • Continuation: 4 years extension 2028-29 to 2031-32 ($203m).	• Building on earlier focus to support: o Consumer Led Research, $100 million over 10 years o Health Technology Assessment, $100 million over 10 years o Maternal Health and Early Childhood, $75 million over 10 years o Promoting Healthy Lifestyles, $75 million over 10 years o Chronic Respiratory Conditions, $65 million over 5 years *NB: Funding for Targeted Translation Research Accelerator continues ($125m over 10 years)*

2nd Plan: Snapshots of Updates – Research Translation

Theme: Research Translation	Changes to initiative's focus
Primary Health Care Research: • $100m over 10 years • Increase: $5m pa to $10m pa • Continuation: 4 years extension 2028-29 to 2031-32 ($40m)	• Expanded focus on supporting projects that **enhance equity of access to high quality primary health care through digital health innovation** and that help patients to monitor and control their own health care, support continuity of care and enable health care providers and patients to communicate in innovative and timely ways. • Funding decisions will be driven by **meaningful engagement with end users**, such as patients, clinicians and health service providers, to address specific needs of Australian populations, including those in rural or remote locations.
Rapid Applied Research Translation: • $228m over 10 years • Increase: Nil • Continuation: 4 years extension 2028-29 to 2031-32 ($92m)	• Nil
Research Data Infrastructure: • $100m over 10 years • Increase: Nil • Continuation: 4 years extension 2028-29 to 2031-32 ($40m)	• Nil

MRFF's Medical Research Commercialisation Initiative

- Activities:
  - **BioMedTech Horizons**
  - **Biomedical Translation Bridge**
  - **Early Stage Translation and Commercialisation Support**
  - **BioMedTech Incubator**
- Some activities are operated by MTPconnect.



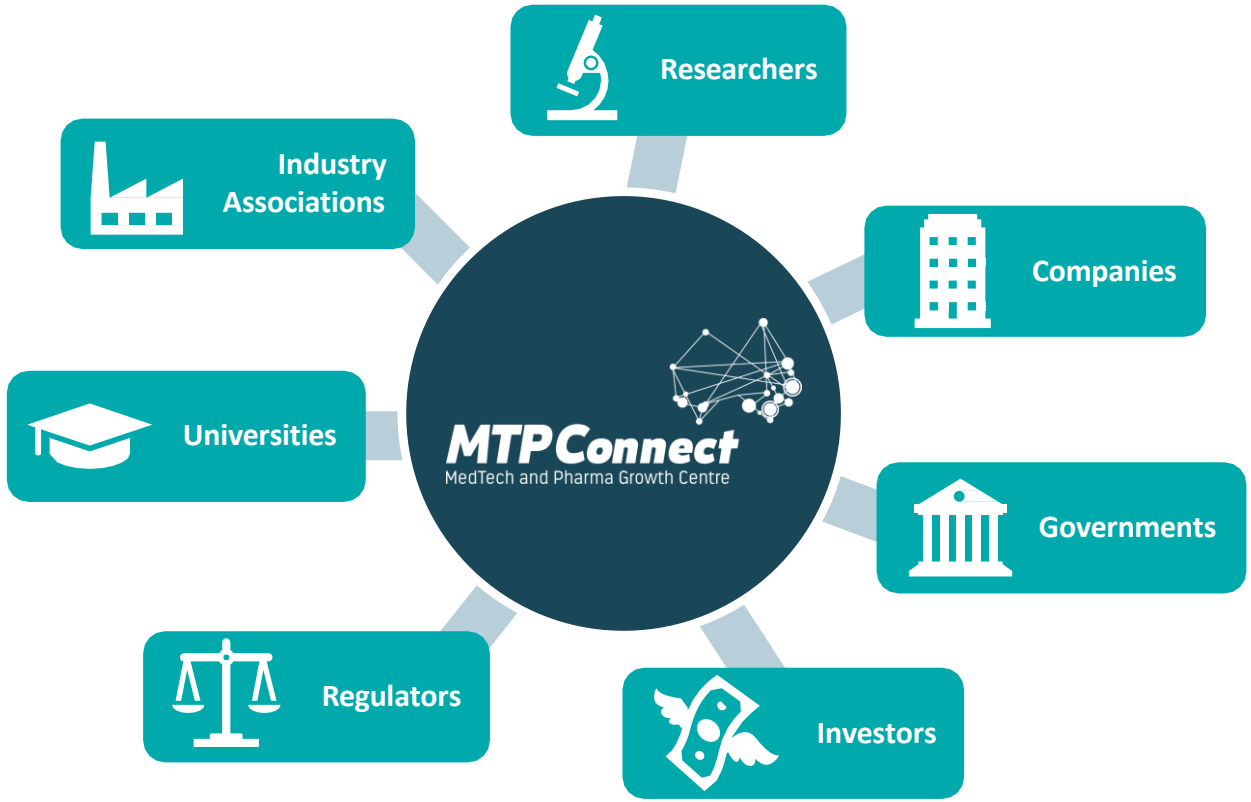
- **$450m** over 10 years from 2022-23
- Building on supporting projects with **commercial potential** (particularly from SMEs), with a focus on supporting **research discoveries**, as they **progress from proof of concept through to clinical implementation**.
- Includes '**incubator' style funding model** for early-stage medical research and medical innovation projects with commercial potential.

MRFF Webinar

Ms Sue MacLeman

Chair, MTPConnect

MTPConnect's goal is to accelerate the growth of Australia's MTP sector



1. Increasing collaboration and commercialisation across the sector
2. Improved management and workforce skills
3. Optimising the regulatory environment
4. Improved access to global supply chains and international markets

Australian MTP Sector

Medical Research Future Fund

ECONOMIC METRICS

GROSS VALUE ADDED (NOMINAL)
BILLIONS OF AUD

JOBS SUPPORTED – INDUSTRY* AND RESEARCH
THOUSANDS OF EMPLOYEES

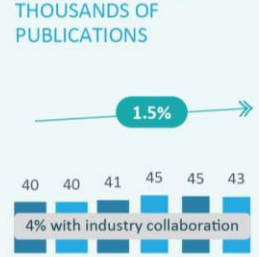
MTP MANUFACTURING EXPORTS
BILLIONS OF AUD

R&D METRICS

R&D INVESTMENT
BILLIONS OF AUD

NUMBER OF COMPANIES PATENTING
NUMBER OF COMPANIES

NO. OF PUBLICATIONS (WEB OF SCIENCE)
THOUSANDS OF PUBLICATIONS

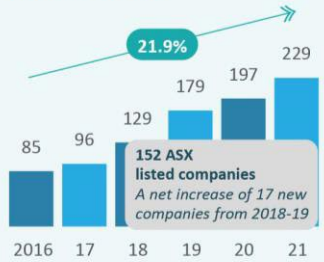


NO. CLINICAL TRIALS
THOUSANDS OF TRIALS

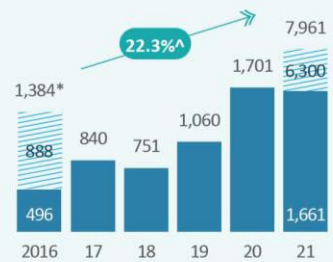
COMMERCIAL METRICS

COMPANIES IN THE MTP INDUSTRY
NO. OF COMPANIES

MARKET CAPITALISATION OF MTP COMPANIES
BILLIONS OF AUD



CAPITAL RAISED
MILLIONS OF AUD



MTPConnect Programs Overview @$182M

Medical Research Future Fund

Department of Industry, Science, Energy and Resources

Australian Government
Department of Industry, Science, Energy and Resources

Industry Growth Centres

Growth Centre Project Fund

$15.6M

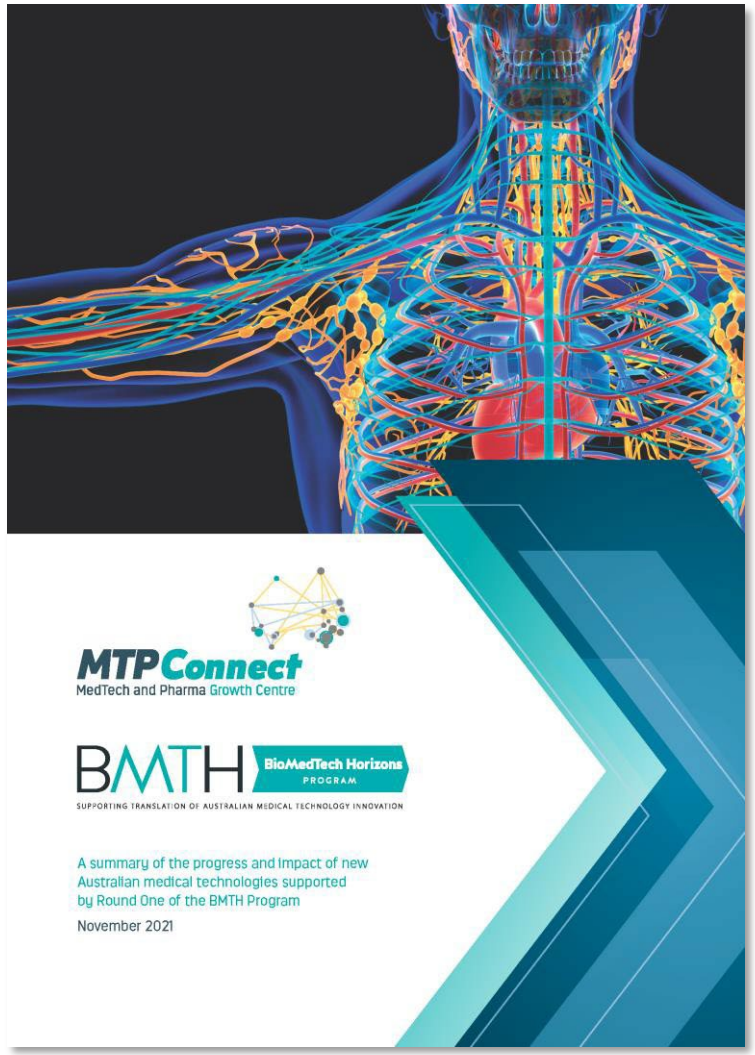
40 Projects

Department of Health - Medical Research Future Fund

bTb Biomedical Translation Bridge Program	**$22.3M**	**21 Projects**
BMTH BioMedTech Horizons Program	**$45M**	**46 Projects**
RED Developing Australia's MTP Sector Workforce	**$32M**	**13 Training partners** **31 Training programs**
TTRA Targeted Translation Research Accelerator – Diabetes + Cardiovascular Disease	**$47M**	**7 Research projects** **2 Research centres**
CTCM Clinical Translation & Commercialisation Medtech	**$19.75M**	**Round 1 – NOW OPEN!**

BioMedTech Horizons Program (BMTH)

- The BioMedTech Horizons program (BMTH) is a $45 million MRFF initiative focused on supporting proof-of-concept to commercial development of biomedical and medical technology
- Four funding rounds - funded 46 projects
- Investments from the program are $40M in funding has been distributed direct to projects and this has leveraged a further $49M in cash and in kind.
- Projects have addressed many technical and clinical domains including precision medicine, 3D printing, cardiovascular health, orthopedics, emergency medicine, ophthalmology, implantable medical devices, digitally enabled devices, wearable devices, oncology, neonatal and pediatric devices and devices aimed at supporting blind people and restoring vision



BioMedTech Horizons Program 1.0 - Impact

The first BMTH funding round concluded activities on 29 October 2021.

Of the 11 projects identified and funded as part of BMTH1, nine successfully completed their program of works resulting in clear advancement of their devices toward achieving their research and commercialisation objectives.

New technologies invented or progressed

27

New patents, trademark applications and **licences**

42

New products launched

3

New jobs created in **project companies** (years – direct and indirect)

58

Total sector **investment** into new companies (cash and in-kind)

$23.5M

BMTH Program Success: WearOptimo

In 2018, WearOptimo was awarded funding in Round One to help create a microwearable platform and again for Round Two in 2019 to develop a cardiac microwearable sensor.

- March 2021, secured a $30 million partnership deal to manufacture its microwearable sensor at an advanced technology facility in Brisbane – for worldwide distribution. Partnership between the QLD Government, ANU and the Australian National Fabrication Facility
- March 2022, announced a multi-million-dollar investment agreement with Australian-owned Aspen Medical, cementing a strategic partnership to accelerate the development of its microwearable sensor that detects and alerts an individual to dehydration risk – while refining and testing it across industries like the military, mining, and resource sectors.

Biomedical Translation Bridge Program (BTB)

The Biomedical Translation Bridge program is a $22.3 million MRFF initiative that provides up to $1 million in matched funding to nurture the translation of new therapies, technologies and medical devices through to the proof of concept stage.

Delivered through mentoring and commercialisation advice by BTB partners and partner programs, the BTB program aims to:

- De-risk and develop ventures so that they can attract further funding opportunities
- Nurture and mentor the next generation of health and medical research innovators in Australia
- Develop ventures to become attractive to Biomedical Translation Fund (BTF)
- Assist in the development of ventures that aim to ultimately result in preventative interventions, cures and
- Treatments for diseases that address health problems of national significance.

BTB Program – Funding:

- **Three funding rounds**
- **R3 funding in 2020 was for COVID-19 research projects that had to be completed within 12-months**
- **20 projects currently funded by the BTB program**

BTB Program Success: The University of Melbourne

The patient isolation hood is an Australian developed technology protecting HCWs from COVID-19 and reducing viral levels in the immediate surroundings. It provides for better patient respiratory treatment, reducing the need for invasive ventilation

- The University of Melbourne's patient isolation hood – now named **"McMonty" by Medihood** – has seen clinical trials conducted in Intensive Care Units (ICUs) at Western Health's Footscray and Sunshine hospitals
- The hoods have been successfully deployed in rural areas of Australia, particularly those without specialised facilities and negative pressure rooms. They have also been deployed internationally in Papua New Guinea and the Republic of Nauru
- A collaboration between the University of Melbourne, Western Health and local manufacturer Evan Evans saw the product in market within 12-months and, to date, 1,000 devices and additional consumables have been sold

Clinical Translation & Commercialisation – Medtech (CTCM)

Medical Research Future Fund

The Clinical Translation and Commercialisation - Medtech (CTCM) program is offered under the 2020 Early Stage Translation and Commercialisation Support Grant of the Medical Research Future Fund's Medical Research Commercialisation Initiative.

- The $19.75 million program will identify and nurture high-quality medical device projects that have commercial potential and support their translation through early clinical trials
- The program opened in December 2021, is focused on SMEs and aims to boost commercialisation of home- grown medical products

CTCM Clinical Translation & Commercialisation Medtech

In partnership with:

MTAA Medical Technology Association of Australia

Medical Device Partnering Program

CICADA INNOVATIONS

The BridgeTech Program

Therapeutic Innovation Australia

Two funding rounds

Funding Round 1
(Opened FY 2022)

Funding Round 2
(Opens FY 2023)

Successful projects will receive

Between **$250,000 & $1.5 million** per project
(50% cash co-contribution)

Funding period per project:
24 months

REDI Initiative

Medical Research Future Fund

Developing future workforce capabilities in the MTP sector

REDI DEVELOPING AUSTRALIA'S MTP SECTOR WORKFORCE

Pillar One

Expansion of proven programs

Partners:
- ANDHealth
- GSK Australia
- IMNIS
- MDPP
- MedTech Actuator

1

Pillar Two

Comprehensive skills gap analysis and support for new programs

Partners:
- ARCS Australia
- Biointelect Consortium
- Cicada Innovations
- SeerPharma
- The George Institute for Global Health
- VCCC Alliance

2

Pillar Three

Industry placements, internships and fellowships

Partners:
- APR.Intern
- MTPConnect REDI Fellowship Program
- The Bridge and BridgeTech programs

3

Researcher Exchange and Development within Industry initiative

Medical Research Future Fund | $32M over 4 years

REDI Skills Gap Analysis

Skills gap analysis has provided us with a skills development blueprint for an industry-ready, fit for purpose MTP workforce

REDI Success: The REDI Fellowship Program

- The REDI Fellowship program provides companies in the medical technology, biotechnology and pharmaceuticals (MTP) sector with up to $250,000 per annum to bring researchers, clinicians and MTP professionals in-house for up to 12-months to work on priority medical research projects
- Intended to accelerate relationships, drive projects towards commercial outcomes and provide high-level commercial and entrepreneurial experience for the Fellow
- To date, 14 fellowships have been awarded, working with major Australian and international companies including Cochlear, Telix Pharmaceuticals, Stryker, Pharmaxis, Paige and Synopsis
- Successful applicants from the November 2021 round are now being finalised, after which all funds in the current budget will be committed and the program will be paused

TTRA Diabetes & Cardiovascular Disease Research Accelerator

The $47M MRFF-funded TTRA program:

- has established two **Research Centres** for diabetes and cardiovascular disease
- is providing direct **Research Project** funding support across Australia,

to enable research translation, commercialisation and implementation through to clinical impact.

MRFF $47M TTRA Program

Medical Research Future Fund

Year 0
Year 1
Year 2
Year 3
Year 4

RESEARCH CENTRES (Pillar 1)

CENTRE #1	CENTRE #2
Needs Assessment	
DIABETES COMPLICATIONS	CARDIOVASCULAR DISEASE COMPLICATIONS
ACADI	ASHRA

RESEARCH PROJECTS (Pillar 2)

Round 1	Round 2	Round 3
Needs Assessment		
D&CVD 7 Projects $5.2M	Needs Assessment D&CVD	Needs Assessment D&CVD

ANDHealth Australia's National Digital Health Initiative
AusHSI Australian Centre for Health Services Innovation
MDPP
UNIQUEST
(Pillar 3)

TTRA Success Story: Research Centres

"a new approach to boosting the translation and commercialisation of Australian research to do more to help people with cardiovascular disease and diabetes"

- In January 2022, two new national Research Centres, the Australian Centre for Accelerating Diabetes Innovations (ACADI) and the Australian Stroke & Heart Research Accelerator (ASHRA) were established under the TTRA initiative
- Each Research Centre has been awarded $10 million over four years and attracted substantial co-contributions from academic and industry partners totalling $34.3 million
- Collectively the two new Research Centres will initially progress **31 research projects** addressing diabetic kidney disease, peripheral neuropathy and diabetic foot syndrome, and short-term complications of hypoglycaemia, hyperglycaemic hyperosmolar syndrome (HHS) and ketoacidosis, coronary artery disease, cardiomyopathy and heart failure, and transient ischaemic attack (TIA) / stroke

ACADI

ASHRA

CONTACT US FOR FURTHER

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Industry Growth Centres

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MRFF's Early Stage Translation and Commercialisation Support

The 2020 Early Stage Translation and Commercialisation Support Grant Opportunity:

- Competitive grant round.
- **$79 million over three years from 2020-21** to support early stage Australian medical research and medical innovation projects with commercial potential.
- Successful projects will be required to partner with Australian small to medium-sized enterprises (SMEs), including to provide them with specialist support and expertise with the aim to de-risk project outputs and progress towards commercialisation.
- **Four grants of $19.75 million each** awarded to:
    - MRCF Pty Ltd (Brandon BioCatalyst) to support 20-25 preclinical medical research or medical innovation projects with commercial potential
    - MRCF Pty Ltd (Brandon BioCatalyst) to support at least 11 early clinical development of novel drugs, or novel uses for existing drugs, with commercial potential
    - MTPConnect to support early clinical development of medical devices with commercial potential
    - ANDHealth Limited to support up to 25 SMEs in early stage development of digital health technologies with commercial potential.

MRFF's Early Stage Translation and Commercialisation Support

- **ANDHealth Limited** has selected and announced five SMEs as the first cohorts under its MRFF-funded program to share in $3.75 million of project funding:
    - **Cardihab** – Digital Cardiac Rehabilitation providing care to patients at a time and place that works for them.
    - **Gheorg**– The friendly robot helping children with anxiety; an AI enhanced first responder for children with mental health issues and expert guide for parents.
    - **Perx Health** – A motivation and engagement platform changing the way people and companies create habits for managing medical conditions.
    - **Sound Scouts**– Free online hearing test app for kids. Fun, clinically proven technology enabling hearing to be checked efficiently and reliably.
    - **VaxApp**– An immunisation management platform that enables healthcare providers to deliver and monitor vaccination and rapid antigen testing programs.
- **MCRF Pty Ltd (Brandon BioCatalyst)** has completed its first round of expression of interests (EOIs).
- **MTPConnect**'s first round of EOIs has opened.

MRFF's BioMedTech Incubator

- Funds a suitable organisation that can identify and select a number of Australian small and medium enterprises (SMEs) undertaking early-stage medical research and innovation projects with commercial potential.
- The successful organisation will partner with the SMEs to progress and nurture their medical research and innovation projects by:
  - supporting novel or repurposed drugs (pre-clinical and clinical), medical devices and digital health technologies
  - providing access to capital (project funding of up to $5 million over 5 years) and industry knowledge to support transition of discoveries through to commercialisation
  - nurture and mentor the next generation of health and medical research innovators.

- **$50 million** available over **two years from 2022-23**
- Applications close **25 August 2022 at 5:00pm**
- GrantConnect: GO ID GO5322

Australian Government
Department of Industry, Science, Energy and Resources
Department of Health

Grant Opportunity Guidelines

Medical Research Future Fund

Medical Research Future Fund – Medical Research Commercialisation Initiative

2021 BioMedTech Incubator Grant Opportunity Guidelines

Opening date:	8 March 2022
Closing date and time:	5.00pm AEDT on 25 August 2022
Commonwealth policy entity:	Australian Government Department of Health
Administering entity	Department of Industry, Science, Energy and Resources
Enquiries:	If you have any questions, contact us on 13 28 46 or BMTI@industry.gov.au.
Date guidelines released:	20 December 2021
Type of grant opportunity:	Open competitive

Biomedical Translation Fund (BTF)

- The BTF **complements the MRFF in supporting the translation and commercialisation** of medical research and medical innovation, in particular the '**second valley of death**' **along the research pipeline**, by
  - investing in their promising biomedical discoveries (therapeutic, medical or pharmaceutical) and assist in commercialisation
  - encouraging development of these companies by addressing capital and management constraints.

- Three licensed private fund managers:
  - Brandon Capital Partners
  - OneVentures Management
  - BioScience Managers.

- Program delivery by AusIndustry: https://business.gov.au/Grants-and-Programs/Biomedical-Translation-Fund

$501.25 million is available
$250 million from Commonwealth funding
$251.25 million from private sector capital

$287.8 million committed in **25 investee companies**
As of 4 March 2022

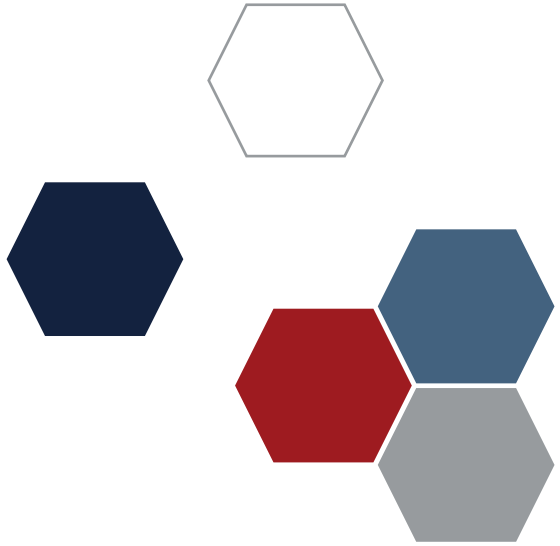
BTF Success Stories

- **$6.5 million** to **Avita Medical Ltd**
  - commercialisation of the **RECELL®** system that produces a suspension of Spray-On Skin™ Cells using a small sample of the patient's own skin for the treatment of acute burns, prepared and applied at the point of care in as little as 30 minutes.
  - RECELL® sales were projected at US$28-30 million for 2020-21.

- **$19 million** to **BiVACOR Pty Ltd**
  - development of a rotary **total artificial heart device**, designed to take over complete function in the case of heart failure.
  - designed to be a long-term device to completely replace a natural heart.

- **$27.4 million** to **Global Kinetics Corporation**
  - accelerating the development and commercialisation of the **PKG® System**, which includes a wrist-worn device that records Parkinson's symptoms and provides clinical reports to assist with planning routine care for Parkinson's patients.

Australian Government
Department of Health



MRFF Program Updates and News

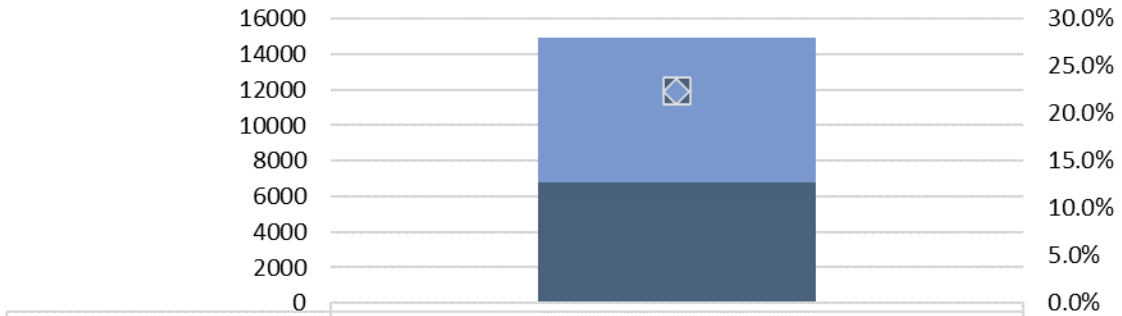
MRFF Gender Data Report

- Report now available on the MRFF webpage at: https://www.health.gov.au/resources/publications/medical-research-future-fund-grant-opportunity-gender-data-report-22-march-2022

- Analysis based on approximately 76% of MRFF completed competitive grant opportunities as of 30 June 2021 consisting of:
  - 60 competitive grant opportunities
    - 56 grant opportunities administered by NHMRC
    - 4 grant opportunities administered by BGH (Business Grants Hub)
  - Data from almost 15,000 Chief Investigators (CIs) or equivalent, who self-identified or were identified by the department as a woman or man.

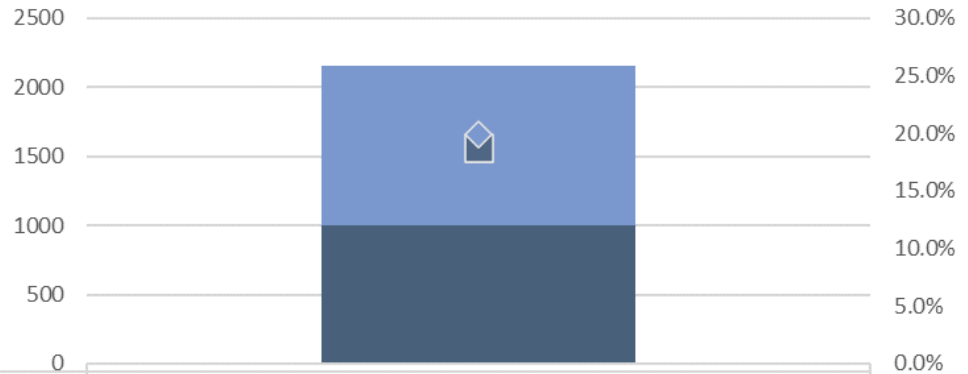
MRFF Gender Data Report

Number of CIs, or equivalent and funded rates, by gender



Total men CI applicants	8086
Total women CI applicants	6818
Funded Rate for women	22.5%
Funded Rate for men	22.3%

Number of CIAs and funded rates, by gender



Total men CIAs	1148
Total women CIAs	1005
Funded Rate for women	18.8%
Funded Rate for men	19.9%

- Overall, more men applied for MRFF grants as a Chief Investigator (CI) or as the Chief Investigator ‘A’ (CIA) compared with women.
- Funded rates for women and men CIs were relatively comparable across the range of factors assessed in this report.

MRFF Gender Data Report

- More women applied for grants in the Health Services Research and Public Health Broad Research Areas compared with men.

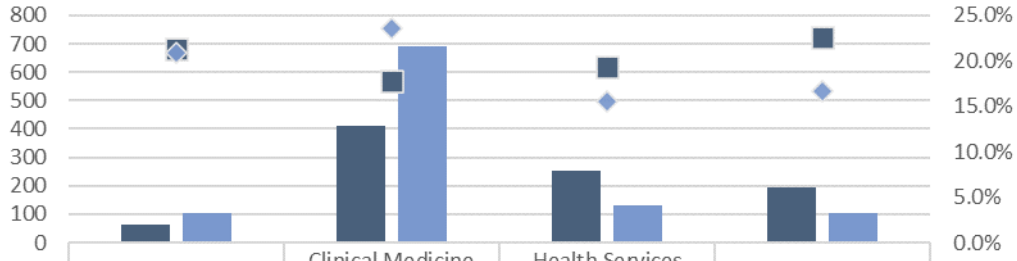
- **Women CIs had better or equal funded rates in applications than men across the broad research areas, other than in Basic Science**.

- For CIA data only:
  - **Women had greater funded rates** than men **for Health Services Research and Public Health applications.**
  - Men had greater funded rates than women for Clinical Medicine and Science applications.
  - **Funded rates for Basic Science applications were approximately equal** for men and women CIAs.

Number of CIs, or equivalent and funded rates by Broad Research Area (NHMRC-administer only), by gender

	Basic Science	Clinical Medicine and Science	Health Services Research	Public Health
Total women CI applicants	311	3021	1746	1297
Total men CI applicants	542	4974	1209	876
Funded Rate for women	22.5%	24.1%	21.0%	22.3%
Funded Rate for men	26.8%	23.4%	19.4%	21.3%

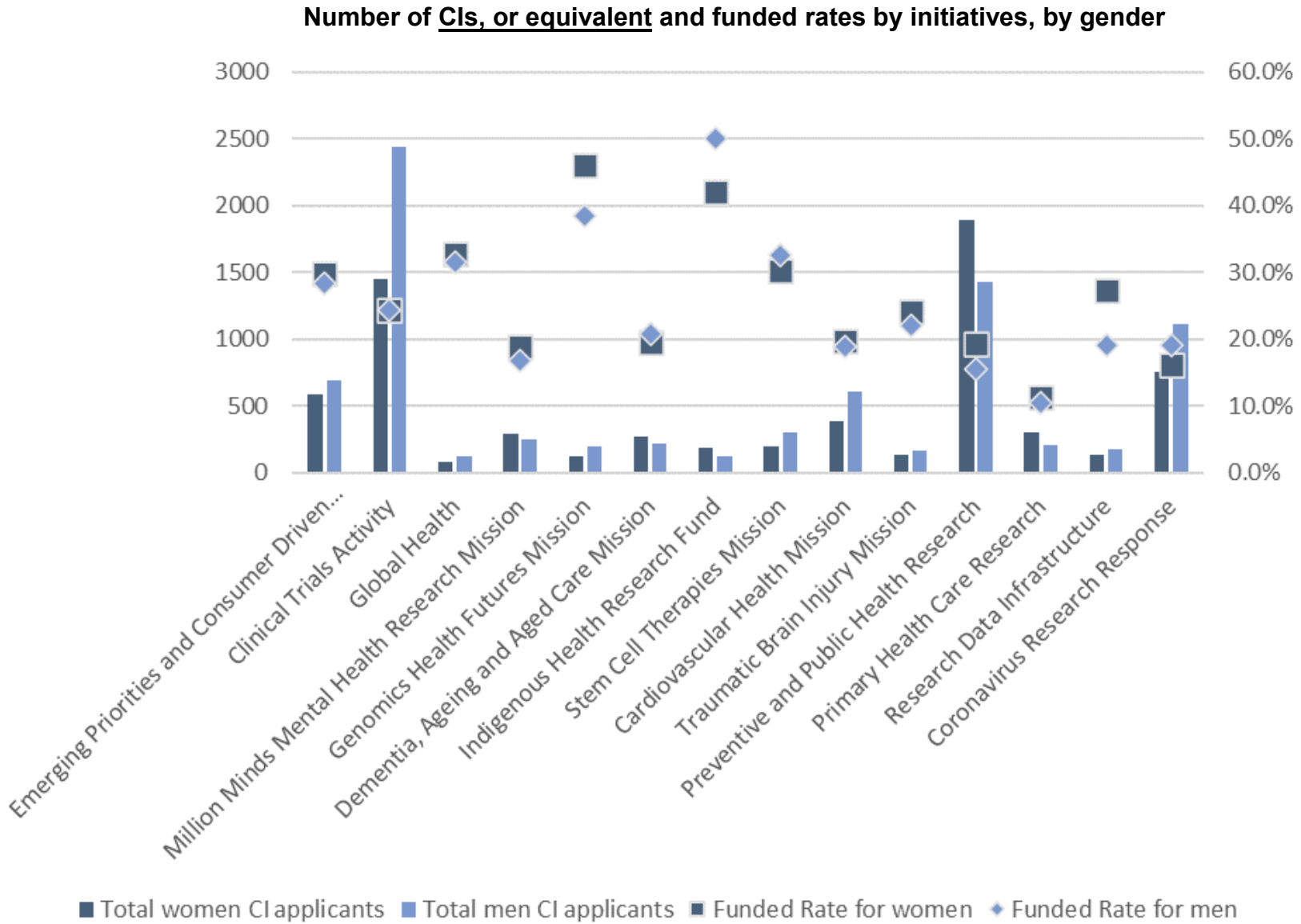
Number of CIAs and funded rates by Broad Research Area (NHMRC-administer only), by gender



	Basic Science	Clinical Medicine and Science	Health Services Research	Public Health
Total women CIAs	61	410	253	195
Total men CIAs	105	693	129	102
Funded Rate for women	21.3%	17.8%	19.4%	22.6%
Funded Rate for men	21.0%	23.5%	15.5%	16.7%

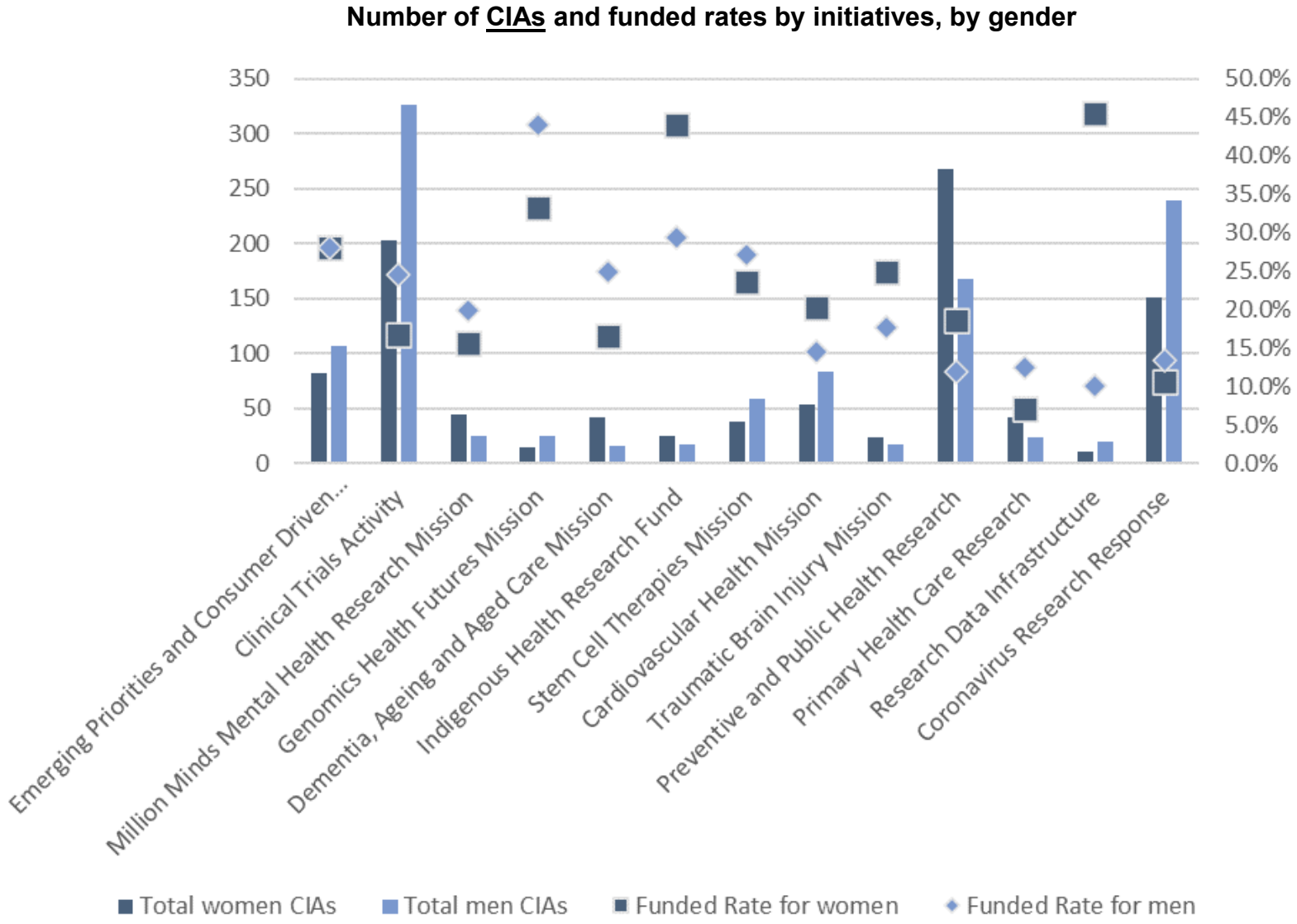
MRFF Gender Data Report

- The funded rates for women CIs tended to be equal to or higher than for men CIs across many MRFF initiatives.



MRFF Gender Data Report

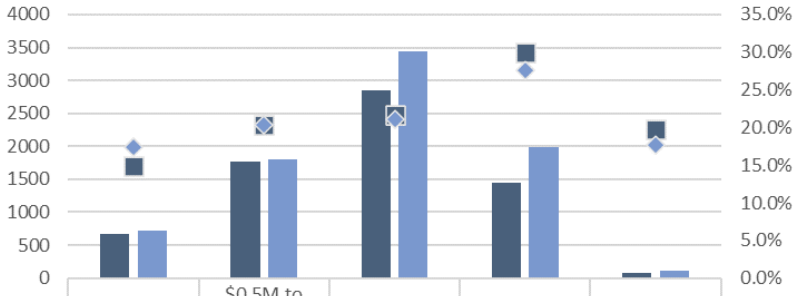
- The funded rates for women CIAs are more variable, with higher funded rates for women across half of the MRFF initiatives.



MRFF Gender Data Report

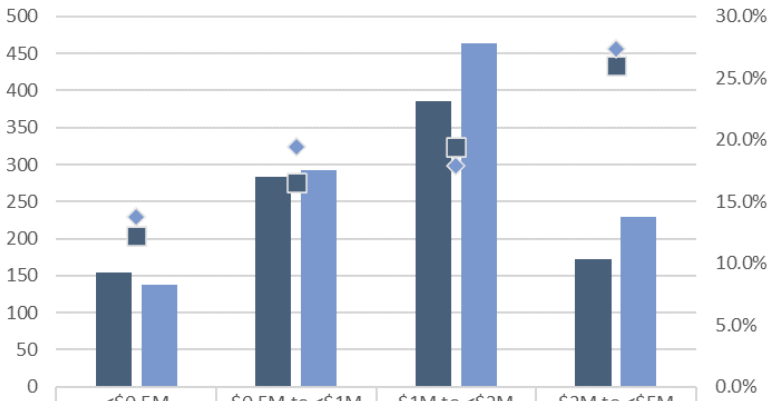
- There are variable outcomes by grant sizes (funding requests).
- Some general trends observed:
  - Funded rates for women CIs are slightly higher than for men for grant sizes $2 million and above, but are about equal or less than for men for smaller grant sizes.
  - Funded rates for women CIAs are lower than for men for all grant sizes, except for grants between $1 million to less than $2 million.

Number of CIs, or equivalent and funded rates by grant size, by gender



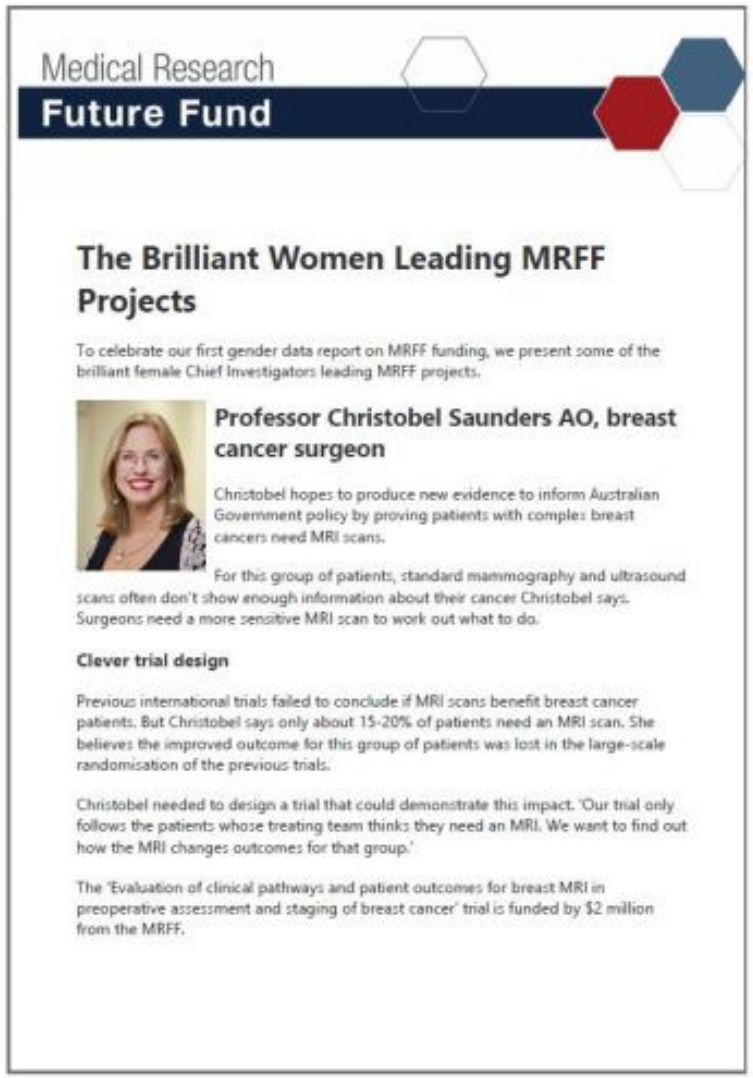
	<$0.5M	$0.5M to <$1M	$1M to <$2M	$2M to <$5M	>$5M
Total women CI applicants	664	1760	2858	1448	71
Total men CI applicants	724	1798	3442	1990	107
Funded Rate for women	14.9%	20.4%	21.7%	29.9%	19.7%
Funded Rate for men	17.4%	20.4%	21.1%	27.6%	17.8%

Number of CIAs and funded rates by grant size, by gender



	<$0.5M	$0.5M to <$1M	$1M to <$2M	$2M to <$5M
Total women CI applicants	155	283	386	173
Total men CI applicants	138	293	464	230
Funded Rate for women	12.3%	16.6%	19.4%	26.0%
Funded Rate for men	13.8%	19.5%	17.9%	27.4%

Sharing stories of the brilliant women leading MRFF projects



Medical Research Future Fund

The Brilliant Women Leading MRFF Projects

To celebrate our first gender data report on MRFF funding, we present some of the brilliant female Chief Investigators leading MRFF projects.

Professor Christobel Saunders AO, breast cancer surgeon

Christobel hopes to produce new evidence to inform Australian Government policy by proving patients with complex breast cancers need MRI scans.

For this group of patients, standard mammography and ultrasound scans often don't show enough information about their cancer Christobel says. Surgeons need a more sensitive MRI scan to work out what to do.

Clever trial design

Previous international trials failed to conclude if MRI scans benefit breast cancer patients. But Christobel says only about 15-20% of patients need an MRI scan. She believes the improved outcome for this group of patients was lost in the large-scale randomisation of the previous trials.

Christobel needed to design a trial that could demonstrate this impact. 'Our trial only follows the patients whose treating team thinks they need an MRI. We want to find out how the MRI changes outcomes for that group.'

The 'Evaluation of clinical pathways and patient outcomes for breast MRI in preoperative assessment and staging of breast cancer' trial is funded by $2 million from the MRFF.

- Read about the brilliant female Chief Investigators leading MRFF projects at: https://www.health.gov.au/resources/publications/the-brilliant-women-leading-mrff-projects

Medical Research Future Fund

$301 million in 13 Grant Opportunities announced in December 2021

Initiative	Grant Opportunity	Value
Early to Mid-Career Researcher	2021 Early to Mid-Career Researchers	$42.8m
Clinical Trials Activity	2021 Clinical Trials Activity	$71.6m
Preventive and Public Health Research	2021 Consumer Led Research Program	$10m
	2021 Maternal Health and Healthy Lifestyles	$15m
	2021 Chronic Respiratory Conditions	$20m
	2021 Optimising the Clinical Use of Immunoglobulins	$14m
Primary Health Care Research	2021 Primary Health Care Digital Innovations	$5m
Indigenous Health Research Fund	2021 Indigenous Health Research	$24.4m
Emerging Priorities and Consumer Driven Research	2021 Chronic Neurological Conditions	$15m
	2022 MRFF Joint Transnational Call	$1m
Australian Brain Cancer Mission	2021 Australian Brain Cancer Research	$7.5m (includes $1.5m from Mission partners)
Medical Research Commercialisation	2021 BioMedTech Incubator	$50m
National Critical Research Infrastructure	2021 mRNA Clinical Trials Enabling Infrastructure	$25m

$268.1 million in 17 New Grant Opportunities in 2022-23 Budget

(guidelines available now)

Medical Research Future Fund

New Grant Opportunities	Value
International Clinical Trials Collaborations to increase Australian leadership of, and participation in, high quality international collaborative clinical trials across **six grant opportunities** over the next three years	$37.8m
2022 Pancreatic Cancer Research to support more effective approaches for managing the pain and symptoms of individuals with pancreatic cancer and to provide access to clinical trials that offer new treatments	$12m
2022 National Critical Research Infrastructure to enhance Australia's research infrastructure to promote new research approaches that will address health challenges	$73m
2022 Multiple Sclerosis Research to provide access to clinical trials and accelerate availability of effective therapeutics for the treatment of Epstein Barr Virus infection, and improve understanding of how immune responses to viruses vary across individuals to inform disease prediction and treatment pathways to ultimately reduce the prevalence and severity of multiple sclerosis and post-viral diseases	$18m
2022 Quality, Safety and Effectiveness of Medicine Use and Medicine Intervention by Pharmacists to generate evidence that supports the safe and effective use of prescription medicines, improves the quality of care provided to patients with cancer, reduces hospital readmissions due to medication related complications, and supports the safe and effective use of medicines in residential aged care facilities	$15m
2022 Effective Treatments and Therapies to support the development and implementation of effective exercise programs that reduce the risk of disease in Australian adults aged over 45 years, increase physical activity amongst priority populations, and ameliorate symptoms of progressive neurological deterioration and mental impairment in children and adolescents	$13m
2022 Nurses, Midwives and Allied Health to support nurses, midwives and allied health professionals to improve the quality of health care, practice and systems by undertaking applied research in health care	$20.3m
2022 Stem Cell Therapies to generate novel approaches to stem cell-based therapies that have the potential to transform clinical care and generate new treatments using human tissues made from stem-cells for pre-clinical development	$10m
2022 Dementia Ageing and Aged Care to support research that improves the wellbeing of Australians living with dementia and their carers and enables earlier and more effective diagnosis of dementia	$24m
2022 Cardiovascular Health to generate knowledge to improve the detection, prevention and treatments for cardiovascular disease and stroke	$24m
2022 Brain Cancer Research Infrastructure to generate knowledge that enables the development of new approaches, treatments and therapies that accelerate progress in improving the diagnosis and care for patients with brain cancer.	$6m
2022 Mitochondrial Donation Pilot Program (*announced 10 April 2022)	$15m

Medical Research Future Fund

MRFF Accelerator Grants

- Large scale (up to $5 million) and long-term (up to 5 years) funding to support interdisciplinary research to drive implementation of substantial improvements to health care and/or health system effectiveness.

- These grants:
  - focus on a specific ‘big question’
  - integrate collaborative work programs under strong governance structure
  - facilitate high quality interdisciplinary research that addresses needs of communities and health consumers
  - aim to embed sustainable, systemic improvements to policy and/or practice within health care and/of health system.

- Grant applications are assessed using selection criteria defined in the grant opportunity guidelines by independent Grant Assessment Committees set up by the grant administration hubs (NHMRC or Business Grants Hub).

- More information: https://www.health.gov.au/resources/publications/mrff-accelerator-grants

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Nominate for an MRFF Grant Assessment Committee (GAC)

https://www.nhmrc.gov.au/2021-22-medical-research-future-fund-mrff-grant-opportunities

Register for MRFF grants opportunities

https://www.grants.gov.au/

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Thank you for your time

Questions?