Appendix A: MRFF Cardiovascular Health Mission projects funded as of March 2023

As of March 2023, the Medical Research Future Fund's <u>Cardiovascular Health Mission</u> has had 7 grant opportunities that have awarded funding for research projects. The grant opportunities are:

- 1. 2019 Accelerated Research Congenital Heart Disease
- 2. 2019 Cardiovascular Health Grant Opportunity
- 2020 Strategic Research Grant*
- 2020 Childhood Stroke Grant*
- 5. 2020 Cardiovascular Health Grant Opportunity
- 6. 2021 Cardiovascular Health Grant Opportunity
- 7. 2022 Cardiovascular Health Grant Opportunity

The below table outlines the projects funded from these grant opportunities, and the 'Priority area/s for investment' as outlined in the Implementation Plan that each project targets. Further information on MRFF funded grants is available here.

Institution	Project Title	Amount (ex GST)	Funded from Grant Opportunity
Implementation Plan Priority Area 1.1			

^{*} Guidelines can be provided at request by contacting MRFF@health.gov.au.

Institution	Project Title	Amount (ex GST)	Funded from Grant Opportunity
University of Adelaide	Maternal exposures, congenital heart defects, and child development	\$3,037,417.00	1
University of New South Wales	Novel deep learning methods for large-scale cardiovascular risk screening using Australian digital health data	\$1,467,090.60	2 (Priority 1)
Monash University	Using Polygenic Risk Scores to Target Statin Therapy in Primary Prevention	\$1,416,095.00	2 (Priority 1)
National Heart Foundation of Australia	 Predictive Modelling Strategic Grant: Early identification and treatment of heart disease to prevent heart attacks Is genetics useful for predicting outcomes in patients with atrial fibrillation? 	\$1,000,000.00 (matched co- funding)	3 (Priority 1)
Monash University	Atheroma Progression in Clonal Haematopoiesis Investigation with Imaging, Biomarkers and Genomic Sequencing (ARCHIMEDES)	\$996,384.68	6 (Stream 1, Topic A)
The University of Newcastle	Cardiovascular disease and cancer: identifying shared disease pathways and pharmacological management	\$999,998.00	6 (Stream 1, Topic A)
University of New South Wales	Investigating Mechanisms of Alcohol-Induced Heart Disease	\$999,995.60	6 (Stream 1, Topic A)
University of Sydney	REnal FactORs Modify HEART disease Study - REFORM HEARTS	\$865,396.80	6 (Stream 1, Topic A)

Institution	Project Title	Amount (ex GST)	Funded from Grant Opportunity
University of Melbourne	Treating the impact of seizures on cardiac function to reduce death	\$847,479.70	6 (Stream 1, Topic A)
University of Western Australia	Alloantibody in kidney transplant recipients: is this the missing link to reduce the risk of heart disease? (AN-INSPIRE STUDY)	\$996,354.00	6 (Stream 1, Topic B)
University of Sydney	Non-invasive imaging of atherosclerotic plaque: quantification of disease activity for improved identification of patients with residual cardiovascular risk	\$999,631.42	6 (Stream 1, Topic B)
The University of Adelaide	The Asialoglycoprotein Receptor 1 (ASGR1): a novel target for atherosclerosis	\$999,989.20	6 (Stream 1, Topic B)
Macquarie University	Early Atrial fibrillation Screening for Indigenous people (EASI)	\$574,883.90	6 (Stream 1, Topic D)
Deakin University	Early detection of insulin-resistance with a mixed meal challenge - The REFINE study	\$1,498,740.60	7 (Stream 1, Topic A)
University of New South Wales	The Elusive Hearts Study: Using genomics to diagnose and manage inherited cardiovascular diseases	\$1,499,286.00	7 (Stream 1, Topic A)

Institution	Project Title	Amount (ex GST)	Funded from Grant Opportunity
Queensland University of Technology	Clinical and health economics implications of routine CTCA for emergency department assessment of Aboriginal and Torres Strait Islander people at risk of acute coronary syndrome	\$1,488,717.70	7 (Stream 1, Topic B)
University of Sydney	Evaluation of a Standardised ClinicAl Pathway to improve Equity and outcomes in Cardiogenic Shock (ESCAPE-CS)	\$971,931.94	7 (Stream 1, Topic B)
The University of Newcastle	Increasing the capacity of Community Managed Organisations to provide preventive care to people with a mental health condition	\$1,135,281.00	7 (Stream 1, Topic C)
Edith Cowan University	Investigating genetic and lifestyle determinants of abdominal aortic calcification, and their relationship with cardiovascular disease	\$1,202,212.80	7 (Stream 1, Topic D)
Implementation Plan Priorit	ry Area 1.2		
University of Sydney	An Australian Study of the Outcomes and Burden of Congenital Heart Disease	\$3,994,175.00	1
University of New South Wales	The SaltSwitch Online Grocery Shopping (OGS) Trial: Trialling a novel method for reducing blood pressure among individuals with hypertension	\$1,687,990.14	2 (Priority 1)

Institution	Project Title	Amount (ex GST)	Funded from Grant Opportunity
Monash University	Statins and Progression of Coronary Atherosclerosis in Melanoma Patients Treated with Immune Checkpoint Inhibitors	\$1,669,300.28	5 (Stream 1)
Monash University	Addressing the poor medication adherence in prevention of cardiovascular mortality and morbidity in Australia: development of a clinical decision support tool	\$706,241.60	6 (Stream 2, Topic A)
University of Sydney	Identifying and addressing barriers and enablers to implementing best- practice cardiac rehabilitation: the Quality Improvement in Cardiac Rehabilitation (QUICR) Cluster-Randomised Controlled Trial	\$894,507.20	6 (Stream 2, Topic A)
University of Sydney	Enhancing engagement with eHealth approaches to prevent cardiovascular disease among adolescents: The Triple E Project	\$993,682.00	6 (Stream 2, Topic B)
University of Tasmania	Improving cardiovascular health through increased transport-related physical activity: A co-designed randomised controlled trial	\$767,132.85	6 (Stream 2, Topic B)
Monash University	Love Your Brain: A stroke prevention digital platform	\$944,787.90	6 (Stream 2, Topic B)
James Cook University	Supervised Home Exercise for Peripheral Artery Disease	\$999,999.71	6 (Stream 2, Topic B)

Institution	Project Title	Amount (ex GST)	Funded from Grant Opportunity
The University of Newcastle	Using existing digital infrastructure for the national scale-up of an effective school nutrition program to reduce population CVD risk	\$997,350.60	6 (Stream 2, Topic B)
Implementation Plan Priorit	y Area 2.1		
National Heart Foundation of Australia	Cardio Oncology Strategic Grant: • Improving cardiovascular health for Aboriginal and Torres Strait Islander people with cancer • Improving cardiovascular outcomes in patients who receive cardio-toxic cancer therapies	\$1,000,000.00 (matched co- funding)	3 (Priority 2)
National Heart Foundation of Australia	 Women and Heart Disease Strategic Grant: Improving screening and management of women with cardiometabolic conditions during pregnancy Prevention of Heart Disease in Women with Non-traditional Risk Factors and High Calcium Scores 	\$1,000,000.00 (matched co- funding)	3 (Priority 3)
National Stroke Foundation	The Australian Paediatric Acute Code Stroke (PACS) study	\$4,000,000.00	4
Monash University	Combining Novel Imaging Biomarkers with Al-Accelerated Diagnosis for Equitable Patient Selection To Proactive Treatment With Middle Meningeal Artery Embolisation To Improve Outcomes in cSDH	\$999,865.70	6 (Stream 3, Topic A)

Institution	Project Title	Amount (ex GST)	Funded from Grant Opportunity
Queensland University of Technology	CTCA-POC: CT Coronary Angiography Inspired Point-of-Care Technology for Enhanced Diagnosis and Monitoring of Coronary Artery Disease	\$999,995.90	6 (Stream 3, Topic A)
Flinders University	Impact of non-invasive coronary angiography on suspected acute coronary syndromes with low concentration troponin elevation	\$999,542.50	6 (Stream 3, Topic A)
Menzies School of Health Research	Non Expert Acquisition and Remote Expert Review of Screening echocardiography images from Child health and AnteNatal clinics (NEARER SCAN)	\$999,764.40	6 (Stream 3, Topic A)
University of Melbourne	Use of Artificial Intelligence-Guided Echocardiography to Guide Cardiovascular Management in Rural and Remote Australia	\$999,996.60	6 (Stream 3, Topic A)
Monash University	PRecision Ecmo in Cardlogenic Shock Evaluation: PRECISE Study	\$999,779.40	6 (Stream 3, Topic B)
James Cook University	Transforming clinical pathways for abdominal aortic aneurysm through use of blood and imaging biomarkers	\$999,999.60	6 (Stream 3, Topic B)
University of Sydney	Beyond Country of Birth: Transforming approaches to quantifying ethnic inequalities in access to best care for CVD	\$782,008.00	6 (Stream 3, Topic D)

Institution	Project Title	Amount (ex GST)	Funded from Grant Opportunity
Monash University	Using co-design to improve accessibility and acceptability of cardiac services for vulnerable populations: The Equal Hearts Study	\$597,104.30	6 (Stream 3, Topic D)
Implementation Plan Priorit	ty Area 2.2		
University of Queensland	Gene Expression to Predict Long-Term Outcome in Infants After Heart Surgery	\$3,068,742.00	1
University of Melbourne	A randomised controlled trial of ultra-early, minimally invasive surgery for intracerebral haemorrhage (EVACUATE)	\$2,138,226.00	2 (Priority 2)
University of Queensland	Development of drugs to prevent ischemic injuries of the heart and brain	\$1,499,560.20	5 (Stream 2)
University of New South Wales	Development of novel, clinically viable strategies for reducing cardiac damage and preventing future events in myocardial infarction (MI) survivors by targeting inflammation	\$2,849,891.71	5 (Stream 2)
University of Sydney	LesioLogic	\$1,102,873.15	5 (Stream 2)
University of Sydney	Safety and Tolerability of AZD6482 in Reperfusion for Stroke (STARS)	\$2,706,533.13	5 (Stream 2)

Institution	Project Title	Amount (ex GST)	Funded from Grant Opportunity
University of Newcastle	Stroke in patients with large Ischaemic Core: Assessment of Reperfusion therapy Impact on Outcome (SICARIO)	\$1,515,113.87	5 (Stream 2)
University of Adelaide	The SPRINTS Project: Stroke – Prevention of Reperfusion Injury and Neuroinflammation – a Therapeutic Strategy	\$2,563,915.78	5 (Stream 2)
James Cook University	ACTIVATION OF AMPK TO TREAT ABDOMINAL AORTIC ANEURYSM (5As)	\$1,044,836.20	7 (Stream 2)
Monash University	Advancing preclinical development of novel GPCR-targeted therapeutics for heart failure	\$1,496,862.61	7 (Stream 2)
University of Sydney	Clinical imaging inspired point-of-care microtechnology for enhanced diagnosis and monitoring of recurrent stroke	\$1,199,996.00	7 (Stream 2)
University of Sydney	Gap Junction Modulation: A Novel Molecular Target in the Management of Ventricular Arrhythmia in Ischaemic Cardiomyopathy	\$1,104,168.00	7 (Stream 2)
Baker Heart and Diabetes Institute	Novel, targeted therapies for heart failure with preserved ejection fraction	\$998,334.81	7 (Stream 2)
University of Sydney	Replenishing enzymatic cofactor NAD+ in Heart Failure: Rescuing an engine out of fuel	\$1,499,523.00	7 (Stream 2)

Institution	Project Title	Amount (ex GST)	Funded from Grant Opportunity
Implementation Plan Priorit	y Area 3.1		
Queensland University of Technology	CHD LIFE+ family-centred care models supporting long-term neurodevelopment	\$2,997,256.00	1
University of Sydney	Congenital Heart Fitness Intervention Trial: CH-FIT	\$3,328,569.00	1
University of Sydney	Personalised Pulmonary Valved Conduits: reducing re-operations in CHD	\$2,081,761.00	1
University of Sydney	Colchicine After Stroke to Prevent Event Recurrence (CASPER) Study	\$2,997,908.45	2 (Priority 3)
University of New South Wales	Total Cardiac Care - STROKE: A randomised controlled trial of a comprehensive smartphone application-centric model of care to improve outcomes in stroke patients	\$1,629,905.00	2 (Priority 3)
University of Canberra	A very brief intervention for physical activity behaviour change in cardiac rehabilitation: the 'Measure It!' trial	\$510,069.60	6 (Stream 4, Topic A)
The University of Adelaide	Next Generation Precision Health Platform to support Atrial Fibrillation Management	\$791,555.40	6 (Stream 4, Topic A)

Institution	Project Title	Amount (ex GST)	Funded from Grant Opportunity
University of Western Australia	Towards Remote Patient Monitoring of Heart Failure Using Event-driven AI Systems	\$583,551.20	6 (Stream 4, Topic A)
Flinders University	Yolnu Heart Health for Life: Person-centred, co-designed and student-assisted cardiac rehabilitation in East Arnhem Land	\$633,589.00	6 (Stream 4, Topic B)
The University of Queensland	The Right Treatment for the Right Person at the Right Time. Driving High- Value Aphasia Care through Meaningful Health System Monitoring	\$451,221.00	6 (Stream 4, Topic C)
University of Melbourne	Impact of Total Arterial Revascularisation in Coronary Artery Surgery on cardiovascular, cerebrovascular and multiorgan outcomes - an RCT (TA Trial)	\$4,958,416.40	7 (Stream 3)
University of Melbourne	Post-thrombectomy intra-arterial tenecteplase for Acute manaGement of Non-retrievable thrombus and no-reflow in Emergent Stroke (EXTEND-AGNES TNK)	\$3,885,163.16	7 (Stream 3)
Implementation Plan Priority Area 3.2			
Monash University	Discovery of new molecular targets for stroke-associated pneumonia to improve recovery	\$663,217.60	6 (Stream 5, Topic A)

Institution	Project Title	Amount (ex GST)	Funded from Grant Opportunity
University of Sydney	Discovery of new platelet targets to improve the management of coronary artery disease	\$659,293.00	6 (Stream 5, Topic A)
Monash University	Improving short- and long-term outcomes in cardiac bypass surgery by preventing acute kidney injury	\$511,208.00	6 (Stream 5, Topic A)
Baker Heart and Diabetes Institute	Novel targeted anti-inflammatory and anti-thrombotic mRNA therapies: Establishing innovative technologies to combat cardiovascular diseases	\$689,854.82	6 (Stream 5, Topic A)
Flinders University	Real-time measurement of renewal rate constants in pulsed field ablation of atrial fibrillation	\$604,305.60	6 (Stream 5, Topic B)
St Vincent's Institute of Medical Research	Sustained delivery of stem cell secretome for cardiac repair	\$958,504.12	6 (Stream 5, Topic B)
University of Melbourne	Targeting no-reflow to augment tissue salvage in stroke	\$999,978.19	6 (Stream 5, Topic B)
University of South Australia	The feasibility and potential of a novel robotic gait bioprosthesis for people with severe gait impairment poststroke.	\$513,102.80	6 (Stream 5, Topic B)
University of Melbourne	Translating novel mechanism-guided therapeutics to improve functional recovery of the brain and kidneys after open-heart surgery	\$998,224.25	6 (Stream 5, Topic B)

Institution	Project Title	Amount (ex GST)	Funded from Grant Opportunity	
University of New South Wales	Developing a holistic machine learning based rapid response system and end of life care system in preventing cardiac arrests and preventable deaths and improving end of life care in acute hospitals	\$700,583.20	6 (Stream 5, Topic C)	
University of New South Wales	Outcome PredicTion in IntraCerebral haemorrhage Study (OPTICS) with machine learning	\$404,190.00	6 (Stream 5, Topic C)	
Implementation Plan Priority Area 3.3				
National Heart Foundation of Australia	Secondary Prevention Strategic Grant: A program to reduce adverse events and improve quality of life of people with blocked leg arteries Assisted self-management to prevent new life-threatening events for all in need after a heart attack	\$1,000,000.00 (matched co- funding)	3 (Priority 4)	
University of New South Wales	CardiacAI: Deep learning to predict and prevent secondary cardiovascular events	\$544,978.65	5 (Stream 3, Topic A)	
Monash University	ECMO-Rehab: A Randomised Controlled Trial of Early Cardiac Rehabilitation to Improve Survival and Recovery in Critically-ill Patients on ECMO	\$662,648.57	5 (Stream 3, Topic A)	

Institution	Project Title	Amount (ex GST)	Funded from Grant Opportunity
Monash University	New models of rehabilitation to improve work and health outcomes after stroke	\$999,056.20	5 (Stream 3, Topic A)
University of Melbourne	REACHING FOR YOUR WORDS: A Phase IIa umbrella trial of integrated UPper limb & Language Impairment and Functional Training (UPLIFT) after stroke.	\$992,634.36	5 (Stream 3, Topic A)
University of Sydney	Digital solutions for heart failure best practice care	\$936,836.88	5 (Stream 3, Topic C)
University of Melbourne	Improving life after stroke with tailored support: Innovation in use of national registry data	\$505,704.36	5 (Stream 3, Topic C)
University of Sydney	Guardian Angel: Implementation of a peer support program for people with heart disease	\$655,522.17	5 (Stream 3, Topic D)
The University of Queensland	Measuring, Monitoring, and Motivating Adherence to Self-Managed Aphasia Treatment	\$388,521.10	5 (Stream 3, Topic D)
The University of Newcastle	Yarning up After Stroke	\$485,061.66	5 (Stream 3, Topic E)