

House Standing Committee on Education, Employment and Training: Inquiry into Funding Australia's Research

University of Western Australia response

The University of Western Australia (UWA) welcomes the opportunity to provide input into the inquiry from the House Standing Committee on Education, Employment, and Training on the efficiency, effectiveness and coherency of Government funding for research. UWA would be pleased to provide further information or explanation on any of the points made in this submission.

UWA's responses to the Committee's Terms of Reference follow.

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

The complexity of Federal Government programs, which is spread across the several portfolios supporting the research and innovation system in Australia, is difficult to navigate for even the most seasoned researcher, and imposes a significant burden on the sector. There are numerous nationally competitive grant schemes, yet they fall into two basic categories: blue sky research that seeks long use-by knowledge and has the capacity to generate disruptive technologies and real innovation; and applied research programs, often done with industry or government departments as co-investigators, seeking shorter-term solutions to existing problems. Rationalisation of schemes across Government departments with similar objectives (e.g. CRCs and ARC LPs) would lead to administrative efficiencies and reduce the cognitive burden on researchers and research organisations that need to navigate this multitude of schemes.

As explained in more detail in point 3 below, universities are research providers which are required to co-invest in research. In many cases that can be with in-kind support but, increasingly, cash is also required in order to participate. This is unsustainable without a source of funds external to research, and so university co-investment in research comes at a cost to other activities.

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

As described above, universities would benefit from consistent application processes that would enable streamlined delivery to all government funding agencies. However, the most significant efficiency gains can be made through a more streamlined approach to post-award administration. For example, both universities and funding agencies alike could benefit by improved delegated responsibility for low-risk, transactional business such as change of CI status. This could be explored in a workshop of senior university research administrators (represented by the Australasian Research Management Society (ARMS)) and key stakeholders from the ARC and the NHMRC.

A model similar to that used overseas, particularly in the United States, could be considered as an alternative to the current administrative burden. In this model, many of the funding agencies do not require grant awardee institutions to enter into funding agreements. Instead, the requirement, in accepting a grant, is to comply with applicable laws and policies that apply to grants awarded by a number of agencies. Presently, in Australia, each university has to enter into an agreement, and sometimes multiple agreements, with each funding agency. Collaboration with other institutions on funded projects requires an inordinate amount of time drafting, reviewing and negotiating associated subcontracts.

In recent times the volume of published findings has increased and yet peer review and replication have not adapted. Both systems are reliant upon researcher time to maintain a gateway of quality in our research findings, time which is increasingly in short supply as universities face a significant administrative burden for reporting, assessment and accountability. These requirements are not necessarily aligned with the research funding a university receives, and in some cases (e.g. ERA) require substantial general administration requirements in addition to subject matter expertise from academics.

The peer-review system in Australia is untenably strained and a coordinated set of programs and schemes will help address this. However, more needs to be done to ensure that funding agencies use a common set of submission procedures and principles for assessment; and the NHMRC needs to be included in this since both the ARC and NHMRC simultaneously (yet separately) developed new on-line systems in 2017/18.

3. 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

This issue has potentially the most significant impact on universities. The dual funding system in Australia is unique in the world and allows universities to invest in the indirect costs of research in a strategic way. Universities are required – and funded – by the Australian Government to undertake research through a dual funding system of competitive research grants and research block grants. Competitive research grants are awarded to universities to undertake specific research projects.

However, funding allocated under competitive research grants will not cover all project costs and the proportion of costs covered is ever decreasing. Most competitive grants cannot be used to fund the 'indirect costs' of research and these include principal researchers' salaries, power and water, insurance, infrastructure and capital equipment. An independent study¹ in 2009 estimated universities had to invest 85 cents for every dollar of competitive grant funding in order to cover the indirect costs not met by the research grant, of which Government funding accounts for around 23 cents. Universities are being stretched to co-fund competitive grants and then provide outcomes from them. Universities Australia estimated that in 2014, universities had to cover a gap of \$1 billion to conduct the research 'secured' by competitive grants. This is more than double the 2002 figure of \$450 million. Moreover, the research block grant monies come with a significant time lag, making agile investment in new areas very difficult.

Past debate about the allocation of research block grant money has led to a proposal that indirect cost support might instead be assigned to each successful competitive grant. This would not be a positive step, as it would in effect mean that the block grant would be allocated directly to the researcher and this would severely hamper the ability of the university to support the systemic costs of research - the RSP block grant at UWA funds its embedded infrastructure such as libraries and laboratories, as well as specialised research equipment and associated technical support.

Until now, Australia's dual funding system has been based on the idea that around half the funding is delivered by the Australian Research Council and National Health and Medical Research Council based on nationally competitive, peer-reviewed grants (Category 1) while the other half is provided back to universities via RBGs, which are distributed according to a formula that was primarily based

¹ Allen Consulting Group 2009, The indirect costs associated with university research funded through Australian Competitive Grants final report, Report to the Department of Innovation, Industry, Science and Research, Allen Consulting Group, Melbourne, p.52.

on how much grant income each university received from the ARC and NHMRC. This logic rests upon an equal growth rate between ARC and NHMRC funding on the one hand, and RBG funding on the other, in order to continue to recover the unfunded administrative costs. However, over the years the rate of growth in grants has outstripped the rate of growth of RBG. Between 2000 and 2013 RBG grew around 19 per cent (from \$1.6 billion to \$1.9bn in constant dollars), while Category 1 grant funding grew by more than 110 per cent (from \$736.7 million to \$1.56bn). This gap requires universities to make hard decisions about which programs to fund, and to subsidize research programs with money earned from other sources.

The recent NISA changes further compound this issue, with Category 2 and 3 income receiving greater weighting for RBG funding formulas. Unlike Category 1 income, which is traditionally very stable across institutions, contract research from the public and private sectors fluctuates – and likely always will do because industry typically invests in short-term gains from R&D. Year on year it is not uncommon to see fluctuations of as high as 70 per cent, and as low as minus 90 per cent from this category of research income. Whilst this introduction theoretically empowers universities to grow an income stream and effect positive change in their RBG funding allocation, after the government safety nets are removed in three years, 38 per cent of a university's RBG funding will be delivered based on highly volatile inputs. This kind of volatility will impact a university's ability to undertake long-term research planning.

4. 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.

Australian universities have responded positively to the challenge of the ARC's Engagement and Impact assessment and many now have embedded programs and processes to capture research impact. At UWA we value the involvement the community in our research and recognise the importance of raising general awareness of the research we undertake. Formally commencing in 2015, UWA established a Research Impact and Engagement Office for the long-term to assist researchers to identify pathways for realising the impact of their research and to communicate their stories to our stakeholders and the community more broadly. This year we have launched the UWA Public Policy Institute (UWA PPI), which aims to increase the translation of research findings into options and evidence for policy decision makers. Our ambition is to make engagement with research end-users and dissemination of impact a part of the fundamental research process.