

SUBMISSION

AUSTRALIAN UNIVERSITIES ACCORD

Response to consultation

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Contact:

Dr Saraid Billiards Chief Executive Officer Association of Australian Medical Research Institutes

PO Box 2097 Royal Melbourne Hospital VIC 3050 enquiries@aamri.org.au www.aamri.org.au

ABN 12 144 783 728

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About AAMRI

The Association of Australian Medical Research Institutes (AAMRI) is the peak body representing medical research institutes (MRIs) across Australia¹. Our 58 member organisations have over 20,000 staff and research students, are internationally recognised and undertake half of all government funded health and medical research in Australia. Our members include independent MRIs as well as university- and hospital-based institutes with a central focus on health and medical research. Their combined revenue exceeds \$2.4 billion per annum and they received over \$693 million in competitive grant funding in 2020. With over 1100 active clinical trials and over 100 new patents awarded each year, medical research institutes have a firm focus on improving health outcomes and delivering great commercial returns for Australia. Together, they aim to drive innovation in healthcare through research to improve the lives and livelihoods of people in Australia, and worldwide.



¹ For further information about AAMRI and its members, please visit https://aamri.org.au

Overview

The Association of Australian Medical Research Institutes (AAMRI) welcomes the opportunity to comment on the Government's commitment to an Australian Universities Accord (the Accord). While the Accord is an opportunity to build a visionary plan for Australia's universities and higher education sector it is important to ensure the 'ecosystem' of the higher education sector is captured in this vision. Medical Research Institute's (MRI) play a critical role in providing training, education and collaborative opportunities for our higher degree students – future leaders - in the health and medical sector.

Below we have identified key considerations for the panel as they devise recommendations and performance targets to meet future skill needs, deliver opportunities for Australians regardless of background, bridge skills gap, and increase production of new knowledge. AAMRI looks forward to continued engagement in the development of the Accord.

Summary

- The Australian higher education system needs to be more flexible and adaptable and less restrictive. This is critical if we are to build capability in Australia to meet with the everchanging needs of students and their future employers.
- The definition of the higher education system needs to go beyond just universities. Successful education and training of higher education students requires an 'ecosystem' which includes research institutes, hospitals and industry partners.
- The system (including accreditation, oversight and government funding for both education and research) should create a level-playing field that both supports existing higher education players AND provides assistance and incentives for new entrants that will increase the diversity of higher education institutions, especially Universities.

Responses to identified questions in the Discussion paper of importance to the health and medical research sector

Q4. Looking from now to 2030 and 2040, what major national challenges and opportunities should Australian higher education be focused on meeting?

Health, social and environmental challenges, security and biosecurity threats, economic and industry transformation, and building flexible and resilient capabilities are among the major challenges facing our nation in the next decade and beyond.

The higher education 'ecosystem' needs to play a central role in training and adapting the workforce to meet these changing needs. Specifically, Australian universities, in collaboration with those in the ecosystem, need to take immediate action and prepare new generations of students to not only respond to these increasing challenges, but to pre-emptively position our nation to lead the way.

Opportunities

Medical Research Institutes (MRIs) represent a vibrant, flexible and diverse component of our higher education ecosystem and one that can help overcome the homogeneity of the current University system (*The Australian Idea of a University*, Glyn Davis). The MRI sector plays a key role in the collective development of a vibrant health and medical research system. As organisations whose mission is solely focussed on delivering improved health outcomes through research, MRIs provide strong collaborative links between all parts of the health and medical research pipeline, including

researchers and academics, universities, health care providers, clinician researchers, industry and the broader community.

MRIs play a major role in the education and training of honours, masters and PhD students and clinician scientists. They provide opportunities for cross-disciplinary collaborations, thereby upskilling the next generation of research and development experts. The students/clinicians trained by the MRI sector are essential to our evidence-based continuously improving health system that is central to driving better health for all Australians.

Recommendations:

- The definition of higher education needs to be expanded beyond universities and university colleges. Successful higher education is the result of a diverse, yet collaborative 'ecosystem' that provides wide-ranging diverse opportunities for individuals that will benefit the Australian workforce.
- Given the integral role of MRIs in training Australia health and medical researchers and clinician scientists, it is recommended that MRIs are provided with a simple but rigorous pathway to confer higher degree students that comes with a similar government support to that afforded to incumbent Universities.

Challenges

The Australian higher education and research and development sector is facing significant issues with a lack of Government funding to cover the true costs of education and research. With decreased funding available, innovation and creativity – both of which are critical to developing the solutions that we need most, are stifled.

Recommendation:

• The development of an Accord must consider a pathway by which Government funds the 'true' costs of research and development, as occurs in the UK² and the USA³. Currently research in Universities and MRIs represents a liability to the Institution. This funding deficit must be filled with income generated by students or via philanthropy, constraining opportunities to innovate, commercialise and invest in new programs. Australia urgently requires a simple system in which the full 'true' cost of research is funded by the organisations carrying out the research that our nation desperately needs.

Q8. What reforms are needed to promote a quality learning environment and to ensure graduates are entering the labour market with the skills and knowledge they need?

Medical Research Institutes (MRIs) are a major engine room of discovery and high-quality training in specialised fields. Stronger collaboration and meaningful partnerships between universities and MRIs is a major opportunity to boost innovation and discovery and deliver high quality lifelong training for individuals.

Universities need to play a role in the facilitation of broader multi-disciplinary collaboration with industry, health care providers, allied health, and associated community groups. Currently the partnerships and collaboration between universities and MRIs are leaving too much value for the nation on the table. There needs to be greater investment in taking outputs and discoveries to

 $^{^2\} https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1141484/rdi-landscape-review.pdf$

 $^{^3\} https://grants.nih.gov/grants/policy/nihgps/html5/section_19/19.4_allowable_costs.htm$

market, wherever possible, and graduates need to be equipped to navigate these types of multiparty projects.

Recommendation:

Universities need to play a greater role in the facilitation of broader multi-disciplinary
collaboration with industry, health care providers, allied health, and associated community
groups to ensure training and education is of quality and fit-for-purpose. Funding systems
need to be re-designed to provide incentives to bring Institutions across the ecosystem
together rather than create competition and barriers to collaboration.

Q13. How could an Accord support cooperation between providers, accreditation bodies, government and industry to ensure graduates have relevant skills for the workforce?

The definition of the higher education institution needs to go beyond just universities. Successful education and training of higher education students requires an 'ecosystem' which includes research institutes, hospitals and industry partners.

An Accord that acknowledges the whole 'ecosystem' and commits to strong and mutually beneficial communication among key stakeholders would facilitate the efficient identification of gaps and priorities, enabling education providers to rapidly adapt to areas of need. It would also provide an informed voice to advocate for appropriate government investment in priority areas.

This is critical in, for example, the health care sector which faces major challenges post-pandemic and over the coming decades as Australia confronts an aging society. Identification of the long-term needs for the health care system, will enable appropriate workforce training.

Recommendation:

An Accord should highlight the criticality of collaboration within the higher education
ecosystem and set expectations and standards to which all parties must operate to enable
effective identification of gaps and priorities.

Q14. How should placement arrangements and work-integrated learning (WIL) in higher education change in the decades ahead?

Placement and WIL is essential to ensure that graduates are ready and employable. The more "real world" skill application that is incorporated into tertiary programs, the better. While it is essential to understand disciplinary fundamentals, graduates need to understand the nuances, pressures, politics, risks, and opportunities of work placement.

There are many degrees that have work-integrated leaning as part of the curricula, however, this should be expanded. For example, in the medical sciences, partnerships with industry leaders would provide enormous benefits to students to better understand the entire research and development pipeline. This may require a cultural shift in university programs and industry, and long-term studies to demonstrate the importance of such arrangements.

Recommendation:

 WIL should be considered across all disciplines and incorporated with a culture of lifelong learning (see below).

Q15. What changes are needed to grow a culture of lifelong learning in Australia?

It is critical that we look beyond the concept that a degree (or higher degree) will set someone up for a lifelong impactful career. Education requires top-up and maintenance, and there is opportunity for universities and more nimble organizations like MRIs, to expand on micro-credentialing to enable them to respond more quickly to the changing educational and training needs of an individual. This may also be more beneficial to the individual where a 'full degree' may not be economically viable or personally desirable and to the employer who often have limited resources and capacity in learning and development areas.

Recommendation:

• Expand on micro-credentialing opportunities in consultation and collaboration between the higher education ecosystem and employers.

Q16. What practical barriers are inhibiting lifelong learning, and how can they be fixed?

Practical barriers include access to suitable education programs, a lack of integration between employers and tertiary educators, and a lack of full funding for ongoing learning and development.

Recommendation:

Expand on micro-credential opportunities through considered and strategic consultation
with relevant sectors and develop a business model in collaboration with Government to
cover the true costs of ongoing learning and development.

Q23. How should an Accord help Australia increase collaboration between industry, government and universities to solve big challenges?

An Accord that acknowledges the 'ecosystem' and commits to strong and mutually beneficial communication among key stakeholders would facilitate the efficient identification of gaps and priorities, enabling education providers to rapidly adapt to areas of need. It could also foster shared mutually beneficial investment in technology, platforms and infrastructure.

Importance of training

An Accord which commits to promoting training across all types of research (basic science, applied, clinical, translational/commercial) would drive collaboration with industry by training the workforce in both innovative thinking and job ready skills. This would also address the immediate issue of access to high-quality well-trained expertise that can facilitate and enable success with Industry partnership. An Accord could assist by targeting training (and retention) of such expertise in the knowledge generation sector.

Access to infrastructure

An Accord could promote greater collaboration and fluidity between Government, industry and the higher education ecosystem to ensure the rapid uptake of commercially viable spin outs and joint ventures. With strategic investment by Government in high end research infrastructure this would allow greater access and competitive advantage for the Australian sector.

Recommendations:

- Acknowledge that higher education is an ecosystem to enhance collaboration and provide greater strategic training opportunities for the sector.
- Ensure universities are integrally connected to the ecosystem to enhance training and education opportunities (e.g linkages with MRIs and industry). The Accord should encourage

new and existing entrants to move away from the one-size fits all approach typified by our comprehensive universities and explore ways of creating educational institutions with focus (e.g. technical or medical universities) and in doing so reduce the fragility of Australia's current higher education system.

Q24. What reforms will enable Australian research institutions to achieve excellence, scale and impact in particular fields?

Recommendations:

- Like our major international competitors, the single most important change to our system
 would be simple transparent and transparent funding of the full cost of research, which
 overcomes the current problem of having to subsidize the cost of research with income from
 teaching and philanthropy. This single system should be available to all research
 organizations.
- Increase Government investment in teaching, training and research and link it to a strategic workforce development plan.

Q25. How should Australia leverage its research capacity overall and use it more effectively to develop new capabilities and solve wicked problems?

The MRI sector plays a key role in the collective development of a vibrant health and medical research system. As organisations whose mission is solely focussed on delivering improved health outcomes through research, MRIs provide strong collaborative links between all parts of the health and medical research pipeline, including researchers and academics, universities, health care providers, clinician researchers, industry and the broader community.

MRIs have the capacity to greatly enhance Australia's current health and medical research and training capabilities, including attracting industry and investment and maximising health and economic outcomes from research. MRIs are well placed to lead collaborations, build and develop the research workforce and expand and enable research translation activities, including addressing and solving wicked problems.

With a combination of a more defined mission and a smaller decision-making structure, MRIs are able to be nimbler and more streamlined in their approach to research.

Recommendation:

 Support expanding the "MRI model" to other parts of the research, training and innovation sectors. Examine the barriers to emergence of Institution focussed specifically on engineering, high-tech manufacturing, agriculture, mining etc. Creating and fostering an environment in which new types of teaching and research intuitions can emerge will lead to the development of new capabilities and enhance our ability to solve the wicked problems that will confront our nation over the decades to come.

Q27. How can we improve research training in Australia including improving pathways for researchers to gain experience and develop high-impact careers in government and industry?

Recommendations:

- Review higher degree research programs:
 - o is the duration appropriate?

- are the programs structured appropriately (rotations, industry partnerships, international experience)?
- o are stipends appropriate?
- Include broader management, leadership, and business-related education for graduate training to prepare them for careers in government and/or industry.
- Ensure funding for research encourages and awards those who move between academia an industry, thereby supporting innovative research.

Q41. How should research quality be prioritised and supported most effectively over the next decade?

Recommendations:

- Provide funding for the true (full and complete) costs of research to ensure quality research and reduce wastage.
- Ensure the process of undertaking high quality research is taught through the education and training phase of researchers.

Q42. What settings are needed to ensure academic integrity, and how can new technologies and innovative assessment practices be leveraged to improve academic integrity?

Recommendations:

- Place stronger emphasis on teaching the importance and benefits of research integrity in academic training, this includes how to identify risk and appropriate risk mitigation strategies and understanding that this goes beyond the individual when working in multidisciplinary teams.
- Implement constant reviews of processes to ensure research integrity is upheld.
- Create an independent entity to oversee research integrity and maintain public confidence in research. If a federal ICAC is a good idea to maintain confidence in elected representatives and public officials, an independent office for research integrity is equally important.