

# Minister's Approval for ARC Centres of Excellence for Funding Commencing in 2023 Schedule

Approved Organisation, Leader of Approved Research Program	Approved Research Program	Estimated and Approved Expenditure (\$)					Indicative Funding (\$)					International Collaboration	Partner Organisation(s)
(Columns 1 and 2)	(Column 3)	2022-23 (Column 4)	2023-24 (Column 5)	2024-25 (Column 6)	2025-26* (Column 7)	2026-27* (Column 8)	2027-28* (Column 9)	2028-29* (Column 10)	2029-30* (Column 11)	(Column 12)	(Column 13)		

## New South Wales

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The University of New South Wales

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CE230100032 Dai, Prof Liming	ARC Centre of Excellence for Carbon Science and Innovation. This Centre aims to develop carbon-based catalysts for clean energy, CO2 capture, and green chemistry to reduce emissions. The Centre expects to use pioneering data-guided atomic-precision synthesis and multiscale analysis to transform fundamental science of carbon materials. Expected outcomes of this Centre will benefit new technologies for energy, environmental, and green chemical industries by utilising abundant sunlight, seawater, and waste feedstocks. This should provide significant benefits, through industry collaborations, our new world-leading capacity will train a next generation of game changers to empower emerging carbon industries to solve grand socio-economic challenges, ultimately meeting zero-carbon emissions targets.	2,500,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	2,500,000.00	United States of America, Germany, France, England, Korea, Republic of (South), Japan	MAX PLANCK INSTITUTE OF COLLOIDS AND INTERFACES, ARGONNE NATIONAL LABORATORY, LAWRENCE BERKELEY NATIONAL LABORATORY, US AIR FORCE RESEARCH LABORATORY, UNIVERSITY OF CAMBRIDGE, UK, RICE UNIVERSITY, ULSAN NATIONAL INSTITUTE OF SCIENCE AND TECHNOLOGY, DREXEL UNIVERSITY, PHILADELPHIA, UNIVERSITY OF TSUKUBA, KENT STATE UNIVERSITY, COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION, AUSTRALIAN NUCLEAR SCIENCE AND TECHNOLOGY ORGANISATION, TECHNOLOGICAL RESOURCES PTY. LIMITED, N2N AI PTY LTD, IRONSIDE CAPITAL PTY LTD, FIRST PACIFIC CAPITAL UNDERWRITERS PTY. LTD., HUNTERNET CO-OPERATIVE LIMITED, ATCO	

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AUSTRALIA PTY LTD, EBUSCO AUSTRALIA PTY LTD

## National Interest Test Statement

The energy, transportation and chemical industries are key to the Australian economy, but through their intensive CO2 emissions, are detrimental to our environment and climate. This Centre will revolutionise these industries by developing game-changing new technologies for the clean production of energy and chemicals. We will develop transformative chemical catalysts from carbon-rich sources (CO2 emissions, plant/animal waste etc.) to replace the expensive rare critical minerals currently required for CO2 conversion, renewable energy, and green chemical production, and so reduce carbon emissions. Outcomes include a paradigm shift in carbon science, breakthrough carbon technologies, and a world-class hub for knowledge creation, future workforce training, and technology translation through our industry partners. This will place Australia in a world-leading position to achieve net-zero emission targets, maximise Australia's global impact on the emerging carbon circular economy and new jobs, and secure a clean environment and a sustainable future for Australia.

<b>The University of New South Wales</b>	2,500,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	2,500,000.00
<b>New South Wales</b>	2,500,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	2,500,000.00

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## Queensland

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**James Cook University**

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CE230100009 Ulm, Prof Sean G	ARC Centre of Excellence for Indigenous and Environmental Histories and Futures. The proposed Centre aims to generate a new direction in knowledge creation based on Aboriginal- and Torres Strait Islander-led approaches to managing Land and Sea Country. The Centre expects to make a legacy contribution by developing complementary Indigenous and Western knowledge frameworks for modelling environmental, cultural, and historical change in Australia over the last millennium and into the near future. Expected outcomes focus on sustainable Indigenous land and sea management planning for future decades. Benefits include improved forecasting of the trajectory of environmental change, an increase in the capacity of Indigenous research, creation of a pipeline for Indigenous students into research, and evidence-based policy-making.	2,500,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	2,500,000.00	United States of America, Canada, Papua New Guinea	DAWUL WURU ABORIGINAL CORPORATION, MURUJUGA ABORIGINAL CORPORATION, GUNDITJ MIRRORING TRADITIONAL OWNERS ABORIGINAL CORPORATION RNTBC, NGARRINDJERI ABORIGINAL CORPORATION RNTBC, GUJAGA FOUNDATION LIMITED, BUTCHULLA ABORIGINAL CORPORATION RNTBC, GUR A BARADHARAW KOD TORRES STRAIT SEA AND LAND COUNCIL TORRES STRAIT ISLANDER CORPORATION, TAUNGURUNG LAND AND WATERS COUNCIL (ABORIGINAL CORPORATION), QUEENSLAND HERBARIUM, QUEENSLAND MUSEUM, AUSTRALIAN MUSEUM, MUSEUMS VICTORIA, WESTERN AUSTRALIAN MUSEUM, SUMMER INTERNSHIP FOR INDIGENOUS PEOPLES IN GENOMICS - AUSTRALIA,	

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COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION, AUSTRALIAN NUCLEAR SCIENCE AND TECHNOLOGY ORGANISATION, BIOPATFORMS AUSTRALIA LTD, TERRESTRIAL ECOSYSTEM RESEARCH NETWORK (UQ), UNIVERSITY OF PAPUA NEW GUINEA, SCARP ARCHAEOLOGY PTY LTD, EMM CONSULTING PTY LIMITED, SIMON FRASER UNIVERSITY, SANTA FE INSTITUTE, USA

**National Interest Test Statement**

First Nations people have cared for Australia for over 65,000 years. Building on this history the Centre will bring Indigenous knowledges and Western science together to create better ways of managing the Australian environment and its heritage. It will tackle current challenges such as extreme weather events, climate change, and degraded lands. The Centre will study records of how people have managed landscapes to guide future land and sea policy making. Better management will save more species while protecting cultural heritage. New training and education initiatives will support Indigenous people across Australia. The Centre will engage with current Indigenous ranger and heritage programs through a new national network. Information from Indigenous land and sea management will guide planning. Current national environmental reports highlight the important role that Indigenous knowledge and practices must play in Australia. This Centre will demonstrate how the partnership of Indigenous knowledges and Western science can benefit modern Australia.

<b>James Cook University</b>	2,500,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	2,500,000.00
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<b>The University of Queensland</b>												
CE230100017 Zhang, Prof Xiwang	ARC Centre of Excellence for Green Electrochemical Transformation of Carbon Dioxide. This Centre aims to advance carbon dioxide electrochemistry innovations to enable the conversion of carbon dioxide into valuable products and transition Australia to a carbon-neutral economy. This Centre expects to generate new knowledge using experimental and computational approaches to develop systems-level understanding to furnish industry-ready carbon dioxide utilisation technologies. Expected outcomes include enhanced capacity through collaborations establishing the Centre as an international hub for research, training, technology translation and strategic advice for stakeholders and policymakers. This should accelerate Australia's progress towards net zero emissions targets and grow a sustainable economy and create future jobs.	2,498,586.50	4,996,552.00	4,994,101.50	4,993,272.00	4,993,272.00	4,992,272.00	4,992,272.00	2,496,136.00	United States of America, Canada, England, Denmark	UNIVERSITY OF CALIFORNIA, BERKELEY, UNIVERSITY OF TORONTO, CANADA, UNIVERSITY OF TEXAS, AUSTIN, UNIVERSITY OF DELAWARE, TECHNICAL UNIVERSITY OF DENMARK, UNIVERSITY OF SURREY, COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION, ZEOTECH LIMITED, ADVANTA SEEDS PTY LTD, HAZER GROUP LIMITED, JOHNSON MATTHEY TECHNOLOGY CENTRE, GRAPHENEX PTY LTD, GRAPHENE MANUFACTURING GROUP LTD, GRAINS RESEARCH & DEVELOPMENT CORPORATION, OAKLEY GREENWOOD PTY LTD, DEPARTMENT OF ENVIRONMENT AND SCIENCE	

## National Interest Test Statement

The ARC Centre of Excellence for Green Electrochemical Transformation of Carbon Dioxide will develop new manufacturing businesses for Australia based on conversion of carbon dioxide into value-added products such as alcohols and urea. The Centre will also strengthen existing Australian Advanced Manufacturing capability through the development of advanced carbon dioxide conversion technologies and associated key components required in these devices such as catalysts, electrodes and membranes. The transformation of greenhouse gas carbon dioxide to value-added products will help to reshape Australia's energy and resource export industries for long-term resilience and growth and place us as a global leader in this field. The Centre's research, training and engagement activities will lay the foundation for Australia to meet their net zero emissions targets by 2050. The critical mass of research activities in the Centre will place Australia at the forefront of science and knowledge for carbon dioxide utilisation.

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CE230100021  Bowen, Prof Warwick P	ARC Centre of Excellence in Quantum Biotechnology. The ARC Centre of Excellence in Quantum Biotechnology aims to develop paradigm-shifting quantum technologies to observe biological processes and transform our understanding of life. It seeks to create technologies that go far beyond what is possible today, from portable brain imagers to super-fast single protein sensors, and to use them to unravel key problems including how enzymes catalyse reactions and how higher brain function emerges from networks of neurons. By building a diverse, multidisciplinary, and industry-engaged ecosystem, the Centre means to develop our future leaders at the interface of quantum science and biology and drive Australian innovation across manufacturing, energy, agriculture, health, and national security.	2,500,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	2,500,000.00	United States of America, England, Scotland, Germany, France, Canada, Austria, Netherlands, Japan	OLYMPUS AUSTRALIA PTY LTD, IBM CORPORATION, GENIEUS GENOMICS PTY LIMITED, Q-CTRL PTY LTD, INTELLIGENT IMAGING INNOVATIONS, INC., ELEMENTAL INSTRUMENTS PTY LTD, ORICA AUSTRALIA PTY LTD, SILANNA SEMICONDUCTOR PTY LTD, PROTEIN EVOLUTION LTD., DEFENCE SCIENCE AND TECHNOLOGY GROUP, COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION, DEPARTMENT OF ENVIRONMENT AND SCIENCE, MASSACHUSETTS INSTITUTE OF TECHNOLOGY, UNIVERSITY OF CALIFORNIA, BERKELEY, UNIVERSITY OF ULM, FRENCH NATIONAL CENTRE FOR SCIENTIFIC RESEARCH, UNIVERSITY OF VICTORIA, CANADA, UNIVERSITY OF EXETER, UK, UNIVERSITY OF SURREY, UNIVERSITY OF	

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CALIFORNIA, IRVINE, UNIVERSITY OF GLASGOW, UK, UNIVERSITY OF MICHIGAN, ANN ARBOR, MICHIGAN US, MEDICAL UNIVERSITY OF INNSBRUCK, DELFT UNIVERSITY OF TECHNOLOGY, NETHERLANDS, UNIVERSITY OF STUTTGART, JOHNS HOPKINS UNIVERSITY

## National Interest Test Statement

The ARC Centre of Excellence in Quantum Biotechnology will be the first national Centre worldwide at the convergence point of the quantum and bio- economies. It will place Australia at the forefront of innovation, pioneering new technologies and training the next generation to create a vibrant world-leading knowledge economy. Australia faces major challenges in agricultural productivity, the sustainable production of energy and chemicals, and the treatment of infectious and age-related diseases. The Centre will deliver the underpinning advances needed to address these challenges, from the quantum-design of drugs and chemicals to the fingerprinting of multiple diseases from a single molecule. Quantum biotechnologies are projected to have a future 100s of billion dollar market. The Centre will seize this opportunity, working with industry partners to seed a high-value, high-skilled Australian quantum bioeconomy. This will secure broad socioeconomic benefits, from national security to better treatments of disease, sustainable bioproduction of industrial and agricultural chemicals, and green energy technologies.

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CE230100027 Hokowhitu, Prof Brendan J	ARC Centre of Excellence for Indigenous Futures. The ARC Centre of Excellence for Indigenous Futures aims to transform and improve the life chances of Indigenous Australians by utilising Indigenous knowledges in unique trans-disciplinary cross-sector designed research to enhance our understanding about the complex nature of Indigenous intergenerational inequity. The Centre expects to generate new knowledge to enable evidence-based policy formulation and implementation including best practice models. The Centre will be entirely led by Indigenous researchers working with communities, government agencies and practitioners to strengthen the delivery of outcomes and linkages intentionally focused on all four of the National Agreement Close The Gap -2020's Priority Reform areas.	2,500,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	2,500,000.00	New Zealand, Canada, United States of America	AUCKLAND UNIVERSITY OF TECHNOLOGY, TE WHARE WANANGA O AWANUIARANGI , THE UNIVERSITY OF AUCKLAND, NZ, UNIVERSITY OF ALBERTA, CANADA, THE LOWITJA INSTITUTE, AIME MENTORING, AUSTRALIAN INSTITUTE OF HEALTH AND WELFARE, CYP PROPERTIES PTY LTD, COMMONWEALTH DEPARTMENT OF HEALTH, THE DHADJOWA FOUNDATION LTD, AUSTRALIAN HUMAN RIGHTS COMMISSION, INSTITUTE FOR URBAN INDIGENOUS HEALTH LTD, NATIONAL INDIGENOUS AUSTRALIANS AGENCY, SOUTH EAST AUSTRALIAN ABORIGINAL JUSTICE SERVICES LIMITED, STRONGER SMARTER INSTITUTE LIMITED, ABORIGINAL LEGAL SERVICE (NSW/ACT) LIMITED, THE TRUSTEE FOR PORT CURTIS CORAL COAST ABORIGINAL PEOPLES CHARITABLE

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TRUST, NATIONAL ABORIGINAL COMMUNITY CONTROLLED HEALTH ORGANISATION, SNAICC-NATIONAL VOICE FOR OUR CHILDREN (ABORIGINAL AND TORRES STRAIT ISLANDER CORPORATION)

## National Interest Test Statement

Indigenous Australians experience inequities in the education system, disparity across health matters and are economically impoverished and over-represented in the justice system. In turn, Indigenous inequity determines an exceedingly high moral, social and economic cost that is shared by all Australians. The Centre proposes ground-breaking Indigenous-led research employing different discipline perspectives to address Indigenous disparity and focused on Indigenous survivance. In partnership with communities, sectoral organisations, government agencies and practitioners, the Centre will engage policy reform and models of best practice to transform the lives of Indigenous Australians. Globally unique, it would position Australia as a world leader in Indigenous social reform, policy and practice research. Key impacts include addressing Closing the Gap targets, such as building a national Indigenous research data and information repository to improve Indigenous access to data for informed decision-making and a stronger community sector. The Centre will foster the next generation of Indigenous researchers.

<b>The University of Queensland</b>	7,498,586.50	14,996,552.00	14,994,101.50	14,993,272.00	14,993,272.00	14,992,272.00	14,992,272.00	7,496,136.00
<b>Queensland</b>	9,998,586.50	19,996,552.00	19,994,101.50	19,993,272.00	19,993,272.00	19,992,272.00	19,992,272.00	9,996,136.00

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## South Australia

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The University of Adelaide

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CE230100015  Gilliham, Prof Matthew	ARC Centre of Excellence in Plants for Space. This Centre aims to create on-demand, zero-waste, high-efficiency plants and plant products to address grand challenges in sustainability for Space and on Earth. Significant advances in plant, food, and sensory science; process and systems engineering; law and policy; and psychology are expected to deliver transformative solutions for Space habitation – and create enhanced plant-derived food and bioresources to capitalise upon emergent and rapidly expanding domestic and global markets. Anticipated outcomes include industry uptake of innovative plant forms, foods, technologies, and commodities; and an ambitious education and international co-ordination agenda to position Australia as a global leader in research supporting Space habitation.	2,500,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	2,500,000.00	United States of America, England, Germany, France, Switzerland	NATIONAL AERONAUTICS AND SPACE ADMINISTRATION, AUSTRALIAN SPACE AGENCY, GERMAN AEROSPACE CENTER(DLR) R&D, AXIOM SPACE, YURI, DEFENCE SCIENCE AND TECHNOLOGY GROUP, SOUTH AUSTRALIAN SPACE INDUSTRY CENTRE, SPACE LAB TECHNOLOGIES, LLC, VERTICAL FUTURE LIMITED, ONEPOINTONE, GAIA PROJECT AUSTRALIA PTY LTD, MINEARC SYSTEMS PTY LTD, UNIVERSITY OF CALIFORNIA, BERKELEY, UNIVERSITY OF CALIFORNIA, DAVIS, UNIVERSITY OF WISCONSIN, MADISON, RICE UNIVERSITY, UNIVERSITY OF ARIZONA, USA, UNIVERSITY OF CAMBRIDGE, UK, THE UNIVERSITY OF NOTTINGHAM, UK, FORSCHUNGSZENTRUM JULICH, FRENCH NATIONAL RESEARCH INSTITUTE FOR AGRICULTURE, FOOD AND THE ENVIRONMENT, ETH ZURICH, THE ANDY THOMAS SPACE FOUNDATION LIMITED, DR JOANNA MCMILLAN PTY LTD, VICTORIAN SPACE SCIENCE EDUCATION CENTRE, HAMILTON SECONDARY COLLEGE, ONE GIANT LEAP AUSTRALIA FOUNDATION LTD, BOARD OF THE BOTANIC GARDENS AND

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STATE HERBARIUM,  
DEPARTMENT OF  
PRIMARY INDUSTRIES AND  
REGIONS, BIOPATFORMS  
AUSTRALIA LTD, TWIST  
BIOSCIENCE  
CORPORATION,  
AUSTRALIAN GENOME  
RESEARCH FACILITY  
LIMITED, THE AUSTRALIAN  
PLANT PHENOMICS  
FACILITY

## National Interest Test Statement

By 2030, the Government aims to triple the size of the Australian Space industry to \$12B and double the agricultural growth rate to exceed \$100B. This Centre aligns with these goals and rapidly growing multi-billion-dollar international markets by establishing Australia as a world-leader in plant-based technologies aimed at enabling a new human frontier - crewed Space exploration. Translation of Centre research would revolutionise plant-based biomanufacturing (e.g. pharmaceuticals, plastics) and food production on Earth to boost human nutrition, and increase sustainability by lowering inputs and waste to target greater food and bioresource security. Training of >400 STEM researchers will help realise the national targets of doubling graduates in agriculture, and creating up to 20,000 new jobs in the Space industry. Co-creation of the Centre with industry partners from space, horticulture, research, and education, and integration of multidisciplinary skillsets in biology, engineering, food science, nutrition, and law enable rapid pathways to technology adoption and commercialisation by future-facing industries.

**The University of Adelaide** 2,500,000.00 5,000,000.00 5,000,000.00 5,000,000.00 5,000,000.00 5,000,000.00 5,000,000.00 2,500,000.00

**South Australia** 2,500,000.00 5,000,000.00 5,000,000.00 5,000,000.00 5,000,000.00 5,000,000.00 5,000,000.00 2,500,000.00

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Approved Organisation, Leader of Approved Research Program  (Columns 1 and 2)	Approved Research Program  (Column 3)	Estimated and Approved Expenditure (\$)					Indicative Funding (\$)				International Collaboration  (Column 12)	Partner Organisation(s)  (Column 13)
		2022-23 (Column 4)	2023-24 (Column 5)	2024-25 (Column 6)	2025-26* (Column 7)	2026-27* (Column 8)	2027-28* (Column 9)	2028-29* (Column 10)	2029-30* (Column 11)			

## Victoria

# Minister's Approval for ARC Centres of Excellence for Funding Commencing in 2023 Schedule

Approved Organisation, Leader of Approved Research Program	Approved Research Program	Estimated and Approved Expenditure (\$)					Indicative Funding (\$)				International Collaboration	Partner Organisation(s)
(Columns 1 and 2)	(Column 3)	2022-23 (Column 4)	2023-24 (Column 5)	2024-25 (Column 6)	2025-26* (Column 7)	2026-27* (Column 8)	2027-28* (Column 9)	2028-29* (Column 10)	2029-30* (Column 11)	(Column 12)	(Column 13)	

**Monash University**

# Minister's Approval for ARC Centres of Excellence for Funding Commencing in 2023 Schedule

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		2022-23 (Column 4)	2023-24 (Column 5)	2024-25 (Column 6)	2025-26* (Column 7)	2026-27* (Column 8)	2027-28* (Column 9)	2028-29* (Column 10)	2029-30* (Column 11)			
CE230100004  True, Prof Jacqui	ARC Centre of Excellence for the Elimination of Violence Against Women. Eliminating violence against women is one of the major challenges of the 21st century. Awareness of the problem has grown exponentially, but solutions to it have not. This Centre aims to transform our understanding of the problem by examining the structural drivers that cause and compound violence against women, and pioneering new, evidence-based approaches to radically improve policy and practice across Australia and the Indo-Pacific. The Centre mobilises survivor-centric and Indigenous methodologies, interdisciplinary collaborations, and Indo-Pacific partnerships to deliver scalable approaches to eliminate violence against women across the legal, security, economic, health, and political systems of Australia and the region.	2,500,000.00	4,999,999.00	4,999,997.00	4,999,997.50	4,999,999.00	4,999,999.00	4,999,999.00	2,499,999.50	New Zealand, Fiji, Samoa, Indonesia, Thailand, Philippines, Singapore, Papua New Guinea, United States of America, Canada, Norway, Vietnam	AUSTRALIA'S NATIONAL RESEARCH ORGANISATION FOR WOMEN'S SAFETY LIMITED, OUR WATCH LIMITED, NO TO VIOLENCE AUSTRALIA, NATIONAL INDIGENOUS AUSTRALIANS AGENCY, ESAFETY COMMISSIONER, ACTIONAID AUSTRALIA, AUSTRALIAN ASSOCIATION OF WOMEN JUDGES, THE AUSTRALASIAN INSTITUTE OF JUDICIAL ADMINISTRATION INCORPORATED, WOMEN'S LEGAL SERVICES AUSTRALIA, COMMONWEALTH BANK OF AUSTRALIA, WESNET (WOMEN'S SERVICES NETWORK) INCORPORATED, DEPARTMENT OF SOCIAL SERVICES, DEPARTMENT OF FOREIGN AFFAIRS & TRADE, DOMESTIC VIOLENCE VICTORIA(DV VIC) INCORPORATED, RESPECT VICTORIA, DOMESTIC VIOLENCE NSW INC, WESTERN AUSTRALIAN COUNCIL OF SOCIAL SERVICES INC, BLACK RAINBOW, KORNARWINMIL YUNTI ABORIGINAL CORPORATION, THE LOWITJA INSTITUTE - AUSTRALIA'S NATIONAL INSTITUTE FOR ABORIGINAL AND TORRES STRAIT ISLANDER HEALTH RESEARCH,	

\* Note - Indicative funding for approved projects will be made available through a funding variation under section 54 of the ARC Act

# Minister's Approval for ARC Centres of Excellence for Funding Commencing in 2023 Schedule

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													QUEENSLAND INDIGENOUS FAMILY VIOLENCE LEGAL SERVICE (QIFVLS) ABORIGINAL CORPORATION, WOMEN'S SAFETY SERVICES SA INCORPORATED, DVCONNECT LIMITED, KOORIE WOMEN MEAN BUSINESS INCORPORATED, BREAKING SILENT CODES NETWORK INCORPORATED, UNITED NATIONS POPULATION FUND, THE ASIA FOUNDATION , THE SMERU RESEARCH INSTITUTE, META , FIJI WOMENS RIGHTS MOVEMENT, RAOUL WALLEMBERG INSTITUTE, THE GASTON ZAVALLA ORTIGAS PEACE INSTITUTE, SCALABRINI MIGRATION CENTER, THAMMASAT UNIVERSITY, THAILAND, NATIONAL UNIVERSITY OF SAMOA, UNIVERSITY OF THE SOUTH PACIFIC, GADJAH MADA UNIVERSITY, RESEARCH AND TRAINING CENTER FOR COMMUNITY DEVELOPMENT (RTCCD), AUCKLAND UNIVERSITY OF TECHNOLOGY, THE UNIVERSITY OF AUCKLAND, NZ, NATIONAL UNIVERSITY OF SINGAPORE, RAGNAR FRISCH CENTRE FOR ECONOMIC RESEARCH, PEACE RESEARCH INSTITUTE OSLO, UNIVERSITY OF BRITISH

\* Note - Indicative funding for approved projects will be made available through a funding variation under section 54 of the ARC Act

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COLOMBIA, THE UNIVERSITY OF MARYLAND, VICTORIA UNIVERSITY OF WELLINGTON, NZ, YALE UNIVERSITY, USA

## National Interest Test Statement

Violence against women costs Australia \$26 billion every year, with significant social costs to the entire community. Despite the enormity of the issue, the root causes of violence against women are poorly understood. Working closely with practitioners and Indigenous leadership across Australia and the Indo-Pacific, this Centre will generate new knowledge to understand the causes of violence against women. The Centre will be the first to take a comprehensive approach to the issue, investigating violence in homes, workplaces and online for communities across the region. Findings will be developed with industry partners into scalable programs, including community-led prevention programs and app-based interventions for perpetrators and bystanders, to create lasting change and improve the lives of women. Bringing together researchers and practitioner groups, the Centre will empower front-line responders and communities to adopt evidence-based approaches that ensure women's safety in Australia and the region. The long-term impact is healthier, safer communities, and reduced economic burden.

# Minister's Approval for ARC Centres of Excellence for Funding Commencing in 2023 Schedule

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		2022-23 (Column 4)	2023-24 (Column 5)	2024-25 (Column 6)	2025-26* (Column 7)	2026-27* (Column 8)	2027-28* (Column 9)	2028-29* (Column 10)	2029-30* (Column 11)			
CE230100012  Jakob, Prof Christian	ARC Centre of Excellence for the Weather of the 21st Century. This Centre aims to determine how Australia's weather is being reshaped by climate change. Through a fusion of innovative analyses of observations and fundamental science advances, alongside the development of ultra-high resolution climate models, the Centre looks to address climate science's grand challenge in anticipating the likely weather patterns of a warmer world. The Centre strives to transform climate research by focussing on what matters most to making critical adaptation and mitigation decisions – weather change. The Centre aspires to provide Australia with the knowledge, technology, and human capital for robust evidence-based decision-making in response to future weather changes in our region and to harness weather as a resource.	2,500,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	2,500,000.00	England, United States of America, Switzerland, Germany, Korea, Republic of (South)	BUREAU OF METEOROLOGY, COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION, NATIONAL COMPUTATIONAL INFRASTRUCTURE (ANU), ETH ZURICH, MAX PLANCK INSTITUTE FOR METEOROLOGY, MET OFFICE, UK, GEOPHYSICAL FLUID DYNAMICS LABORATORY, NATIONAL CENTER FOR ATMOSPHERIC RESEARCH, MASSACHUSETTS INSTITUTE OF TECHNOLOGY, COLUMBIA UNIVERSITY, NEW YORK, USA, IBS CENTER FOR CLIMATE PHYSICS, DEPARTMENT OF ENVIRONMENT LAND WATER AND PLANNING, DEPARTMENT OF AGRICULTURE, WATER AND THE ENVIRONMENT, DEPARTMENT OF PLANNING AND ENVIRONMENT, WATER NSW, ENERGY AUSTRALIA PTY LTD, INSURANCE AUSTRALIA GROUP LIMITED, GLOBAL SUSTAINABLE ENERGY SOLUTIONS PTY LIMITED, DELOITTE TOUCHE TOHMATSU	

## National Interest Test Statement

The warming of the Earth with climate change will change our day-to-day weather, an important resource on which our lives depend. The availability of water to drink and grow food, as well as the wind and sunshine to power our net-zero economy, will undergo significant changes that we cannot currently predict. This Centre will discover how climate change will affect our future weather resources. In partnership with leading Australian businesses, governments as well as Australia's Climate Service, the Centre will develop insights and tools to answer critical questions such as where to best place wind and solar farms, where to grow food and collect water, and how to prepare communities for future weather change. In doing so, the Centre will underpin the critical decisions we need to make to safeguard and improve the prosperity and resilience of Australia and its people.

# Minister's Approval for ARC Centres of Excellence for Funding Commencing in 2023 Schedule

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	<b>Monash University</b>	5,000,000.00	9,999,999.00	9,999,997.00	9,999,997.50	9,999,999.00	9,999,999.00	9,999,999.00	4,999,999.50			
<b>RMIT University</b>												
CE230100006 Mitchell, Prof Arnan D	ARC Centre of Excellence in Optical Microcombs for Breakthrough Science. This Centre aims to explore the society wide transformations that will flow from optical frequency combs - thousands of highly pure light signals precisely spaced across the entire optical spectrum - by leveraging and building upon the latest breakthroughs in physics, materials science and nanofabrication. It expects to generate a wide new base of knowledge in fields as diverse as astronomy, spectroscopy, chemical sensors, and precision measurement. Expected outcomes include the capability to realise complete comb systems on a chip the size of a fingernail, tailored to specific applications, with significant benefits spanning from imaging live cells to autonomous vehicles, satellite communications, and the search for exoplanets.	2,496,544.50	4,995,515.00	4,994,338.50	4,989,705.50	4,990,127.50	4,992,450.50	4,993,399.50	2,496,739.00	United States of America, Germany, Switzerland, Denmark, Singapore, New Zealand, Canada, Sweden, England, France	WM KECK OBSERVATORY, UNIVERSITY OF CALIFORNIA, SANTA BARBARA, INRS - ENERGY, MATERIALS AND TELECOMMUNICATIONS, THE UNIVERSITY OF AUCKLAND, NZ, UMEA UNIVERSITY, NOKIA BELL LABS, ECOLE CENTRALE DE LYON, MOG LABORATORIES PTY LTD, MENLO SYSTEMS GMBH, CITY UNIVERSITY OF HONG KONG, LIGENTEC, ADVANCED NAVIGATION PTY. LTD., TECHNICAL UNIVERSITY OF DENMARK, DEFENCE SCIENCE AND TECHNOLOGY GROUP, NATIONAL MEASUREMENT INSTITUTE, BARAJA PTY LTD, CALIFORNIA INSTITUTE OF TECHNOLOGY, USA, SWISS FEDERAL INSTITUTE OF TECHNOLOGY, LAUSANNE, TERRA15 TECHNOLOGIES PTY LTD, NBN CO LIMITED, LOUGHBOROUGH UNIVERSITY, UK	

## National Interest Test Statement

An invention combining the precision of lasers with the utility of electronics made it possible to measure any physical quantity with unprecedented accuracy. However, 20 years later, this technology is still so complex and expensive that it has had limited impact on society. This centre will pioneer a revolutionary new form of this technology that can be mass manufactured to be cheap, compact, and reliable – just like the electronics inside a smart phone. The centre will train the next generation of research leaders who will use this technology to address real-world challenges such as turbo-charging the internet, analysing living organisms, and monitoring civil infrastructure and the changing environment. The research program is deeply linked with Australian industries spanning defence, manufacturing, communications, and sensing – ensuring that its breakthroughs will be harnessed for national benefit. The centre will establish Australia as the global focus for sensing and measurement solutions, achieve generational scientific breakthroughs and drive future industrial automation and environmental awareness.



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<b>RMIT University</b>	2,496,544.50	4,995,515.00	4,994,338.50	4,989,705.50	4,990,127.50	4,992,450.50	4,993,399.50	2,496,739.00
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## Swinburne University of Technology

CE230100016	ARC Centre of Excellence for Gravitational Wave Discovery. The mission of our Centre is to use gravitational waves to investigate the fundamental nature of relativistic gravity, ultra-dense matter, and cosmology. This will generate critical discoveries that cement Australia's leadership role in the gravitational wave mega-science instruments of the 2030s and 2040s. By bringing together a world-class team with broad and complementary expertise we will develop core technologies for future detectors, discover new sources of gravitational waves, probe fundamental physics, and lay the foundations for an Australian gravitational wave observatory. Our discoveries will inspire Australia's youth to pursue high tech careers and position our staff and students to become leaders in both industry and academia.	2,500,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	2,500,000.00	United States of America, Germany, South Africa, India, Italy, Scotland	COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION, UNIVERSITY OF WISCONSIN, MILWAUKEE, MAX PLANCK INSTITUTE FOR ASTROPHYSICS, MASSACHUSETTS INSTITUTE OF TECHNOLOGY, UNIVERSITY OF ROME TOR VERGATA, THE UNIVERSITY OF CHICAGO, USA, NORTHWESTERN UNIVERSITY, ILLINOIS, MAX PLANCK INSTITUTE FOR RADIO ASTRONOMY, UNIVERSITY OF CALIFORNIA, SANTA CRUZ, LASER INTERFEROMETER GRAVITATIONAL-WAVE OBSERVATORY, UNIVERSITY OF GLASGOW, UK, NASA GODDARD SPACE FLIGHT CENTER
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### National Interest Test Statement

This Centre will spearhead Australia's involvement in one of the most exciting scientific quests of this century, using gravitational waves to understand our Universe. We will harness a national and international network of highly trained astrophysicists to detect and analyse gravitational waves, which will expand our knowledge of fundamental physics, the Universe, and the nature of ultra-dense matter. The Centre will develop technologies to support Australia's involvement in high-tech industries and global megascience projects. These technologies range from high-powered lasers and precision optics, to advanced supercomputing and artificial intelligence. The Centre will leverage approximately two billion dollars of international investment in gravitational-wave science. It will benefit Australia's defence and space industries, create spin-off companies, and nurture the future leaders in science and high-tech industries and space research. The Centre will expand strategic partnerships and pave the way for a future Australian gravitational-wave observatory.

<b>Swinburne University of Technology</b>	2,500,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	2,500,000.00
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## The University of Melbourne

CE230100001	ARC Centre of Excellence for the Mathematical Analysis of Cellular Systems. The ARC Centre for the Mathematical Analysis of Cellular Systems aims to deliver the mathematics required to compute life. The Centre will deliver innovation in computational and mathematical biology and establish in silico biology alongside in vivo and in vitro biology. These models will allow us to understand the complexity of life at the cellular level and enable new ways of combining diverse and heterogenous data. This will allow us to understand the mechanisms underlying cellular behaviour, and to apply rational design engineering methods in order to control the dynamics of biological systems.	2,500,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	2,500,000.00	United States of America, Germany, Switzerland, England, Austria, Spain	MATHEMATICAL INSTITUTE, UNIVERSITY OF OXFORD, UK, BIOPLATFORMS AUSTRALIA LTD, UNIVERSITY OF BONN, GERMANY, UNIVERSITY OF CALIFORNIA, IRVINE, UNIVERSITY OF LAUSANNE, AUSTRALIAN WINE RESEARCH INSTITUTE, ETH ZURICH, GEORG-AUGUST UNIVERSITY OF GOTTINGEN, UNIVERSITY OF TUBINGEN, JULIA COMPUTING, ANSYS, TWO BULLS HOLDINGS PTY LTD, ABORIGINAL AND TORRES STRAIT ISLANDER MATHEMATICS ALLIANCE LIMITED
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### National Interest Test Statement

To solve biological challenges in sustainable agriculture and food production, it has become essential to be able to predict cell behaviour. Data to describe the molecules in a cell is available, but data must be supported by dynamic models. Each cell involves millions of molecules with relationships between thousands of proteins, and the number of equations and unknowns is far beyond current mathematical methods. The Centre will deliver advanced mathematics to study biological processes through whole cell modelling and will develop methods for engineering biotechnological applications. Software industry collaborators will accelerate the translation of research outcomes to the first computer-aided design methodology for biological processes. The Australian biotechnology sector will benefit from early access to this technology that will reduce costs and speed innovation. The Centre will be linked to industry partners that depend upon biological processes for creation of products, such as food and wine, through institutional commercialisation pathways.

<b>The University of Melbourne</b>	2,500,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	2,500,000.00
<b>Victoria</b>	12,496,544.50	24,995,514.00	24,994,335.50	24,989,703.00	24,990,126.50	24,992,449.50	24,993,398.50	12,496,738.50
	<b>27,495,131.00</b>	<b>54,992,066.00</b>	<b>54,988,437.00</b>	<b>54,982,975.00</b>	<b>54,983,398.50</b>	<b>54,984,721.50</b>	<b>54,985,670.50</b>	<b>27,492,874.50</b>