

29 September 2023

Science Strategy and Priorities Taskforce priorities@industry.gov.au

Re: Response to Australia's draft National Science and Research Priorities

Universities Australia (UA) welcomes the opportunity to provide a short response to the release of the draft National Science and Research Priorities. Representing Australia's 39 comprehensive universities, UA believes it is critical to get these priorities right, as they reflect the challenges and opportunities ahead and help drive how we respond to them. UA generally supports the draft priorities noting that we suggest making a version of *Priority 4: Building a stronger, more resilient nation* the overarching vision, with the remaining priorities naturally flowing from this. UA also suggests an additional priority with a specific indigenous focus (discussed below).

It is noted that the draft priorities are more high-level than the current priorities which are more discipline specific. This shift allows the scope to reflect that science, and the role and impact of research, cut across disciplines, sectors and our everyday lives. Cross-cutting priorities are also likely to be more practical for researchers to consider as they conceptualise potential projects and develop grant applications – providing clear indicators for demonstrating the value and potential impact of their research.

Science and research are key to addressing the complexities of energy transition and climate change, maintaining the good health of Australians, and driving a more productive, modern economy and nation. But establishing the priorities alone does not achieve change or advance our sovereign capability. It is paramount that the priorities are underpinned by adequate investment and firm implementation measures.

Universities will play a critical role in addressing the challenges ahead. If we want to continue to succeed and prosper as a nation, we need to increase our research capacity and universities can deliver this. But we need the investment that enables us to do so. Australia's research system is chronically underfunded. Research and development (R&D) funding as a share of GDP is in free fall, currently sitting at 1.68 per cent – the lowest it has been in almost 20 years. In comparison, our peers on average invest 2.7 per cent of GDP in R&D. UA supports the Government's commitment to boost investment in R&D as a percentage of GDP, getting it closer to 3 per cent. Given the low levels of funding, universities must find other ways to fund research.

For every \$1 of competitive grants won, universities only receive approx. 22 cents to support the indirect cost of research. This means that universities must fund research through other means, such as international student revenue. Currently, 53.2 per cent of research performed at universities is funded through internal sources. In our recent submission to the University Accord Interim Report, we called for a ramp up of research support funding to at least 50 cents per \$1 competitive funding granted. This will move Australia's research system on to a more sustainable footing. Failing this, it is unlikely that the aims and objectives under these priorities will be fully realised.

Beyond the quantum of funding, the key to successful implementation of the new priorities lies in the connection between funding and priorities. Australia has a complex, and somewhat fragmented research funding ecosystem with Commonwealth grants spread across multiple portfolios - notably Education, Health and Defence - with the Industry, Science and Resources portfolio funding things like Cooperative Research Centres and setting National Science and Research Priorities. UA recommends that for the priorities to be successful, we need a whole of Government approach to the adaptation and implementation of the priorities.

While the priorities will be important to ensure that we are tackling the key challenges ahead, this should not come at the expense of investigator-driven research such as that funded through Australian Research Council (ARC) and National Health and Medical Research Council (NHMRC) programs. Fundamental research is invaluable as is underpins future discoveries and translational research. It provides new



knowledge, which can be translated into impact to meet current and future challenges. The social and economic benefits of being a knowledge generating nation are manyfold. It is unknown what the national priorities of the future will be, but a national research funding system with dedicated, ongoing investment into new knowledge is the only way to prepare for future scientific and technological developments.

It is also important to recognise the specific nature of the Medical Research Future Fund (MRFF) and that this program is driven by its own set of funding priorities that are determined by the independent Australian Medical Research Advisory Board (AMRAB) and are revised (and legislated) every two-years. It is noteworthy that MRFF legislation requires AMRAB to take various things into account when setting priorities – the National Science and Research Priorities are not identified in this context.

Noting the fragmented research funding landscape and the lack of direct levers for the National Science and Research Priorities to impact on programs such as the MRFF, UA suggests that prior to any new priorities being finalised, it should be a focus of this review to a) determine the extent to which it is appropriate for National Science and Research Priorities to be applied across various contexts, b) develop a detailed implementation plan which considers these contexts and articulates a process for specific consultation around implementation, and c) provide greater clarity on measurement of progress and success.

In line with the Accord Interim Report, there is a role for the Government to play as an exemplary direct user of university research. To truly achieve the stated objectives of these priorities and maximise research impact, it will be critical that the Government engages and collaborates with universities. UA believes that should be reflected in the National Science Statement.

UA welcomes the focus on Indigenous knowledges and knowledge systems throughout the four priorities and acknowledges that they will all benefit from Indigenous ways of knowing, being, and doing. Historically, Western sciences have overlooked the knowledge gifted by Indigenous knowledge holders and the respective accomplishments and benefits of these knowledge systems. This is despite numerous examples of how Indigenous knowledge and Western sciences have come together to address global challenges. One example is how Indigenous wisdom and knowledges, in combination with the latest scientific advances in ecological understanding, have been critical in protecting and restoring biodiversity. While Indigenous knowledges and Western scientific methodologies may differ in their philosophical underpinnings, there is a place for both views and clear value in getting the balance right by recognising the strength and limitations of both.

To complement Indigenous knowledges woven through all four priorities, UA recommends an additional priority focusing on elevating and investing in Indigenous people's perspectives on science, technology and innovation. This will acknowledge that while Indigenous knowledges should influence our thinking around how we are responding to major challenges faced by the nation, Indigenous knowledges as a standalone priority is also important in its own right. As a country, we need to establish genuine collaboration and partnership across knowledge systems and continue to embed Indigenous knowledges and cultures into our education while respecting the rights of Indigenous people to own and protect their knowledge. It is critical that research agendas are ethically inclusive and respectful toward Indigenous and local communities. Programs such as *Elders in Residence* are becoming more common in universities and a way to deepen recognition of Indigenous knowledges in our education system. Elders on campus also provide cultural mentoring and leadership for Indigenous students, which has a positive impact on student retention and through mentoring may lead to building a pipeline of critically needed Indigenous researchers.

We look forward to engaging further with the Government to shape the final priorities. If you would like to discuss this submission in more detail, please contact Mr Jarrod Ross, Policy Director Research and Innovation at <u>i.ross@uniaus.edu.au</u>.

Yours sincerely

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