

28 November 2014

Submission: boosting the commercial returns from research

Overview

The University of Western Sydney (UWS) thanks the Australian Government for the opportunity to submit a response to the discussion paper 'Boosting the Commercial Returns from Research'. UWS welcomes the government' s initiative to increase the translation of research into commercial outcomes as a core element of the Economic Action Strategy.

UWS is a confirmed research leader in Australia. The excellence and depth of the University's research has been recognised in the latest Excellence in Research for Australia 2012 national report, with over 70 per cent of the University's assessed research ranked at world class or better, putting UWS in the top 20 of Australia's universities.

UWS is one of the largest universities in Australia with over 43,000 students and close to 3,000 staff. As a major metropolitan university our campuses are spread across Greater Western Sydney. A recent Deloitte Access Economics report (February 2012) found that the economic contribution of UWS and its students to the region was \$845.3 million in 2012 (or approx. 1% of the GRP). UWS is actively engaged within its region, with a mission to support GWS' growth, economic development and education.

Through engagement, UWS has forged strong and successful alliances with stakeholders in the government, business and not for profit sectors. In view of its central role as an educator in GWS and its regional research and teaching partnerships, the University is well placed to facilitate regional economic growth through collaborative innovation.

Response

UWS would like to address the overarching strategy outlined in the discussion paper:

As a part of this strategy, the Government:

has established the Commonwealth Science Council, chaired by the Prime
 Minister, to provide advice on important science and technology issues facing
 Australia that draws on industry, science and government experience.

UWS notes the importance placed on the Commonwealth Science Council, reflected particularly in the status of its chair, the Prime Minister. This sends a strong message that science and its potential for commercialisation in partnership with industry is high on the agenda of the Australian Government.

UWS would like to note that the arts, humanities and social sciences also produce research that may have strong commercial impact. Arts, humanities and social science research often leads to policy, program and/or educational research impact, where the commercial gain is often profound, far reaching and change-affirming for the community.

- will consult with stakeholders to set national priorities for research. These
 priorities will align areas of national research excellence with Australia's
 industrial strengths, global trends and community interests. Each priority will
 be supported by practical research challenges that will be developed in
 consultation with experts from industry, research organisations and
 government.
- will assess existing research activity against the research priorities and practical challenges to ensure there is critical mass around each of the challenges. Where there are gaps, tailored strategies will be developed to address the specific challenge.

UWS endorses the government's focus on new applied research and the translation of existing research. UWS believes that there is a place within this focus for "blue sky" research that has a longer timeframe for commercial return. In adopting strategies for increasing the commercialisation of research, care should be taken to avoid defining commercialisation in line with short term interests or narrowly as the creation of a marketable product or process. Various tacit knowledge translation activities improve Australia's competitiveness and expand its innovation network.

There may always be a gap between research that is for the greater public good, and research that industry pursues for financial and commercial return. Australia needs to boost the prevalence of university-industry relationships, commercial opportunities and knowledge sharing at the same time as maintaining diversity and capacity in disciplines outside the immediate interest of commercial entities.

The discussion paper lists six proposals as part of the implementation strategy for the policy mechanism:

- 1. Creating stronger incentives for research-industry collaboration
- 2. Supporting research infrastructure
- 3. Providing better access to research
- 4. Increasing industry relevant research training
- 5. Measurement of outcomes
- 6. Capitalising on the Medical Research Future Fund

UWS supports these implementation strategies in addressing the current industry-university-community culture of operational suspicion and silos. In more detail, UWS strongly supports the following measures.

Incentivising PhD Industry Placement Opportunities

UWS strongly supports increased industry-focused training during the PhD as a critical stepping stone to long-term engagement between industry and research institutions.

UWS is open to collaborative, industry-focused projects involving placements and co-

supervision arrangements, and would encourage further dedicated strategies and incentives for industry to engage in this manner; for instance, through the proposed Industry Transformation and Training Centres. Active engagement during the research training process is a mechanism to breach current education-industry silos, create cultural change for industry and research institutions and develop a generation of researchers who are comfortable working in both settings.

UWS supports both short term and long term incentives to spur cross institutional postgraduate, PhD and research staff placements and projects.

Inclusion of "Impact" performance metrics

UWS strongly supports the inclusion of impact measures for research evaluation. UWS is developing a Research Effort Framework to capture research impact within UWS's academic performance metrics. UWS does however recognise the practical difficulties of assessing impact on a sector-wide basis, and would caution that any assessment scheme should be introduced only after consultation with the sector.

Current assessment mechanisms for academic performance are largely orientated towards publication output, including the ERA exercise. This emphasis on traditional academic publications provides a practical impediment to movement between academia and industry; by entering industry a researcher often significantly compromises their publication record and therefore opportunities for career progression should they wish to re-enter academia in future. Universities have a key role to play in addressing this issue internally; however, the introduction of an independent impact metric would be valuable in providing a career pathway for industry-engaged researchers.

Refocusing the R&D Tax Incentive

The R&D Tax Incentive constitutes a significant percentage of Australia's national investment in research and development. Of the 8.97 billion (2012-2013) spent by the Australian Government on research and development, approximately a quarter was expended on the R&D Tax Incentive.

Despite this, there is little evidence to suggest that the tax incentive drives innovation in business: demand factors and competition incentivise innovation more effectively. Further, despite recent and mooted changes to the incentive scheme, arguably those firms best placed to take advantage of the incentive—relatively large, 'steady-state' firms—are the least likely to provide significant growth in innovation.

Reforming the R&D Tax Incentive to better target collaborative industry/university startups will encourage competition, effectively providing a market incentive for larger, established firms to invest in research and development.

Encouraging increased uptake of intellectual property

Australian universities are very competitive in the international sector; in this respect the quality of research being produced is a strong argument that the public investment in research represents good value. Conversely, Australian universities have had a poor record of commercialising the IP that they generate. UWS has recently adopted the Easy Access IP model as a tool to promote the uptake of the research it generates and would encourage its expansion.

Easy Access IP is an initiative to rebalance the personal incentive for researchers to invent and the public's interests in securing the maximum benefit from publicly funded research. EAIP prioritises universities' interests in the establishment and embedding of positive, long-term industry relationships over short-term royalties-based financial returns and is a more effective means to achieve impact.

Conclusion

UWS welcomes the discussion paper's focus on collaborative solutions to increasing the commercialisation of research. UWS is an important node in the diffusion of research and innovation within Western Sydney and the nation. We believe collaborative solutions rely on long-term support across the innovation system—including the tertiary, industry, community and government sectors. Effective reform must treat the system as a whole.