Submission to the Policy Review of the National Competitive Grants Program

The Academy of the Social Sciences in Australia (the Academy) is an independent, not-for-profit organisation that brings together the multidisciplinary expertise of our nation's leading thinkers to provide practical, evidence-based advice to address important social issues.

As the pre-eminent organisation in Australia representing excellence across the social science disciplines, we welcome the opportunity to respond to the Policy Review of the National Competitive Grants Program, Discussion Paper (the Discussion Paper).

Overview

Australia's social science researchers are highly reliant on the National Competitive Grants Program (NCGP) as an essential and primary source of competitive funding for their research. The knowledge produced supports our understanding and management of the many issues facing society, the environment and the economy, and it helps shape government policy and inform business and community practice.

We strongly support this review which was a key recommendation in our submission to the *Review of the Australian Research Council Act 2001.*[1]

Current funding structures have facilitated the emergence of a strong and vibrant research ecosystem and contributed to the growth of Australia's research and innovation capacity. However, the NCGP has become overly complex, and it is unclear if all schemes are delivering their intended outcomes.

This review provides an important opportunity for a full-scale redesign of the purpose, objectives and processes of the NCGP, thus enabling the Australian Research Council (ARC) to fulfill its ambition to position Australia as a world-leader across research domains and deliver benefits to the economy, culture, society and environment.

We make nine recommendations:

- **Recommendation 1**: Recognise research excellence as the foundational objective of the National Competitive Grants Program.
- **Recommendation 2**: Amend the description of research translation to: 'Promote the *use* and *application* of research …'.
- **Recommendation 3:** Boost research translation through new schemes or amended criteria across National Competitive Grants Program schemes that encourage pathways to impact across all disciplines and types of research.

[1] Academy submission to the Review of the *Australian Research Council Act 2001*

- **Recommendation 4:** Establish a monitoring and evaluation framework for the National Competitive Grants Program, based on a strengthened data collection and analysis capability.
- **Recommendation 5:** Preserve funding for basic research for which the primary objective is the advancement of knowledge.
- **Recommendation 6:** Trial modifications to the design of the National Competitive Grants Program to encourage potentially transformative research as a component within standard funding schemes.
- **Recommendation 7:** Undertake a comprehensive evaluation of the Fellowship Programs, including eligibility, pathway gaps and their impacts on people, disciplines, universities and other organisations.
- **Recommendation 8:** Ensure steps are taken to improve outcomes across the National Competitive Grants Program for researchers from under-represented groups by exploring and testing evidence-based approaches.
- **Recommendation 9:** Adjust criteria across the National Competitive Grant Program to make it easier for technical specialists to hold grants and fellowships or to write specific salary costs against grants and fellowships.

To discuss any matters raised in this submission, please contact Andrea Verdich, Policy Director on 0438 218 352, or andrea.verdich@socialsciences.org.au.

Purpose and impact of ARC research grants

Guiding objectives

We endorse the six guiding objectives outlined in the Discussion Paper. However, given the objectives are intended to guide changes to the design of the NCGP it's critical to acknowledge that they are not of equal significance. Rather, the objectives form a hierarchy with research excellence as the foundational priority. The NCGP should only provide funding to excellent research projects, proven or high-potential researchers, and high-quality programs of work.

Establishing the NCGP based on excellent research that encourages 'the highest-quality research which will contribute new knowledge, complexity of thinking, new thinking, breakthroughs in understanding difficult concepts and transcendence of boundaries'[2] is essential to delivering the complimentary objectives of research capacity, collaboration, translation and impact. Research excellence implies research quality and research integrity.

> **Recommendation 1:** Recognise research excellence as the foundational objective of the National Competitive Grants Program.

Research translation description and funding gap

Effectively translating research into social, economic, and environmental outcomes is crucial to realising the advantages of Australia's world-class research system.

[2] See Office of the Chief Scientist paper *Trust in Science: Clarifying the distinctions between research integrity, research quality, excellence, and impact*

Research commercialisation, which has been the subject of significant policy attention in recent years, represents one translation pathway. There are many other avenues to impact and most research translation occurs through stakeholder engagement, knowledge diffusion and adoption.[3] These broader pathways, which can strengthen institutions, transform practices in the public and private sectors, influence policy and legislation, and support social cohesion and inclusion, are of particular importance to the social sciences.

The focus on commercialisation within the objectives limits a more expansive and inclusive understanding of the diverse ways in which research can be used and applied in real-world contexts. We recommend the ARC broaden its conception of research translation by removing the reference to commercialisation and emphasising both the *use* and *application* of knowledge and research findings.

> **Recommendation 2:** Amend the description of research translation to: *'Promote the use and application of research …'.*

Research commercialisation is well supported in the national research funding landscape under the Australian Government's *Research Translation and Commercialisation Agenda* which includes programs such as *Australia's Economic Accelerator*, and the *Trailblazer Universities Program*.

However, there is a funding gap for translation activities in the broader sense as recognised by *Australia Universities Accord Final Report* and their recommendation to establish a *Solving Australian Challenges Strategic Fund*.

The Discussion Paper considers ways in which the NCGP can encourage translation noting international schemes like the *European Proof of Concept Grants* (p. 8). We suggest a scheme along these lines be considered, noting grants should be available to all disciplines to support diverse translation pathways and forms of research impact for pure basic, strategic basic and applied research.

Another option to encourage research translation across the NCGP could be to amend criteria for all grants to have an additional 'translation' or 'pathway to impact' option nominated by the Chief Investigator. Awarded grants would be eligible to apply for optional extra funding to support the nominated activities, such as Chief Investigator time for research translation, knowledge dissemination, industry engagement and exploration of commercialisation or Intellectual Property protection.

> **Recommendation 3:** Boost research translation through new schemes or amended criteria across National Competitive Grants Program schemes that encourage pathways to impact across all disciplines and types of research.

Program structure and design

Monitoring and evaluation framework

Evaluation is critical to ensuring the NCGP and individual funding schemes remain both fit-for-purpose and adaptable to changing priorities and sector needs. The Discussion Paper currently focuses on opportunities to better monitor, evaluate, and communicate the impact of NCGP-

[3] See Australian Council of Learned Academies Report: *SAF09: Translating research for economic and social benefit – Country comparisons*

funded research, based on recommendations from the ACIL Allen *Impact assessment of ARC-funded research*. We recommend similar attention is given to establishing an evaluation framework for the NCGP as whole and individual funding schemes.

There has been little evaluation of the NCGP and schemes since its establishment. A more strategic and systematic approach to program evaluation would enable the ARC to improve the efficiency and effectiveness of the NCGP administration along with providing information for the new ARC Board to make robust decisions about the design and delivery of the NCGP in the future.

A new evaluation framework should form part of broader endeavours to strengthen NCGP data collection practices, recommended by ACIL Allen, and connect to external data sources. There are emerging opportunities to undertake cost-effective evaluations of the NCGP and schemes using data-intensive approaches. For example, NCGP data on researchers, grants and research outputs, could be linked to public sector administrative data sets such as the Person Level Integrated Data Asset (PLIDA) and the Business Longitudinal Analysis Data Environment (BLADE) hosted by the Australian Bureau of Statistics, to examine researcher employment pathways, evaluate Fellowship programs or examine research translation and university-industry research engagement.

> **Recommendation 4:** Establish a monitoring and evaluation framework for the National Competitive Grants Program, based on a strengthened data collection and analysis capability.

Funding for basic research

Advanced, internationally competitive research and innovation ecosystems have strong basic research foundations. Basic research ensures a steady pipeline of new knowledge and ideas, which fuels innovation and drives economic growth and enhances quality of life.

Decisions resulting from this review, to refine existing funding schemes or develop new ones, will need to be met through existing resources and reprioritisation from the current ARC budget. The limited funding allocated for basic research, where the primary objective is the advancement of knowledge (not use or application), must be preserved.

> **Recommendation 5:** Preserve funding for basic research for which the primary objective is the advancement of knowledge.

Potentially transformative research

Consistent with our submission to the *Review of the Australian Research Council Act 2001,* we support the suggestion in the Discussion Paper to *modify the design of the NCGP to support greater creativity and innovation through research that pushes the frontiers of knowledge* (p. 10).

Potentially transformative research (PTR) typically requires interdisciplinarity because the complexity and significance of research problems calls for approaches that overcome disciplinary limitations. PTR also implies the potential advances in new knowledge, and research use and application will be wide-ranging.

International PTR schemes, such as Canada's New Frontier Research Fund, are typically bespoke. Given the desirability of streamlining the NCGP, PTR could be built into its core funding schemes through design initiatives to support interdisciplinarity and potential high reward. Within

individual schemes a proportion of funding could be set aside for successful proposals showing PTR promise.

To better promote ground-breaking research, Canada's New Frontiers Research Fund uses 'innovative merit review processes, including proof-of-concept applications; pass-or-fail assessment; double-anonymous review; and sandpit for targeted, special calls.' Some of these processes could also be trialled.

- **Recommendation 6:** Trial modifications to the design of the National Competitive Grants Program to encourage potentially transformative research as a component within standard funding schemes.

Strong and diverse research sector

Fellowship Program and the researcher pipeline

The ARC has invested significantly in Australia's research workforce and seeks to provide opportunities across different career stages, particularly for early and mid-career researchers.

Whereas there is clear evidence of the enormous and significant contributions of Fellowships over many years, concerns remain about eligibility, 'bracket creep', gender equity and gaps in the suite of pathways.

Across these schemes, we echo the widespread concern for early career researchers, noting that outcome statistics for the 2023 Discovery Early Career Researcher Award (DECRA) round show that most successful applicants were more than 4 years post PhD. DECRA is clearly no longer a fit-for-purpose postdoctoral training scheme and should be redesigned. The new design could further extend and implement the *Vitae Researcher Development Framework* and as with higher degree by research training, should have researcher development as its primary objective.

In 2013 there was an evaluation of the Future Fellowship scheme, however, there has been no evaluation of the Fellowship Program taken together, or the DECRA individually. Consistent with recommendation 3 (ii) of *Trusting Australia's Ability: Review of the Australian Research Council Act 2001* we recommend there needs to be a comprehensive evaluation of the Fellowship Program collectively. This evaluation should examine the outcomes for individual researchers, for disciplines, and for universities and other organisations. It should consider negative and positive and intended and unintended outcomes.

> **Recommendation 7:** Undertake a comprehensive evaluation of the Fellowship Programs, including eligibility, pathway gaps and their impacts on people, disciplines, universities and other organisations.

Improving outcomes for under-represented groups

The ARC plays an important role supporting a diverse research sector, including through initiatives such as the Kathleen Fitzpatrick Laureate Fellowships and the Discovery Indigenous scheme. It is important to continue the equity, diversity, and inclusion activities to ensure we are making the most of Australia's research and innovation talent pool.

There are different ways to achieve this objective, and the Discussion Paper highlights measures employed by other funders, including the National Health and Medical Research Council (NHMRC) requirement for equal representation of women amongst fellowship grantees (p. 16). Other options that may improve outcomes for under-represented groups and early career

researchers include supplementing peer review with randomisation [4] or anonymisation of applicants.[5] However, there are mixed views on these approaches, and it is important that the ARC explore and test any potential reforms to ensure that they meet the overarching objectives of the NCGP and deliver intended outcomes.

> **Recommendation 8:** Ensure steps are taken to improve outcomes across the National Competitive Grants Program for researchers from under-represented groups by exploring and testing evidence-based approaches.

Technically skilled professional careers in academia

Technically skilled or 'third space' research professionals, such as software developers, data specialists and training experts, are increasingly important in academia to harness current and emerging technologies associated with undertaking research in a globally competitive system.

The Academy's recently released report *Connected, Innovative and Responsive: Decadal Plan for Social Sciences Research Infrastructure 2024-33* highlighted the lack of secure recurrent funding for essential tasks such as data curation and software or platform maintenance, which are undertaken by the third space workforce. Funding insecurity is compounded by university employment systems, policies and procedures that do not always support meaningful secure technical and professional careers. This has costs for individuals and for the overall development of highly skilled technical research workforce whose expertise is increasingly a requirement of undertaking research.

The problem arises because the technical research workforce, and the associated research infrastructure that many technical research workers support, are funded largely on a project-by-project basis. The NCGP cannot solve the problem that Australia lacks a national system of recurrent funding for a technical research workforce. However, it can contribute to the solution by making it easier to secure NCGP funding for technical research staff salaries and making technical research staff eligible to hold NCGP grants and fellowships, which would encourage universities to offer them greater employment security.

> **Recommendation 9:** Adjust criteria across the National Competitive Grant Program to make it easier for technical specialists to hold grants and fellowships or to write specific salary costs against grants and fellowships.

Conclusion

The ARC NCGP occupies a unique and essential place in Australia's research and innovation ecosystem. It is the primary source of competitive excellence-based non-medical research funding for Australian universities. It is the most substantial and important source of basic (pure and strategic) research funding. Excellence in basic research is a precondition for a globally competitive research and innovation system that serves the nation now and in the future.

Because of its centrality to university research, the NCGP also offers the opportunity to drive research translation and researcher development across all disciplines.

---

[4] See the British Academy news and analysis: *'Promising' results from first year of innovative grant awarding trial show greater diversity of awardees and institutions given funding*

[5] See the Women in STEM Ambassador Research Brief: *Making research applications anonymous: A boost for early-career researchers, while preserving pre-existing gender equity.*

The Academy encourage a comprehensive rethink and redesign of the NCGP, through this Policy Review, to enhance and promote these core functions, while also streamlining and simplifying the system for the ARC and the research sector.