

SUBMISSION TO THE REVIEW OF THE ARC

December 2022

Universities Australia (UA) welcomes the opportunity to make a submission to the Independent Review of the Australian Research Council (ARC).

Universities Australia is the peak body for Australia's 39 comprehensive universities. Our members are spread across Australia, in regional and metropolitan areas. They educate more than a 1.5 million students each year and undertake research that adds to Australia's stock of knowledge, and to Australia's economic and social wellbeing.

To remain at the forefront of global research advances, Australia needs a competitive research grants system with strong governance, robust peer review and genuine transparency at its core. The ARC is fundamental to this system.

On 9 March 2022 the UA Plenary released a statement calling on Government and industry to support nine principles to underpin the ARC as Australia's premier independent agency for funding for non-medical research.

UA urges Government to carefully consider the recommendations outlined below. UA looks forward to working with the Government to ensure that the ARC is one of the world's leading research funding agencies.

RECOMMENDATIONS

Scope and purpose of the ARC

1. That the Government amend the ARC Act to clarify the scope of the research that may be funded by the ARC. The scope should be restricted to non-medical research undertaken by universities; and have regard to the optimal distribution between basic and applied (including translational) research.
2. The Government considers a form of the Haldane Principle to be included in the ARC Act as a guiding principle towards allocating investment in research.
3. The Government remove the provision for Ministerial veto of individual project grants. Should the Government decide to retain the Ministerial veto power, UA recommends that the ARC Act be amended so that in the case of the exercise of the Ministerial veto power, the Government is to set out its reasons in Parliament for the veto of the grant(s).
4. That the Government discontinue the ERA initiative and consider, in consultation with the sector and other experts, other options to provide assurance of the high-quality research performed by Australian universities.

Governance of the ARC

5. That the ARC Act be amended to introduce an ARC Board, including an independent Chair, as outlined in the consultation paper.
6. That the ARC Act be amended to:
 - a. Strengthen the role of the CEO by bringing it in line with the NHMRC in relation to the protections relating to appointment, performance and termination of the CEO.
 - b. Consider, as a high priority, a strong research track record as well as proven management experience as a criteria for the position of CEO.

Other key issues

Structure and staffing of the ARC

7. That the Government:
 - a. Undertake a review of the balance of policy, program, administrative and research expertise within the ARC management and leadership to strengthen the level of research expertise.
 - b. Examine the appropriate organisational structure and funding levels to support the rebalanced workforce.

The National Interest Test

8. That the ARC replace the National Interest Test (NIT) with the current peer review process that covers the national benefit.

National security processes in grant assessment

9. That the Government review the approach to managing national security risk in research grants throughout the grant application and assessment process.

This review should consider using the current University Foreign Interference Taskforce (UFIT) mechanisms and the expertise of the national security agencies. It should not rely on the ARC to make judgment calls on issues that are, reasonably, outside of its scope of expertise.

Grant success rates

10. That the ARC in its review of grant process improvements develop an application process that significantly reduces the amount of time spent by researchers on unsuccessful grant applications, especially given the low success rates.

Full cost of research

11. That the Government work with the sector to develop an appropriate model for funding the full cost of research.

1 SCOPE AND PURPOSE OF THE ARC

1.1 ARC SCOPE OF RESEARCH FUNDING

The definition of research that may be funded by the ARC as set out in the *Australian Research Council Act 2001* is broad. Funding encompasses all research, basic and applied, and does not explicitly reference universities, despite the history of the ARC being a body that funds universities. The organisations to be funded are limited in custom and practice through the grant guidelines which define eligible organisations. There have been other organisations included from time to time (e.g medical research institutes and CSIRO in the first rounds of the Future Fellows), AIATSIS and the Learned Academies.

However, UA notes that some of these grants to non-university organisations are not competitive grants but are ‘off the top’ allocations for projects and functions decided by Government. These projects and functions should be provided for through normal departmental budgetary processes and not from ‘top slicing’ the ARC’s research grant allocation.

The ARC plays a uniquely important role within the portfolio of research supported by Federal government investment in that it is the only body that explicitly funds discovery or fundamental research.

Approximately 60 percent of the ARC’s funding is distributed through the Discovery Program and is the primary source of funding for basic (non-medical) research in Australia. The remaining 40 percent is distributed through the Linkage Program. However, the boundary between Discovery and Linkage is not distinct, as within the “Linkage” envelope the Centres of Excellence include fundamental research, and infrastructure grants support the entire research spectrum.

UA supports a unified approach by the ARC to fund basic and applied non-medical research. Clarifying in legislation the scope of the research that is to be funded by the ARC will ensure that the policy intent of the organisation is protected from ‘scope creep’.

Given the ARC’s unique role in funding basic research, the distribution between basic and applied research should be made with respect to national priorities and comparable international organisations that have a similar responsibility for basic research in their research system.

Recommendation 1

That the Government amend the ARC Act to clarify the scope of the research that may be funded by the ARC. The scope should be restricted to non-medical research undertaken by universities and have regard to the optimal distribution between basic and applied (including translational) research.

1.2 THE HALDANE PRINCIPLE AND MINISTERIAL VETO

An overarching principle for the allocation of funding to individual research proposals, commonly referred to as the Haldane Principle, is broadly the notion that decisions about what to spend research funds on should be made by researchers rather than politicians.¹ In 2010 then then UK Minister for Universities and Science further elaborated on this definition:

"The Haldane principle means that decisions on individual research proposals are best taken by researchers themselves through peer review. This involves evaluating the quality, excellence and likely impact of science and research programmes.

Prioritisation of an individual research council's spending within its allocation is not a decision for Ministers...There are areas where Ministers should have no input: Ministers should not decide which individual projects should be funded nor which researchers should receive the money. This has been crucial to the international success of British science."

The UK Higher Education and Research Act 2017 enacted the Haldane principle as section 103(3):

The "Haldane principle" is the principle that decisions on individual research proposals are best taken following an evaluation of the quality and likely impact of the proposals (such as a peer review process).

The basic premise of the Haldane principle is that it is in the national interest to fund the highest quality research. Given the complexity of research, it is researchers that are best placed to assess research quality. This does not diminish accountability or Parliamentary oversight but ensures that taxpayer's money is spent in a transparent, rigorously defensible manner.

The power of a Minister to veto individual research grants does not align with the internationally accepted, merit-based peer review mechanism known as the Haldane Principle. In line with UA's commitment to the Haldane Principle, we do not support the continuation of this power of veto.

UA and the sector would be pleased to engage with the Government on shaping a form of the principle that can be included in the Act.

Recommendation 2

The Government considers a form of the Haldane Principle to be included in the ARC Act as a guiding principle towards allocating investment in research

Recommendation 3

The Government remove the provision for Ministerial veto of individual project grants.

(a) Should the Government decide to retain the Ministerial veto power, UA recommends that the ARC Act be amended so that in the case of the exercise of the Ministerial veto power, the Government is to set out its reasons in Parliament for the veto of the grant(s).

¹ <https://publications.parliament.uk/pa/cm200809/cmselect/cmdius/168/16807.htm>

1.3 ARC RANGE OF FUNCTIONS AND ERA AND EI

In its most recent Strategic Plan, the ARC states that its purpose is

To help shape the Australian research system for the benefit of the nation by enabling world-leading research, fostering research quality, translation and impact, and safeguarding research integrity.

Functions such as research quality assessment which became Excellence in Research for Australia (in 2008) and later the Engagement and Impact exercises (piloted in 2017) were introduced post the establishment of the ARC as an independent agency in 2001. The Australian Research Ethics and Integrity Committee (ARIC) was added as a joint initiative in ARC and NHMRC in 2011. Of these, the addition of Excellence in Research for Australia added scale to the ARC. The impact of ARIC, which considers less than 10 cases per annum, was more modest.

Therefore, it is pertinent to consider the scope of the ARC and the extent to which the additional functions, especially in research quality, inform and enhance its activities.

A revised ARC Act should be clear on the functions of a modern ARC.

Whatever the amended legislation provides for as the role of the ARC, it will be important to ensure that both its resourcing and staffing skills mix is appropriate to effectively deliver on those functions. Therefore, the extent to which those functions provide additional scale to the ARC is relevant.

UA supports the Minister's call to pause the ERA 2023 process and to develop a streamlined approach to the measurement of research quality. In addition to achieving efficiencies through streamlining measures and automation, it is also necessary to consider the purpose for which the exercise is being undertaken.

UA notes that, following Professor Peter Coaldrake's 2019 review of the higher education provider category standards, the Government introduced new requirements into the threshold standards for Australian universities to demonstrate particular volumes of research activity and research quality (B1.3.16 to B1.3.19). The streamlined measures being considered could assist with demonstrating these requirements.

UA agrees that the measurement of research quality is an important part of the accountability of R&D funding by the taxpayer. The current exercise however is highly expensive and far exceeds what would be required for assurance. The peer review mechanisms and grant application processes have significant inbuilt features to ensure that quality and national benefit is accounted for.

The granularity and comparative nature of the data in UA's view is unnecessary in the case of the former and unproductive in the case of the latter.

A similar examination of purpose and design should also be employed for the Engagement and Impact (EI) exercise which, similarly to ERA, is highly expensive. While the outputs of EI are illustrative and useful for demonstrating the value of research, it is not proven that the benefit justifies the cost.

Recommendation 4

That the Government discontinue the ERA initiative and consider, in consultation with the sector and other experts, other options to provide assurance of the high-quality research performed by Australian universities.

2 GOVERNANCE OF THE ARC

2.1 ARC BOARD

The ARC is the only key funder of research without support of a board or council. The NHMRC has a council prescribed in legislation; the Medical Research Future Fund (MRFF) has the Australian Medical Research Advisory Board (AMRAB) and CSIRO also has a board.

The recently established ARC advisory committee does not have the remit of a board in relation to the performance of the organisation and the CEO. It is conceivable that some of the communication and policy challenges in recent years may have been avoided if a board was present.

It is UA's view that the CEO, the ARC and the Government would benefit from the re-establishment of an ARC board with, as the paper notes, contemporary modifications through inclusion in the ARC Act.

Recommendation 5

That the ARC Act be amended to introduce an ARC Board, including an independent Chair, as outlined in the consultation paper.

2.2 THE ROLE OF THE CEO

Section 33B of the ARC Act deals with the functions of the CEO:

The CEO has the following functions:

- a) *to make recommendations to the Minister under section 52 in relation to which proposals should be approved as deserving financial assistance under Division 1 of Part 7;*
- b) *to administer the regimes of financial assistance provided for in Divisions 1 and 2 of Part 7;*
- c) *to provide advice to the Minister on research matters; and*
- d) *any other functions conferred on the CEO by this or any other Act.*

To effectively carry out these functions requires independence and deep research expertise well as proven management experience.

In its present form, the position of the CEO of the ARC is perceived as being vulnerable to political pressure.

Relative to the NHMRC and CSIRO (for example), the ARC CEO position has less protection from political influence and the CEO may be dismissed by the Minister with no reasons required. The NHMRC, for example, provides a higher legislative barrier, requiring the Minister to set out the reasons for termination, and that the Minister may terminate the appointment for misbehaviour or for physical or mental incapacity. The CSIRO CEO may be terminated for sustained non-performance.

It is in the national interest to have a strong, independent research granting agency. The ARC CEO should have the same independence and job security as the NHMRC CEO.

In relation to the research expertise of the CEO, Section 34(2) notes that the Minister is required to consider the person's record in research and management. UA submits that given the special nature of the ARC, it is in the interest of the effective functioning of the ARC that a strong research track record be a high priority, and this be inserted into the Act for the position of CEO.

Recommendation 6

That the ARC Act be amended to:

- a. Strengthen the role of the CEO by bringing it in line with the NHMRC in relation to the protections relating to appointment, performance and termination of the CEO.
- b. Consider, as a high priority, a strong research track record as well as proven management experience as a criteria for the position of the CEO.

3 OTHER KEY ISSUES

3.1 STRUCTURE AND STAFFING OF THE ARC

The ability of the ARC to competently and effectively carry out its functions relies on strong structure and governance, but also on the quality of its workforce. As with any complex public sector organisation, the skills required include program and policy delivery skills, administration and deep research expertise.

UA believes that the balance of skills within the organisation over the last decade has shifted away from research expertise and requires rebalancing.

An ARC with a strengthened, discipline focused executive directorship

Previously, the executive structure of the ARC comprised largely a discipline focused academic leadership. This allowed the ARC to offer expert advice at both the strategic and operational level. UA submits that a review of the balance of policy, program, administrative and research expertise of the ARC management and leadership is required, with a view to strengthening research expertise in the organisation.

Recommendation 7

That the Government:

- a. Undertake a review of the balance of policy, program, administrative and research expertise within the ARC management and leadership to strengthen the level of research expertise.
- b. Examine the appropriate organisation structure and funding levels to support the rebalanced workforce.

3.2 THE NATIONAL INTEREST TEST

The Minister in his August 2022 letter of expectation to the CEO of the ARC asked for advice about improving the National Interest Test (NIT).

A Senate Order² tabled Thursday 17 September 2022 showed that there has been an increase in applications asked to rewrite their NIT. Of the four most recent ARC programs to award competitive funding of \$256.6 million, none of the more than 2300 applications were rejected on the basis of their NIT. However, 78 per cent of the 377 projects that did receive funding were asked to revise their NIT statements, while more than half had to do this multiple times.

The articulation of national benefit is appropriate as part of the grant application process. However, the NIT was an anomaly as a stand-alone, CEO-assessed process separate to the peer review process. UA welcomes the modifications to NIT announced on 1 December that give responsibility to Deputy Vice-Chancellors (Research) to clear the statements at institutional level. UA is also pleased the NIT statement will be part of the peer assessment process, and will not be an assessable part of the grant application.

A logical final step is for the NIT to be fully replaced by the National Benefit section of the application.

² https://www.aph.gov.au/Parliamentary_Business/Tabled_Documents/291

Recommendations 8

That the ARC replace the National Interest Test (NIT) with the current peer review process that covers the national benefit.

3.3 NATIONAL SECURITY PROCESSES IN GRANT ASSESSMENT

It is essential that Australian researchers and academics are able to build and maintain links with colleagues and collaborators across the world. The ARC has programs that provide support for these collaborations, thereby multiplying the effect of research investments in this country.

As the geopolitics of the world and our region change, researchers understand that certain issues need to be considered however, it is essential that systems designed to protect Australia's national security are proportionate to risk.

Australia's future depends on our ability to work with, attract and retain the world's best minds. Facilitating global partnerships helps to ensure that Australia remains an attractive partner and destination for such people. We want to attract the smartest of the smartest, across a range of disciplines and career pathways. In doing that, we compete on reputation – a reputation for excellence and fairness keeps Australia's research system competitive in the global hunt for talent.

Since the introduction of national security related responses by the ARC, sufficient anecdotal experience has accumulated to suggest that the ARC at present does not have the capability to effectively make national security-related decisions on the research grants.

UA is of the view that the ARC should not be expected to develop the required capability for the assessment of national security interests in relation to research grants. UA and the university sector work effectively with multiple agencies through the University Foreign Interference Taskforce (UFIT) in implementing the *Guidelines to Countering Foreign Interference in the Australian University Sector*.

These measures, combined with the expertise of the national security agencies in our view provide a superior approach to mitigating national security threats than the current reliance on the conflict of interest questions, that the ARC is then expected to make sensitive judgment calls on.

Recommendation 9

That the Government review the approach to managing national security risk in research grants throughout the grant application and assessment process.

This review should consider using the current UFIT mechanisms and the expertise of the national security agencies. It should not rely on the ARC to make judgment calls on issues that are, reasonably, outside its scope of expertise.

3.4 GRANT SUCCESS RATES

In a 2012 study, Australian researchers were found to collectively spend more than five centuries worth of time preparing research grant proposals for consideration by one of the largest NHMRC funding schemes in 2012. The success rate at that time was 20.5 per cent, which equates to a loss of over 400 years of researcher time.³

The low grant application success rates are a well-known area of concern among researchers and policy makers. For example, the 2021 (latest) success rates for the Discovery Program were 20 per cent, and for the Discovery Early Career Research Awards the success rate was 17 per cent.

Australia's research application process is known to be onerous in relation to international comparators. A regional example of a less onerous process is the Marsden Fund in NZ, where an expression of interest (Eoi) approach is employed as an initial screening procedure. The Eois, comprising a single page description and a short CV are ranked, and the top-ranked applicants are invited to submit a full proposal.⁴

A reduction in the total amount of effort in applying for a grant would significantly reduce the cost to the researcher and institution. Australia should consider examples from around the world and devise a robust but efficient system for grant applications, possibly including a mechanism for applications not competitive in that particular round or scheme to be eliminated early.

Recommendation 10

That the ARC in its review of grant process improvements develop an application process that significantly reduces the amount of time spent by researchers on unsuccessful grant applications, especially given the low success rates.

3.5 FULL COST OF RESEARCH

A longstanding issue in higher education has been the cost of success in the ARC's competitive grants programs.

Whilst the issue of the full cost of research is outside the scope of the Review, it is paramount to the operation of the ARC and the success of university research.

As a general principle, the university sector is of the view that the funding of research needs to reflect its true cost, whether the funder be government or industry.

There are many distortions in the system which necessitate cross-subsidisation across the sector. One example noted is the Medical Research Future Fund (MRFF), which now provides over \$600 million annually into the research system. The MRFF provides welcome funding for critical health and medication research. However, its grants are not fully funded. In addition, the flow of MRFF funds has diluted the pool of money available through the research support program to fund research 'overheads'.

In short, the research support program funding pool has not increased commensurate with the value of the competitive grants funding pool. This means that success in competitive research grant funding schemes results in an increasing burden on universities, as they are left to support the cost of this success. One source of funds for providing this support is revenue from international students' fees.

³ Herbert, D., Barnett, A. & Graves, N. Australia's grant system wastes time. *Nature* **495**, 314 (2013)

⁴ <https://conservationbytes.com/2022/05/13/a-few-insights-into-the-inner-workings-of-the-australian-research-council/>

The dependence of university research on international student fee revenue (which supports competitive research grants, research infrastructure and strategic research investments) has become a structural component in research funding. Generally, other nations cost research to include what are termed 'indirect costs'. The Government should consider an appropriate model for funding these indirect costs, and what trade-offs could or should be made in research focus and intensity.

Recommendation 11

That the Government work with the sector to develop an appropriate model for funding the full cost of research.