

## Review of the Australian Research Council Act 2001

14 December 2022

The Australian Technology Network of Universities (ATN) appreciates the opportunity to provide this submission to the independent review into the Australian Research Council Act 2001 (ARC Review), to outline our vision for a modern, fit-for-purpose ARC.

As a sector, we are at a pivotal moment with several ground breaking reviews and initiatives currently underway, including the Universities Accord. It is important that the legislative foundation of ARC sets a strategic direction based on what Australia needs from the national research ecosystem and the role of ARC, and one that enables ARC to deliver with the confidence and support of the sector.

As universities focused on community and industry engagement and impact, we know that it is by generating and harnessing Australia's own ideas and capability, we can develop and make the most of our own skilled workforce, deliver on national priorities, and build our national knowledge and innovation base for sovereign capability.

University research is an essential catalyst for national economic development, international competitiveness and the attainment of social goals. This role and contribution requires translation of research discoveries into positive economic, social, environmental, cultural and other impacts, particularly in partnership with communities, government and industry.

It is also important to understand that to continue our supply of ideas and expertise to industry and communities and to inform their most effective translation into impactful innovations, a broad range of research is needed. This must include discovery research and research in the humanities, arts and social science, to ensure a holistic understanding of our world and the people in it.

There is also a valuable opportunity to align Government, university and industry investment in research and education across a range of programs, innovations, and high-value and strategic industries. This will help to better realise these investments and to deliver outcomes for Australia in key priorities like healthcare, aged care, childcare, disability care, manufacturing, and cleaner energy.

### Recommendations

ATN's principal recommendation is that significant reform of ARC needs to be done in conjunction and alignment with the Universities Accord, which will seek consensus on what we want from our national research ecosystem and how it interacts with other pillars of the higher education and university system. The Accord will no doubt engender significant reforms of the system, so it is appropriate that the reform of ARC is part of that.

Understanding that this ARC Review will inform the Accord process, ATN recommends that the Government:

1. Identifies and supports research innovation and excellence wherever it occurs
2. Outlines the strategic outcomes sought for ARC research funding, including a principles-based approach
3. Assesses progress towards agreed research priorities.

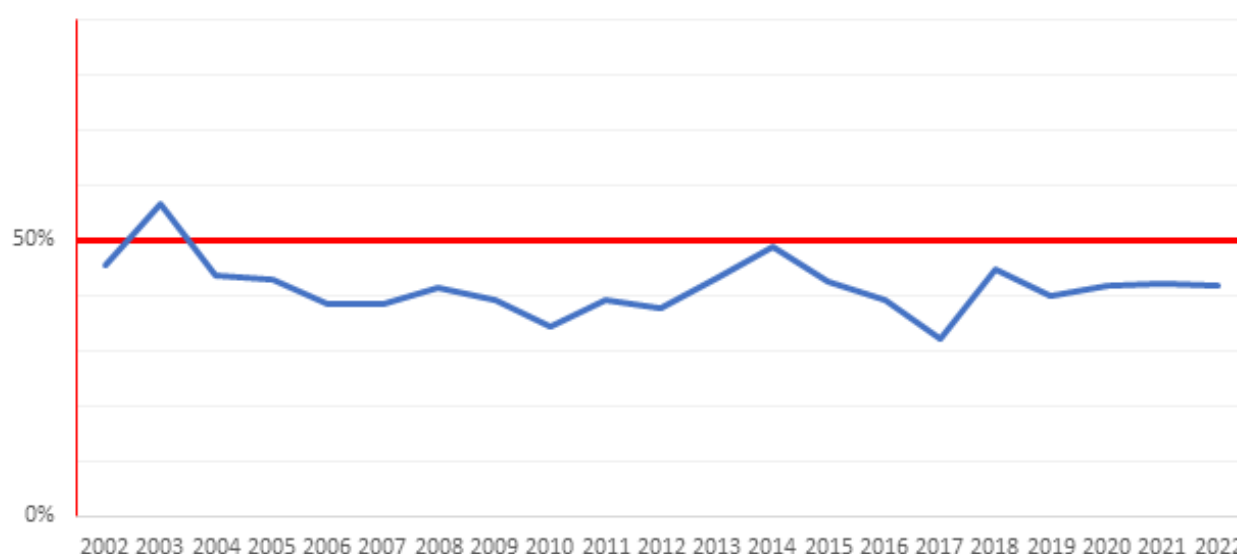
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## Recommendation 1: Identify and support research innovation and excellence wherever it occurs

One of the strategic outcomes of ARC should be to identify and support research innovation and excellence wherever it occurs across the sector, to ensure we more fully utilise our talent pool and resources across Australia. ARC, in consultation with the sector, should determine how best to identify research innovation and excellence that merits and requires its support and how best to structure and deliver that support.

Each year for the last 18 years, six universities have shared over 50 per cent of total funding distributed by ARC leaving the remaining shared amongst 31 other public universities and other organisations.

**ARC funding for all except the six most funded universities**



Source: ARC National Competitive Grants Program dataset

If ARC's research funding process consistently produces similar funding outcomes at a macro level, then we must further consider the purpose and utility of a resource-intensive approach of grant or project-based funding. There are other, more efficient ways of distributing funding if we as a sector and more broadly, a community, accept that such outcomes best marshal our talent to address Australia's needs. However this current approach demonstrably fails to fully develop and utilise Australia's talent pool and to support and incentivise-sector engagement, including interdisciplinary, holistic and more effective pathways to discovery and translation.

Instead ARC should consider and be focused on supporting and achieving high value outcomes that would not otherwise happen under current more direct and narrow funding systems. If the current competitive funding mechanism consistently entrenches the status quo and existing inequality and falls short of realising our national potential, then it is time to address that 'market failure' by instituting new mechanisms designed to address the persistent problems and challenges of the system to try to generate step change in meeting Australia's needs.

This may include targeting gender and equity outcomes for defined research domains, rewarding effective interdisciplinary collaboration, improving fairness and participation in the research workforce, creating sustainable research career pathways, and enabling greater participation in research for SMEs or distinct communities.

One example of a feasible model for part of this change is NHMRC's gender equity initiative:

*From 2023, the National Health and Medical Research Council (NHMRC) will award equal numbers of Investigator Grants to women and men in a new intervention to address gender inequities in research funding.*

*The Investigator Grant scheme is NHMRC's largest funding scheme and a major investment in Australia's health and medical research workforce. The scheme awards around \$370 million in research funding each year.*

*The grants provide a 5-year fellowship and research support for outstanding researchers at all career stages. An earlier intervention to address gender inequities in grant funding has helped to achieve gender targets. However, relatively few women apply at the senior levels of the scheme, reflecting the many barriers that lead to their attrition from the research workforce.*

*The result is that, between 2019 and 2021, male applicants received about 35% more grants and 67% more total funding (about \$95 million extra per year) than female applicants.*

*The new initiative will see NHMRC introduce a special measure under the Sex Discrimination Act 1984 and set targets to fund an equal number of Leadership grants for women and men in the Investigator Grant scheme.*

...

*"Despite good progress, gender inequities persist across the health and medical research sector. Disparities in funding of women and men in NHMRC's flagship Investigator Grant scheme have highlighted the barriers that many women face as they seek to advance their research careers" said NHMRC CEO Professor Anne Kelso AO.*

*"An Investigator Grant can make all the difference to a researcher's career. This is one of the reasons that gender equity in this scheme is so important if we are to build a diverse research sector."*

To achieve all of this the Government and ARC should conduct an exercise to map out ARC's place in the national research ecosystem, using the opportunities presented by the Chief Scientist's review of Australia's Science and Research Priorities and National Science Statement, the Universities Accord and the Diversity in STEM Review.

This could be part of a broader review of the national research ecosystem (including research and development tax incentives), with particular attention on how to develop and support the attributes we want for Australia's research and workforce, taking into account:

- Research and workforce diversity
- Supporting research careers and exchange with industry
- ARC's interactions with the NHMRC, MRFF and relevant Government departments.

This should be paired with a whole-of-Government, cross-agency review of the administrative and regulatory burden on universities and possible backend efficiencies with other agencies. There is substantial opportunity to free up resources and our research talent, by simplifying and aligning the myriad and overlapping regulatory frameworks that the sector operates under.

## **Recommendation 2: Outline the strategic outcomes sought for ARC research funding, including a principles-based approach**

The Universities Accord is a valuable opportunity to openly discuss the purpose of ARC and issues such as the benefits and challenges of funding research excellence and innovation, wherever it occurs across domains, institutions and geography.

We can discuss and define what we as a collective, across government, communities, industry and the higher education sector, see as the deliverables from research and the research funding system in Australia. These expectations as to the enduring and long-term outcomes sought can then be embedded in the founding legislation for ARC to set the direction and standard for research funding. A principle-based approach should be adopted to provide clarity and maintain currency over an extended time period.

The Act should:

- outline high-level strategic and bi-partisan outcomes for research funding delivered through ARC
- require consultation with stakeholders on strategies to achieve those outcomes
- require the publication of those strategies and evidence of achievement against the expected outcomes.

Enshrining strategic outcomes, rather than specific funding programs, will set a strategic and more fit-for-purpose long-term direction of ARC and allow it the flexibility to adapt to changing research priorities and challenges. Ensuring that these outcomes are discussed and developed through the Accord process, will mean that the Government, other political parties, universities, communities and industry are all properly consulted and common ground is sought.

Similar to the founding legislation for Jobs and Skills Australia, ARC should be required to consult with its stakeholders in developing strategies to achieve those outcomes.

*In performing its functions, Jobs and Skills Australia must, where appropriate, consult and work with the following*

- (a) *State and Territory governments;*
- (b) *relevant authorities of State and Territory governments;*
- (c) *employers, unions, training providers, universities and other industry stakeholders, and other persons or bodies with an interest in the labour market, workforce skills or workforce training needs.*

Stakeholders should include:

- Universities and their peak bodies
- Industry and employer peak bodies
- National Reconstruction Fund Corporation
- NHMRC and other Australian and international research funding agencies
- Venture capitalists
- Research end-users.

These strategies (and the action plans to implement them) should be reported regularly, along with analysis of the performance of the research funding system (including accessible data and statistics).

*Jobs and Skills Australia must, before the end of each calendar year beginning on or after 1 January 2023, prepare and give to the Minister a report on Australia's current, emerging and future skills and training needs and priorities (including in relation to apprenticeships) during the calendar year.*

ARC should be required and resourced to regularly report on how its research development and support programs and other activities (including advocacy and forging international partnerships) contribute to delivery of its required strategic outcomes.

### Recommendation 3: Assess progress towards agreed research priorities

Through the Universities Accord, we should agree on tangible and achievable priorities for our national research and research system and ARC should use its evaluative capabilities to measure the progress towards our shared targets.

Excellence in Research for Australia (ERA) in its current form has served its purpose of shifting the emphasis from the volume of research towards the quality of research. Engagement and Impact (EI) is refocusing the sector on the uses and beneficiaries of research. In its current form however, the latter does not very effectively capture the full impact of Australian discoveries and ideas and their translation into impact, reflecting the narrow parameters and limited approaches used.

World university rankings also have their place and have evolved beyond traditional academic foci, indicating that they can adapt and develop with global challenges and shifting priorities. The Times Higher Education (THE) Impact rankings are a good example of this – they have focused attention of the contribution towards the UN’s Sustainable Development Goals (SDGs).

*The Times Higher Education Impact Rankings are global performance tables that assess universities against the United Nations’ Sustainable Development Goals (SDGs). We use carefully calibrated indicators to provide comprehensive and balanced comparison across four broad areas: research, stewardship, outreach and teaching.*

The Australian Carnegie Community Engagement Classification is similarly focusing attention on recognising, improving and valuing universities’ community engagement and impact.

*The Carnegie Community Engagement Classification allows universities to demonstrate their commitment to the communities they serve and to share good practice in the sector. It has been the leading framework for institutional assessment and recognition of community engagement in US higher education for the past 15 years. The framework, after being contextualised for the Australian context through a pilot process, is now being implemented in Australia.*

These examples indicate potential approaches to a more strategically aligned and priority-oriented assessment of the efficacy of the national research and innovation effort.

The ARC’s assessments of progress towards delivery of research and innovation for impact should be targeted at incentivising and helping the sector focus on and succeed at overarching missions and goals (e.g. diversity in research workforce, contribution to global challenges) and in areas not covered by other global or national assessments or classifications, including those to date.

To do this we will need to shape and modernise ARC’s research and innovation evaluations to better reflect Australia’s and the sector’s current and future priorities. This could reflect the following principles:

- Evaluation should contribute to universities’ understanding and benchmarking of research performance of their workforce
- The scope and scale of the evaluation should be proportionate to the weight they are accorded by stakeholders – sample-based approaches should be used where appropriate
- Evaluation should consider research excellence and success in wider community and industry contexts, reflecting our diverse missions, functions and stakeholders
- Evaluation should be data driven and use existing resources where appropriate.

Further enquiries should be addressed to:

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