



Submission

To the

**House of Representatives Standing Committee on Employment, Education and
Training (Parliament of Australia)**

Inquiring into

Funding Australia's Research

Submitted by: The University of Notre Dame Australia

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Introduction

The University of Notre Dame Australia (Notre Dame) is pleased to contribute to the House of Representatives Standing Committee on Employment, Education and Training's inquiry into Funding Australia's Research.

Notre Dame is especially concerned about the challenges facing younger and smaller institutions when competing for Higher Education research funding. There are a number of obstacles which these institutions face, ranging from the types of programs which are funded, to the nature of research assessment panels, and the levels of support provided to grant applicants.

The diversity, fragmentation and efficiency of research investment across the Australian Government, including the range of programs, guidelines and methods of assessment of grants

Diversity and fragmentation in research foci

The management of the scope and diversity of research programs remains a complex issue, given the need to incorporate diversity in the types of research being funded, the areas being focused on, and the background/experience of the researchers. A common discussion point remains the breakdown in funding available for HASS and STEM projects. Whilst HASS fields enjoy a similar rate of overall success through the ARC discovery scheme, when the broader scope of Commonwealth funding for research is considered, including the ARC Linkage and the NHMRC, the overall level of funding available to them is much smaller. HASS disciplines make an important contribution to achieving the national research objectives, so additional avenues for funding them need to be pursued. The recent changes to ARC Linkage grants, where a greater percentage of industry contributions can be made "in-kind" are potentially very beneficial to HASS disciplines, as the type of "industries" they are more likely to work with are those that do not generally have large cash flows. These changes should result in a greater number of HASS-focused ARC Linkage applications and a better overall success rate.

Whilst efforts have been made to broaden the scope of fields which access Commonwealth funding, significant gaps remain, including in areas which are outside HASS. Since the demise of the Office of Learning & Teaching (and OLT research grants), the Education discipline has not fared well, especially the area of teaching pedagogy which is important to smaller universities such as Notre Dame. Given that Australia sees education as a growing element in our economy, this gap stymies progress and improvement. One solution would be to re-establish the OLT in the Department of Education, but an alternative would be to make this area a priority area within the ARC program.

Fragmentation of research priorities remains an issue. This fragmentation manifests itself not only within the Commonwealth funding program, but also in research investment more broadly, given the state/commonwealth divide and the layers of public, philanthropic and NGO sources. This leads to difficulties in identifying the types of grants available, and the level of details required by each source. The use of a tendering system to undertake some priority areas of research may tend to drive cost-effective research rather than enable sound scientific approaches; it may also undermine or compromise the peer-review system.

Diversity of research perspectives

The current ARC funding processes prioritise individuals and institutions with strong track records. Under the current system, the temptation remains for applicants to list Chief Investigators who have

little connection to the project yet use it to enhance their standing; newer academic members of staff have to carry out the bulk of the research in order to build the required track record to become a Chief Investigator in the future. Emphasis on track records acts as an obstacle for researchers from a variety of groups including newer academics, part-time researchers, academics with significant teaching commitments, and women and men with carer responsibilities. The ARC's 2016-2017 report references those groups that perform poorly within the National Competitive Grants Program (NCGP): just 27 per cent were female researchers, 12 per cent were early-career researchers, and 1 per cent were Aboriginal and Torres Strait Islander researchers.¹ Researchers from regional or remote campuses, who are often affiliated with smaller universities, are also disadvantaged. Whilst the ARC has initiated specific mechanisms to support such groups, it is important to recognize that the prioritization of track records has a broader impact on the innovation and diversity of *projects*, not just researchers. There needs to be more weighting given to the dynamism, value and impact of the individual project itself, not merely the person or institution proposing it. Assessment panels need to better consider the prospective value of research in their deliberations.

Efficacy of the grant assessment mechanism

At one level the ARC panel review process seems transparent and robust. All the applicants receive feedback (including the individual comments) from the external assessors which is important for the researchers in developing future grant proposals. The applicants are encouraged to submit a rejoinder where applicants respond to these comments. However, it is not known how much the rejoinder process is seriously considered in the overall grant success, as rejoinders are no longer reviewed by external assessors but considered by the ARC College of Experts Panel or Selection Advisory Committee when deciding the overall ranking of grant proposals. If the rejoinders are not considered by the actual assessors, the rejoinder process may be wasting the applicants and research administrators' time.

The time commitment expected for assessment panel members acts as an obstacle for researchers from a variety of groups including many of those who are already under-represented amongst successful applicants. This in effect means that the same people who find it difficult to apply for grants also face obstacles in participating in the panels which assess them. This lack of participation leads to lost opportunities for innovation in assessing applications. Many Western Australian researchers find it difficult to participate due to the time and cost of travel. This concern is broader than the actual selection of the assessment panel, but extends to the wider institutional apparatus surrounding it, including the panels, workshops and "think-tank" style activities typically located in Canberra, Sydney and Melbourne. New mechanisms to ensure greater diversity and inclusion within the assessment process are required, such as rotation systems and video conferences, as well as better incentives and financial support for travel.

Lack of diversity on panels also leads to difficulties in assessing interdisciplinary research project applications. This can in turn result in wildly different assessor reports. Researchers are encouraged to be interdisciplinary in their approach, yet the mechanisms for assessing the potential value of this research are still evolving. The ARC has previously acknowledged this challenge and is seeking to address it, including the utilization of more than one panel, leading to some recent improvements.² Encouraging a broader range of panel participants should lead to greater consideration of emerging research methodologies when assessing projects.

¹ Australian Research Council Annual Report 2016-17, Section 3.1., accessed at [http://www.arc.gov.au/sites/default/files/filedepot/Public/ARC/Annual%20Reports/2016-17/ARC Annual Report 201617.pdf](http://www.arc.gov.au/sites/default/files/filedepot/Public/ARC/Annual%20Reports/2016-17/ARC%20Annual%20Report%20201617.pdf)

² Australian Research Council (2016) "Valuing and Assessing Interdisciplinary Research" 47th Annual Symposium, Australian Academy of the Humanities, 18 November 2016, accessed at <http://www.arc.gov.au/valuing-and-assessing-interdisciplinary-research>

The process and administrative role undertaken by research institutions, in particular universities, in developing and managing applications for research funding

Consistency and coherency within the grant application process

The broader Commonwealth grant scheme is fragmented and it can be difficult to find material in a timely fashion; many grants applications require different completion using different forms which makes re-utilisation of material more difficult and time-consuming. The GrantsConnect platform has improved ease and accessibility for finding Australian Government funding opportunities and documents in one place. Smaller universities still find it a challenge to keep informed across the large range of programs and their requirements. Further harmonization of the guidelines and rules around grant schemes would facilitate better compliance and avoid the need for multiple support staff with knowledge of different programs.

There are a number of ways in which the current systems could be improved. One would involve a common research management system across all schemes which would reduce costs of grants application and post award management in Australia; this could involve a GrantsConnect research management system which might be utilised by ARC, NHMRC, GRDC and all government departments or agencies. Government agencies could also harmonise standard templates for contracts for public funding, including the wording of terms and conditions of those contracts. Furthermore, an agreed date and format for annual reporting for all government schemes would be more efficient and save money. Greater consensus and consistency in reporting to government would be welcomed within the university sector. Whilst state government funding is beyond the scope of this review, the Commonwealth should explore the possibility of harmonising, where appropriate, consistency in terms and conditions within research grant schemes in other jurisdictions. The variety of forms and processes means that re-utilisation of contextual material is more difficult and time-consuming than it should be.

Administrative burdens for universities

The number of research agreements and compliance requirements for universities in relation to government grants has increased significantly in the past 5-10 years. At the same time, university requirements in relation to government reporting (including ERA, EI, Australian Bureau of Statistics, National Survey of Research Commercialisation) continue to grow. In addition to this, there is considerable work involved in the competitive application process for grants. The current system within the ARC requires detailed funding applications which often involve three months of full time work for a single application, along with significant support teams. These applications result in very low success rates, as well as relatively short project timelines, meaning that individuals and teams must continually re-apply, consuming further resources. This places strain on individual workloads, especially teaching-research academic staff with substantial teaching commitments.

Outside the immediate project team, research administrative support is supplied by several staff members at the School or Faculty level in the first instance, with an 'army' of support at the next stage in the Research Office. In particular, there is a need for support staff in research offices to have discipline-specific knowledge to advise on grant writing across HASS and STEM. Smaller research institutions will require extra resourcing to meet the changing funding landscape. Some of these institutions might be forced to make strategic decisions in terms of which researchers to support for major competitive grants in order to, in turn, provide adequate teaching relief, administrative support and research training.

The effectiveness and efficiency of operating a dual funding system for university research, namely competitive grants and performance-based block grants to cover systemic costs of research;

What are the advantages and disadvantages of this dual system?

The Dual funding system is critical for the higher education sector in particular smaller universities that rely on the additional funding to support Higher Degree by Research (HDR) Scholarships, research activity and other indirect costs of research. Universities have to find approximately 85 additional cents for every dollar of competitive grant funding they receive to cover the indirect costs (these costs are not able to be included in most grant applications). Outside Research Block Grants, the considerable infrastructure costs to Universities for supporting research and research students would not be supported by the government; this would place major obstacles in the path of smaller Universities and inhibit their growth and expansion. The Commonwealth Government's recent emphasis on developing the innovation and engagement agenda is still being implemented; this will require significant additional resources in oversight, monitoring and reporting.

Smaller institutions within the dual funding system

In the current research environment, a limited number of universities control the bulk of the research funding from the government in both the competitive and Research Block Grant areas due to a history of success; this success is compounded year-on-year which sets the younger universities at an enduring disadvantage. The current grant assessment processes exacerbate these disparities; there is a culture of lead universities retaining all or the biggest portion of the grant with other universities with collaborating project members being overlooked. In addition, research which influences teaching is not sufficiently valued under the current structure, meaning that research is not harnessed for excellence in teaching as effectively as it could be.

While we support the dual funding system, it does disadvantage smaller universities who are still developing their research capacities whilst aiming to lift research performance. The Research Block Grant system is designed to distribute funding to institutions while they are still developing their research potential and their capacity to achieve successful grant application outcomes in all categories. But it remains difficult for young universities to gain access when it comes to grant funding, especially Category 1 funding, which could potentially increase their Research Block Grant allocations. The recent changes to the Research Block Grant funding formulae and the dwindling funding supply are going to more greatly impact young institutions, especially those that have been unable to gain access. Comparative success rates for ARC projects still demonstrate large discrepancies between organisations.

Without reform, there is a danger that the gap between universities will only widen, with the research capacity of some institutions growing year on year, whilst others stagnate. One avenue for addressing this is to better incorporate evidence of impact and collaboration throughout the sector, when assessing grants and determining institutional support. Many smaller universities have remote and regional campuses which struggle to build research capacity in the current dual funding system with the majority of incentives going to larger universities which have signature research intensive institutes. Incentives are needed to attract and retain quality researchers in regional areas, especially those whose research focus clearly benefits their local area. One means of preventing this gap from widening is to enhance grant processes such as Collaborative Research Networks which focus on capacity building; this would provide greater equity given the large amount of resources currently allocated to Centres of Excellence.

There has been considerable emphasis placed on engagement and impact in recent years, but these concepts could be embodied more effectively within the dual funding model. For instance, the dual funding model heavily favors HDR completions with few incentives for diversity in postgraduate training, and ensuring end user engagement. This could be resolved by establishing incentives to reward research training which is both high quality and flexible, thus attracting greater diversity of HDR applicants within the system. In particular HDR training requires ongoing support at regional and remote campuses.

Opportunities to maximise the impact of funding by ensuring optimal simplicity and efficiency for researchers and research institutions while prioritising delivery of national priorities and public benefit

Emphasis on collaboration, amongst researchers, institutions and funding providers

Effective collaboration is a principal means of both maximizing the impact of funding, as well as delivering on national research priorities. Whilst it remains important to continue supporting sole researchers, collaboration can bring together outstanding expertise nationally, and reduce duplication.

In recent years the Commonwealth funding system has sought to provide more incentives for joint research activities, but collaborations remain more common in some disciplines than others. Field of Research (FoR) data released by the ARC has shown that there are significant differences between the FoRs in terms of average authorship of publications, showing multiple authorship is less likely in the HASS disciplines.³ Similarly it was rare to find research outputs in HASS areas with more than 2 Australian institutions involved.⁴ It is important that incentives, rewards and grant opportunities are targeted specifically to support collaborative research. There should be a higher priority and acknowledgement for funding which is collaboration-focused, including CRC-projects, CRCs, ARC Linkage, NHMRC Partnerships and similar schemes. Within the ARC Linkage program, recent reforms around “in-kind” contributions have enabled a broader range of areas to apply; this is important because linkage applications have tended to be dominated by applied research. Better incentivisation of industry in its broadest sense should result in collaborations where a cash contribution is not essential at the application stage; this would be especially beneficial in the HASS and public health sectors. Often Industry-linked funding schemes tend to be larger programs where significant contributions are required; more ‘start-up’ schemes on a smaller scale may help increase engagement between researchers and industry partners with a lower risk for the industry partner. Another innovation worth considering is the funding of industry placements for HDR students.

Successful projects which have delivered outcomes could be offered an extension in funding outside the regular applications rounds, thereby ensuring continuity. Smaller institutions will benefit if the Commonwealth continues to reward large-small institutional partnerships as well as domestic-international collaborations.

It is important to recognize that policy changes may take time to eventuate, because these rely on end-users bringing products developed from relevant research into the market. Incentives for State and Local Government departments, or levies for business to invest funding into research with universities, would boost engagement faster. Furthermore, such incentives would grow research and

³ Australian Research Council (2017) “Mapping the Humanities, Arts and Social Sciences in Australia”, page 72, accessed at <https://www.humanities.org.au/issue-item/mapping-humanities-arts-social-sciences-australia/>

⁴ Australian Research Council (2017) “Mapping the Humanities, Arts and Social Sciences in Australia”, page 71, accessed at <https://www.humanities.org.au/issue-item/mapping-humanities-arts-social-sciences-australia/>

development within the private sector, thereby enabling innovation and commercialization to flourish between the private and public sectors.

Support for longer term, innovative projects

One means of ensuring continuity in research and effectiveness in outcomes would be to fund larger, longer-term “grand challenge” projects, with 5 years as the standard, rather than 2-3 years. This would enable most substantive studies addressing national priorities to be undertaken, especially longitudinal studies where research over an extended period is required. This change would also reduce the overall burden on the system resulting from the large number of applications every year. It would also make it easier to recruit research teams, due to more security in funding.

There are few avenues for funding innovative projects that are potentially higher risk or less developed, but which will potentially lead to long-term societal impact. In the current system, in general, successful applications tend to be those that are well developed and stipulate specific results, meaning that there is a gap in funding for ‘start-up’ projects. At the moment, most research teams would be covering the cost of early activity themselves to collect ‘preliminary data’ to be able to submit a competitive application. Most projects would not be building in tools for long term assessment and to evaluate impact into their budgets.

Much of the terminology with Commonwealth grant applications presumes that the pathways to outcomes are always known or knowable in advance. There are many examples of critical research activities which would never have been supported let alone delivered if likely outcomes needed to be outlined prior to the project commencing.

The funding of individual short term projects may be inefficient, in the absence or reviews of findings, recommendations and then future projects with common themes linked in a holistic or comprehensive manner. One means of addressing this might be to establish specific groups of projects which are linked and funded over a period, whilst being regularly reviewed and evaluated. Such studies could be published as fields of research by the responsible funder.

Conclusion

In effect, the University makes the following recommendations:

1. The challenges faced by relatively young and small universities in accessing national funding need to be addressed within a restructured research funding framework, with greater emphasis on capacity building and broadening collaborative institutional partnerships;
2. Assessment of projects within competitive grant schemes need to better recognise prospective research criteria and not only retrospective or lag research criteria such as prior track record;
3. Consideration should be given to increasing the overall pool of funding available to HASS disciplines, particularly where such funding leads to translation of research into societal impact, especially for those segments of our society that are most in need;
4. Funding schemes need to better address the ‘grand societal challenges’ of our time, by developing robust mechanisms to ensure that genuine interdisciplinary research collaborations are directly funded;
5. The maximum timeframes for research projects need to be lengthened, given that the timeframe from research discovery to impact can be in excess of 20 years. This will ensure that longer term longitudinal research is better supported;

6. The complexity of the overall funding system needs to be considerably reduced, so as to eliminate the significant administrative burden placed on institutions (especially smaller universities) by the specialist nature of the different application processes.