Regional Universities Network
REGIONAL STRENGTH. NATIONAL SUCCESS.

Policy Review of the National Competitive Grants Program

13 MAY 2024

CHARLES STURT UNIVERSITY | CQUNIVERSITY | FEDERATION UNIVERSITY AUSTRALIA | SOUTHERN CROSS UNIVERSITY
UNIVERSITY OF NEW ENGLAND | UNIVERSITY OF SOUTHERN QUEENSLAND | UNIVERSITY OF THE SUNSHINE COAST

ABOUT THE REGIONAL UNIVERSITIES NETWORK

The Regional Universities Network (RUN) welcomes the opportunity to make a submission to the Policy Review of the National Competitive Grants Program.

RUN is a national collaborative group of seven regional Australian universities: Charles Sturt University, CQUniversity Australia, Federation University Australia, Southern Cross University, University of New England, University of Southern Queensland, and University of the Sunshine Coast.

This submission reflects the positions of RUN institutions, and in doing so, also aims to represent the views of those students and communities which RUN universities serve; the one-third of Australians who live outside of metropolitan centres in Regional, Rural and Remote locations.

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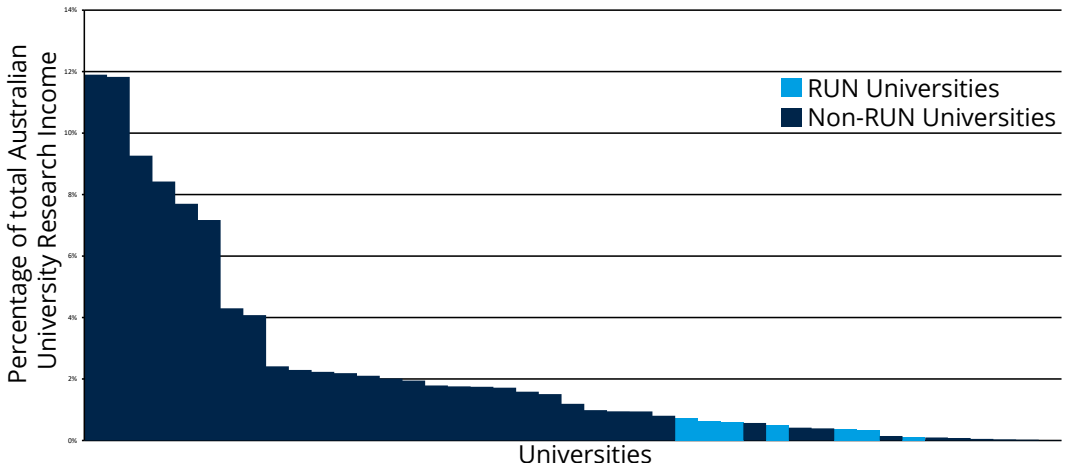
CONTEXT

RUN universities host highly successful and collaborative research clusters that are recognised as performing at, above, or well above world standard in many key research areas. Regional university research efforts and their subsequent impacts are typically targeted and highly-applied to the unique social, industrial, and cultural needs of their respective regions. Despite the tremendous impact of regional university research outputs, there are geographic imbalances in the distribution of national research funding, activity, and infrastructure. Australia's tertiary research landscape sees a disproportionate share of its research capability becoming concentrated within a small handful of higher education institutions[1]. In fact, five metropolitan-based universities account for half of Australia's research income in 2022, with 18 universities (including all RUN institutions) receiving just five per cent of the nation's research income collectively[2].

Australia's research funding, research infrastructure and research trained workforces are progressively gravitating towards large urban centres. In an increasingly competitive and volatile global environment, this growing concentration of research effort and the dilution of balance represents a vulnerability in the diversity, accessibility, and culture of Australia's research ecosystem. This also raises serious questions about how equipped regional Australia will be over coming years as major sovereign research priorities swing towards the regions – for example the transition to net zero emissions, our national Closing the Gap targets, defence and border security, and issues relating to food, water, energy, and climate security.

The Australian Universities Accord revealed the national priority of redistributing the benefits of Australia's degree attainment rates more equitably to regional Australians[3]. Similarly, there must be an equal focus on a more equitable redistribution of Australia's research capabilities, infrastructure, and research-trained workforces. It is in the interests of Australia for regional universities to be more involved in the nation's cutting-edge research, clinical trials, and new knowledge and innovation opportunities. Smaller scale universities are often not able to attract research grants due to a lack of infrastructure and/or human capital but are equally unable to build infrastructure and/or human capital due to lack of research grant funding. This perpetuating

Figure 1. Concentration of Australian University Research Income, 2022



CONTEXT

cycle is entrenching an imbalance that limits regional Australia's ability to improve its research capabilities. Furthermore, opportunities to study beyond undergraduate education into research degrees are similarly limited for Australians living in regional, rural, and remote areas, who account for 27.3 per cent of the working-age population, yet only 13.4 per cent of research training students and 9.8 per cent of research degree completions[4]. As a result, local research expertise and infrastructure required by regional industries is lost, reducing economic opportunity, and innovation potential outside of metropolitan Australia. Regional universities are well placed to address these geographic discrepancies directly, through a more equitable distribution of the Australian Research Council (ARC) NCGP via regionally-targeted funding rounds, and other measures discussed in this submission such as leveraging Australia's existing research capacity such that partnerships with regional universities are more overtly incentivised.

It is imperative to recognise that additional support is needed to lift research outcomes in regional Australia. This is required not only to boost the living standards and economic prosperity of those living outside our major cities, or to compliment the clear equity objectives of the Australian Universities Accord recommendations, but also in order to meet the Commonwealth's reform agenda to ensure the NCGP delivers "economic, social, environmental, and cultural benefits for all Australians through the funding of excellent pure basic, strategic basic and applied research"[5].

PURPOSE AND IMPACT OF ARC RESEARCH GRANTS

Future-focused objectives of the NCGP

RUN welcomes the development of more explicit and overarching (draft) objectives of the NCGP, as reflected in the recent review of the Australian Research Council Act 2001. RUN consider the draft objectives entirely appropriate for the NCGP. While RUN will not comment on each of the individual drafts in isolation, it is important that the objectives support the key role that the ARC and the NCGP play in funding basic research. It is vitally important for Australia's future prosperity that the NCGP continues to support basic research. There are currently very few avenues for researchers and universities to access funding for basic research. While there is nothing wrong with the increased focus on applied research, this should not come at the expense of basic research. It is vital to note that the pathway between discovery and the application of that discovery is rarely straightforward and predictable. It is even more vital to note that basic research is required to develop practical applications of research. Government has an essential role in funding basic research, as industry is far more likely to focus on research with applied outcomes. It is imperative that all objectives are given equal weighting, and there is no form of prioritisation.

Driving the future impact of the NCGP

While there were limited programs in place to support translation and commercialisation when the NCGP was initially set up, the national research landscape today has a plethora of programs targeting this space, a role that the NCGP and the ARC should not necessarily be filing. Increasing focus on commercialised outcomes would underestimate the importance of basic research. The role of ARC in funding projects for the purpose of 'research-seeding' is vital, and this should be enshrined first and foremost in the NCGP. RUN believes that there is a need to have a broad view of the research and development landscape beyond that of just the National Science and Research Priorities and/or National Reconstruction Fund.

In terms of impact stemming from NCGP research, RUN would emphasise the impact potential of basic research, and would urge the NCGP to recognise that future impact does not exclusively rest with applied research only. It is vital that any future impact evaluation framework does not become an exclusively data-driven exercise, particularly in the peer-review disciplines. While not diminishing the importance of measuring and communicating the impact of research, RUN would be concerned however, if a more sophisticated (and costly) impact evaluation framework was realised from the existing NCGP funding envelope. RUN would like to see a more robust impact evaluation framework arise from an additional funding allocation to the NCGP, ensuring existing research funding is not diverted to meet this reporting enhancement.

PROGRAM STRUCTURE AND DESIGN

Optimising the design of schemes and assessment

Given that scarcity of public funds, and the need to ensure that tax-payer dollars are spent in the most efficient way possible, RUN is supportive of the NCGP grant delivery process having less complexity. However, reducing complexity should not reduce opportunity for researchers, nor Australia's regions. Any streamlining of schemes would need to ensure however that equity and diversity are built into their design. It would be unacceptable for there not to be dedicated research funding schemes for early career researchers be those awards or fellowships. In an effort to boost diversity there should be dedicated funding schemes for indigenous researchers. Similarly, RUN believes that there should be dedicated funding for researchers and universities based in Australia's regions.

RUN believes there should be a greater proportion of grants that provide funding for longer durations of five years or more. This is particularly important in the regions where it can take time for researchers to build strong relationships with external partners to achieve breakthroughs/ research dividends (for instance, in working with First Nations communities). The exact reason for why there are so few successful linger duration grants needs to be better understood.

RUN supports the ARC taking a more favourable assessment towards potentially transformative research opportunities. While understanding that this shift may attract a greater level of uncertainty in terms of outcomes, RUN would nonetheless like to see more appetite for risk, with funding decisions weighted more favourably towards potential, rather than solely based on the track record of researchers. Additionally, there may be value in considering a wider pool of potential funding reviewers, from industry or community sectors for instance, to facilitate a higher risk threshold in decision-making.

There may also be value in considering a stage-gated approach, similar to the two-stage application process currently being used for the Discovery Projects Scheme. It would be useful for a review of the outcomes of the stage-gated approach to be understand if this is yielding different outcomes for researchers and institutions.

PROGRAM STRUCTURE AND DESIGN

Promoting more collaboration within and across the sector

RUN supports the identification and removal of disincentives that may exist within NCGP processes that affect interdisciplinary collaborations. Addressing and solving the priority areas identified in the National Science and Research Priorities and the National Reconstruction Fund will require an interdisciplinary approach, as opposed to a siloed research disciple approach. To better understand how to solve these challenges, the ARC may need to undertake further work to form a greater understanding of how current disincentives to collaboration manifest.

RUN would welcome enhancements to NCGP processes that may incentivise cross-sector collaborations, particularly those that specifically require collaborations with regional universities. Such incentives would not only enrich and strengthen national research networks but would assist with breaking the cycle of perpetuated funding success that tends to favour older, more established metropolitan institutions, leading to geographic imbalances of returns from our national research system.

RUN universities have a growing desire, and a growing track record, of building successful international research collaborations – particularly with non-metropolitan global partners. It is important to ensure international collaboration remains possible within the NCGP, and RUN would support initiatives to further incentivise these collaborations.

INCREASING RESEARCH SECTOR DIVERSITY

RUN agrees with the review's assessment that questions whether current ARC funding provisions provide appropriate support to attract and retain talented higher degree research students. RUN advocates that Australia is in need of additional PhDs within our research institutions and broader workforces, with heightened need existing in the regions. RUN believes the existing PhD stipend is inadequate and a significant deterrent to Australia's best and brightest undertaking a PhD. The current stipend is not competitive with graduate starting salaries and is well below minimum wage. Combined with a period of increased cost of living pressures and low unemployment, it is no surprise that domestic PhD enrolments have been falling. To that end RUN supports increasing the PhD stipend as the first step in increasing the diversity of Australia's research sector workforce.

To increase the benefits of Australia's research knowledge stock, RUN recognises the need to increase the number of First Nations PhD students as well as those with a disability, and/or from low socio-economic backgrounds, and/or from regional locations. This will require a nuanced understanding of the needs of each equity cohort and the need for uniquely developed support strategies. As well as ensuring that all Australians have access to the highest levels of learning no matter their background, a PhD cohort that truly reflects a population-parity diversity of backgrounds, experience and perspectives of all Australians will result in research that will be more inclusive, holistic, innovative, and relevant. The cost pressures that students face when taking on higher research degrees are amplified for equity cohorts. The opportunity cost of foregoing fulltime employment, which can be prohibitive for all students, is even more pronounced for students from lower socioeconomic backgrounds. Also, students in regional, rural, and remote Australia face additional barriers due to their location, including the cost and time burden of travelling to conferences and research facilities that are not present in regional areas.

As the policy review's discussion paper acknowledges, Australia's researcher pipeline is showing concerning levels of homogeneity, and an increasing number of early-career researchers have indicated that they are considering leaving the research ecosystem[6]. The reasons for leaving are varied, include lack of career security, workplace culture, mentorship, and questionable research practices. This creates significant challenges in increasing diversity in Australia's research pipeline. The NCGP needs to ensure that early career researchers, women, Indigenous and underrepresented groups, including researchers at regional universities, are able to access research grants and can experience the career certainty that is required to remain in the research sector. This will be a vital first step in ensuring a diverse pipeline of researchers. To that end, it is therefore worth considering if the ARC should contemplate changes to funding programs to early-career researchers.

Specific actions that RUN advocates would enhance the diversity and representation of our national research sector, including that which supports First Nations research and researchers, would include:

- An increase in PhD stipend rates, with consideration for additional, nuanced support for those candidates from underrepresented backgrounds.
- New and/or dedicated NCGP funding rounds targeting non-metropolitan-

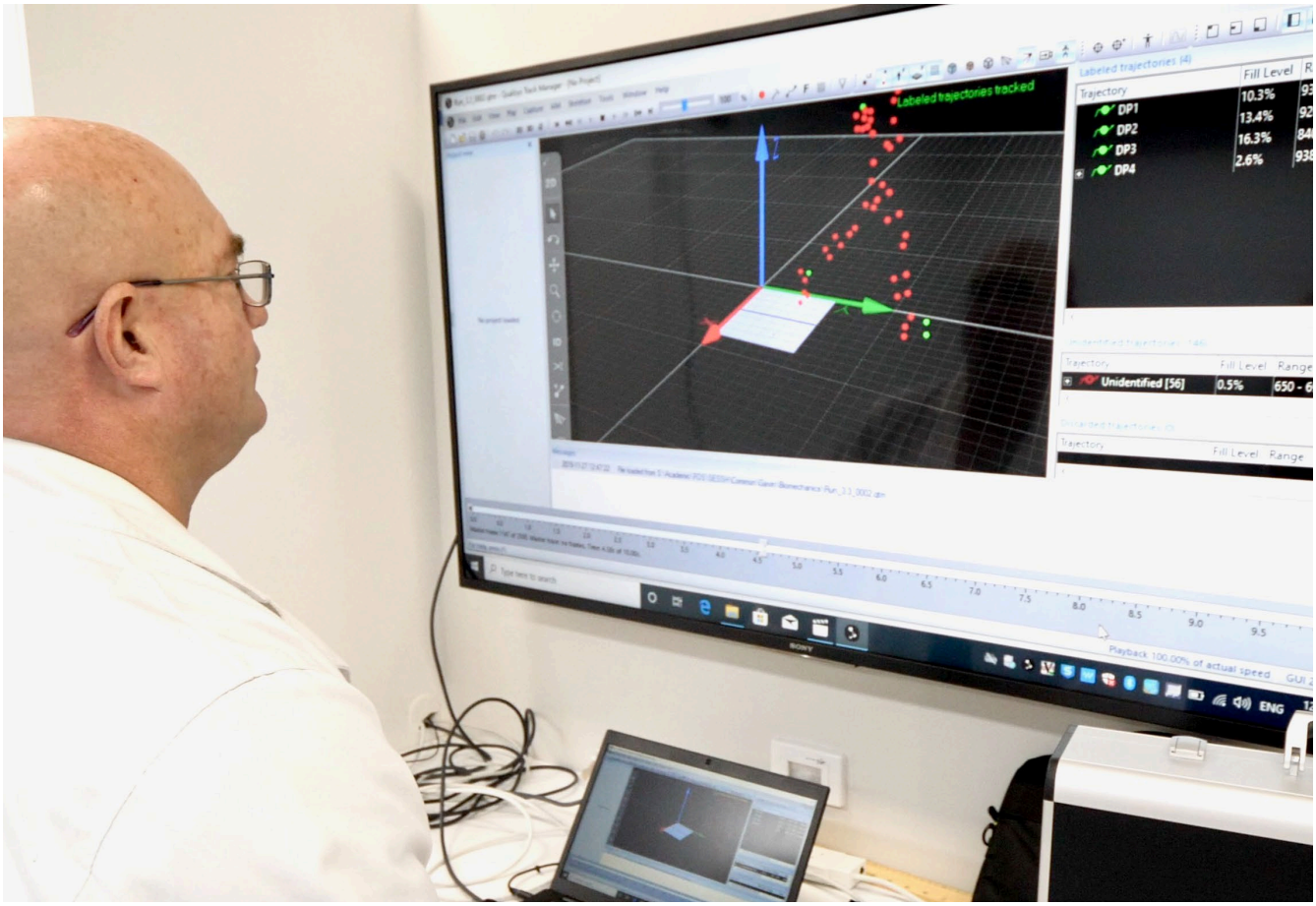
based projects/researchers, as well as funding rounds requiring regional partners.
- Set attainment targets and provide adequate funding for increasing the numbers of research higher degree graduates in regional Australia (thereby extending the (population-parity) equity attainment targets set out in the Australian Universities Accord beyond that of just undergraduate students,
- The setting of quotas/targets for larger NCGP grants/projects to require how they will support diversity and career development, making this a reportable outcome.
- Increased investment in postdoctoral fellowships for Indigenous researchers.
- Further consideration/investigation about how regional researchers can be supported to participate in career development opportunities that are not available in the regions, taking account of family commitments, cultural commitments, travel etc.

ALIGNING WITH OTHER GOVERNMENT RESEARCH FUNDING PROGRAMS

RUN shares the concerns highlighted within the Australian Universities Accord Final Report surrounding the tendency for applied research (and experimental development) with shorter term outcomes to be prioritised above long-term support for basic research. RUN recognises the national importance of supporting basic research across all fields, acknowledging its role in activating the research pipeline.

RUN would like to see a more reliably consistent, and transparent split of funding between different ARC programs as to enable a degree of surety for Australia's research sector, especially between basic and applied research. RUN recommends introducing maximum/minimum proportions of allowed funding splits between the different grant programs. Therefore, one program would not receive an excessive majority of funding, i.e. a 90/10 split. This could be established as a 65 per cent or 70 per cent maximum. This would ensure a healthy and predictable balance between Discovery and Linkage programs.

Despite our recommendation, it is important to acknowledge that the ARC is fundamentally designed to support fundamental research and this needs to be a core function of the NCGP. While the application of research is important, there a range of other programs to take the outcomes of research further along the Technology Readiness Levels.



SUPPORTING NATIONAL PRIORITIES

The ARC currently administers a large number of schemes through the Discovery and Linkage programs. It would be in the interest of Australia's research sector to ensure that the schemes are being operated in the most streamlined manner possible. Equally, it is important for the ARC to ensure that these schemes have equity and diversity built into their design. RUN believes that it would be unacceptable for there not to be dedicated research funding schemes for early career researchers be those awards or fellowships. In an effort to boost diversity there should be dedicated funding schemes for indigenous researchers. Similarly, RUN believes that there should be dedicated funding for researchers and universities based in Australia's regions.

Increasing the research capability of regional Australia is not just pure self-interest. Many of Australia's national research priorities such as those identified within the National Science and Research Priorities and the National Reconstruction Fund are predominantly going to impact Australia's regional communities. The importance of place-based research cannot be underestimated in ensuring a prosperous and egalitarian society. Priorities concerning food, soil and water, energy, resources, environmental change or minerals, mining/oil/gas, supply chains, for instance, are primarily regional matters that affect national interests. Indeed, sovereign challenges relating to climate change, natural disasters, bio security, food and water security, defence and border protection, Australia's transition to net-zero emissions, and our Closing the Gap targets, are distinctly regional by nature.

While research has a major role to play in meeting national challenges and priorities, it is somewhat concerning that Australia's national research capabilities (research workforces, infrastructure, investment and outputs) remain overwhelmingly tethered to our largest cities. While metropolitan universities make critical contributions in this space, the issues of geographical detachment to place-based research remain a sovereign vulnerability. It is indeed important, as the review's discussion paper states, to structure investment in research that balances building on our sovereign strengths, and addressing critical weaknesses, with supporting a broad-base of curiosity-driven research that may become a priority in the future.

RUN sees value in a far more coordinated and strategic approach from Government in how Australia's national priorities/ initiatives align with each other, so that Australia's research efforts work together in a more harmonious and coordinated manner. At present, there exists a distinct lack of coordination in how Australia's research priorities align and/or influence each other. The National Science and Research Priorities, the National Reconstruction Fund, and the list of Critical Technologies in National Interest are currently not aligned to the extent that they could be with the NCGP. Despite the current lack of alignment, RUN would urge caution that in seeking greater alignment, excellent and possibly impactful basic research could not be funded due to a misalignment between national priorities. RUN would be supportive of modelling Australia's NCGP in a similar fashion to the European Commission's Horizon Europe program pillars.

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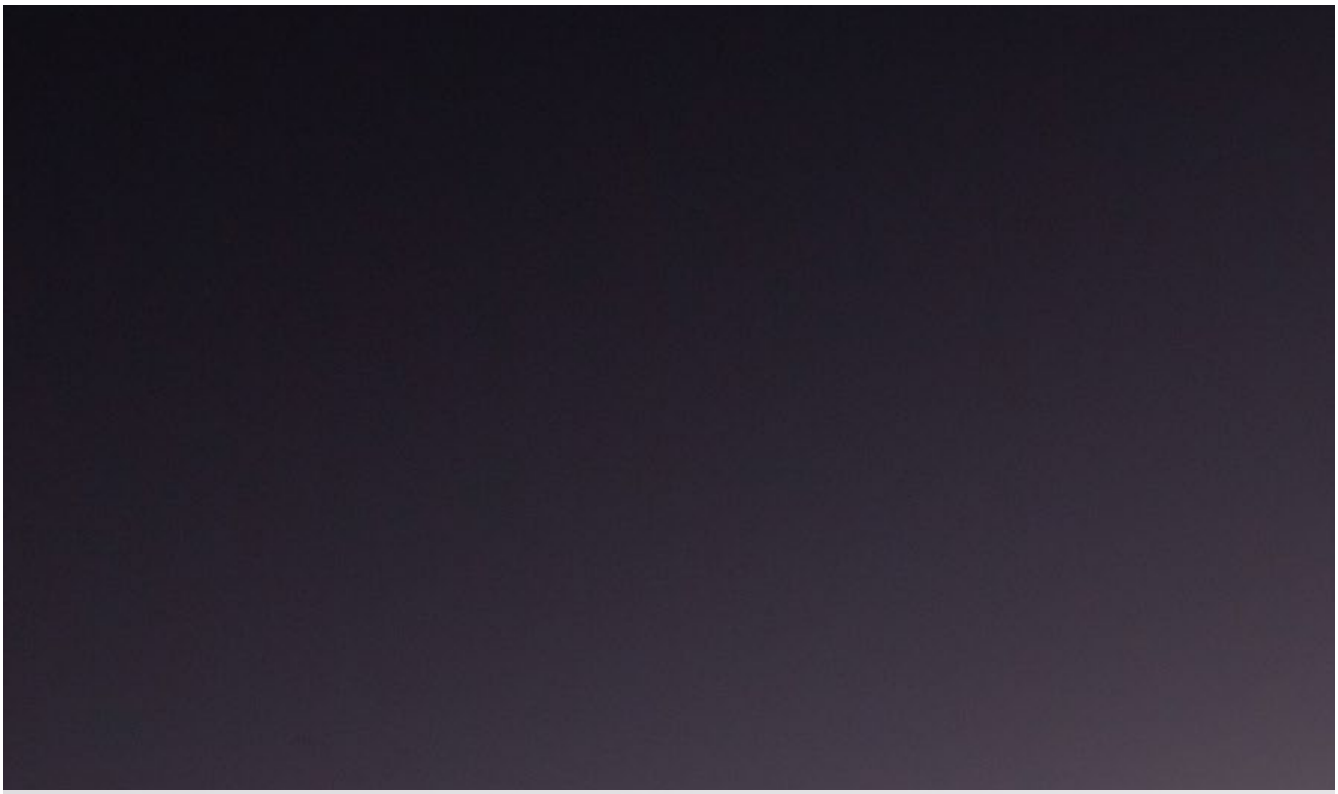

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