



General Principles

The Australian Council of Graduate Research Inc proposes that the following principles should drive any revision of the current research and research training funding system:

1. Research should be fully funded whether via a dual system or via indirect costs being incorporated into research grants
2. The support of research via the system of block grant/competitive research grants should continue
3. Block grant drivers must continue to support research and research training excellence and must continue to use hard, auditable research performance metrics
4. The research block grant system is overly complex with its 6 schemes and it should be simplified.
 - a. Explicit funding for research training should continue on the basis of outcome drivers rather than being load driven.
 - b. Research engagement components should recognise industry end-users and international collaborations as this builds Australia's global reputation and citations.
5. Competitive grants should be driven by agreed national research priorities and free from undue ministerial influence or influence from industry or end-user lobby groups
6. Funding of translational research should require matching funding from end-user groups

Specific principles relating to research training block grants are that:

7. Research training block grants need to explicitly support both the institutional delivery of programs and scholarship schemes for students.
8. Additional skills training and industry engagement requirements incorporated within PhD programs should be supported by full cost funding for up to 4 years of candidature.
9. Government should drive desired research and research training behaviours by using appropriate metrics to determine the block grants rather than by mandating structures and having restrictive rules on use of the grants.
10. Research training should be funded to attract high quality domestic candidates. Given the high contribution of research candidates to the research effort in Australia, introduction of fees for these researchers is seen as a retrograde step with potential to reduce the attractiveness of higher degree research for high performing domestic PhD candidates in particular.



Specific Responses to Section 5 – Research Training and Employment

5.3.1 How could research programme structures and rules be improved to remove blockages to more flexible and innovative HDR delivery?

The focus should be on developing block grants that have a base level of funding founded on appropriate performance metrics for high quality candidates and associated academic programs (provision and scholarship support). Added incentives should be used to drive certain behaviors, such as encouraging industry engagement, international partnerships and interdisciplinary research partnerships.

Increasing representation of disadvantaged groups and increasing diversity, in particular gender in the academy, are seen as key goals that should be incentivized.

Overall, simplification of the block grant system should be examined with two or three defined schemes focusing on research training, infrastructure and engagement, and with flexibility introduced in expenditure breakdown of block grants to allow diversity of institutional strategy.

5.3.2 What changes to research funding structures reduce structural funding barriers affecting the movement from undergraduate to HDR studies?

The Australian PhD, under the AQF guidelines, is nominally 3-4 years and there are some concerns that it is not of sufficient length to conduct high quality research, produce research outputs as well as develop the necessary skills for later employment. The PhD in the USA, while probably too long, is desirable to aspiring doctoral candidates worldwide due to capacity to develop disciplinary depth as well as the teaching experience expected of most graduates from the US system.

The Australian research training system needs to consistently produce very well trained graduates. With increasing pressure to incorporate industry engagement and transferable skills development in the PhD and ensure timely completions, it is important to ensure that candidates entering into a research program are as well prepared as possible. This increasing pressure to develop additional skills and have experiences outside the academy means that completion in less than 4 years is becoming unrealistic particularly without consistent and robust preparation of applicants via pathway programs.

In response to these factors, there is significant discussion and movement across the sector in Australia moving to a Bologna 3 cycle system with postgraduate pathway/research preparation programs prior to admission into a shorter and more focused PhD.

The funding issue is that while undergraduate places are uncapped, postgraduate coursework places (CSP) are restricted. Thus having a “second” cycle Masters (or variant) as an entry to the PhD is not currently feasible as there is insufficient support. The main funding barrier to this is the



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lack of CSP masters by coursework places, rather than any problem with the research funding structures.

Preparation for the preeminent research degree has always required a high level qualification with a research component. This pathway program is typically not funded via the research block grant (except via the Masters by Research pathway).

Alternate program architectures such as the Macquarie Model have quite effectively addressed the need for specific research training preparation but by using a fee paying/RTS hybrid this model draws upon the currently underfunded RTS pool.

It is critical that pathway programs into the PhD are appropriately funded and this relies on review of both research block grants and institutional teaching grants.

Given that a key principle of this review is to *“ensure the quality and excellence of Australian university research and research training”* and recognising that the RTS has already been reduced to levels that cannot support additional preparation (*refer to the full cost of research training study conducted by the Government which showed that the cost of training a candidate was approximately 1.3-1.4 times the amount supported under the RTS (Go8 average)*), one approach to this issue would be to focus the RTS on funding the PhD only. The Masters by Research program is declining both in numbers (now 13% of total HDR numbers compared with 19% in 2005) and in importance/relevance as a research degree and is typically used as a pathway into or out of a PhD.

5.3.3 Would a move away from institutional funding towards student based funding improve HDR delivery?

ACGR does not support moving away from the current system where institutions receive block grants to cover tuition costs and scholarships for eligible candidates to a process for awarding domestic students a “grant” that covers candidates fees and stipend. Any system that pays on a per student basis is likely to mean significant decreases in student numbers (given that universities tend to subsidise more candidates than the RTS can support), which will in effect reduce the research workforce (which in Australia gains a significant contribution from the activities of our research candidates) and consequently value return for government investment. It will also necessarily remove completion metrics from the block grants that are seen as an important driver for quality outcomes.

The most efficient system to support high quality of research training would be to continue a block grant-type support with institutional performance drivers such as completions as well as drivers of quality. The latter could be based on quality of the research environment and the training outcomes. Such a system will also support diversity (discipline, culture, gender etc) by funding into areas of research strength and encouraging and funding good quality outcomes. It should be noted that some of these metrics may not be simple to collect, and supporting definitions and systems will need to be developed.



5.3.4 Do university employment practices include drivers of promotion and IP ownership which work against researchers engaging in commercialisation opportunities?

This question delves beyond the areas of direct responsibility for most members of ACGR, however we do make the following statements about the impact that university employment practices have on engagement in commercialization opportunities and pursuit of IP ownership.

First, universities in Australia are generally comprehensive, spanning the sciences and social sciences, engineering, architecture, humanities, creative arts, medicine and allied health sciences, business and law. Whilst ACGR broadly agrees that end-user engagement and impact is critical to Universities and thus should be an important part of promotion processes, we recognise that only a limited number of these disciplines engage in commercialization. Thus when universities plan for the employment and promotion of their staff they should take into account other activities that have had impacts on policy development, systems improvement and service delivery which in turn create efficiency gains and employment and thus boost the economy.

Additionally, engagement with industry does not necessarily lead to commercialisation, particularly in the short term over which promotion occurs. Thus having commercialisation as a key component of promotion across universities is not tenable. It is noted however that industry/commercialisation engagement such as through the ARC and NHMRC industry linkage and development programs are rated highly by university promotion committees.

Specific recommendations:

1. Combining funding for APA and IPRS to provide institutional diversity provided that notional stipend numbers are not reduced
2. Provide a pool of funds for training programs and scholarships to allow institutional flexibility but with a minimum specified proportion of expenditure on scholarships
3. Single funding formula determined by combining current completion measures with measures of research activity and quality measures.
4. Additional incentive pool for engagement and a similar pool for identified minority populations such as bonus completion weightings where candidates are for example indigenous or are located in industry for at least one year of their HDR program. A repurposed JRE Cadetship Scheme could also be used to incentivise engagement.
5. Revise and reinstate the Commercialisation Training Scheme to support industry engagement and employability skill development.
6. CSP allocations for pathway programs that are not restricted by minimum research components
7. Schemes to encourage industry linkage with universities for research training need to be grown and incentivised through tax benefits and leverage of government funds with clear



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metrics outlined for engagement. For example, research leading to innovation such as the ARC Linkage scheme should be not simply restored to its former size, it should be expanded. For industry linkage programs, rolling application processes should be instituted to enable nimble and flexible delivery of programs on an appropriate timescale. Although a limited number of large, multi-partner training hubs can add significant benefit in terms of critical mass, the size of the company pool in Australia limits these types of initiatives.