

SUBMISSION TO THE INQUIRY INTO NATIONAL SECURITY RISKS AFFECTING THE AUSTRALIAN HIGHER EDUCATION AND RESEARCH SECTOR

December 2020

INTRODUCTION

Universities Australia (UA) welcomes the opportunity to make a submission to the Parliamentary Joint Committee on Intelligence and Security.

UA is the peak body for Australia's 39 comprehensive universities. Our members are spread across Australia, in both regional and metropolitan areas. They educate more than a million students each year and undertake research that adds to Australia's stock of knowledge, and to Australia's economic and social wellbeing.

Australian universities are a key national resource. Unlike physical resources, they provide limitless potential through the generation of ideas that enable society and the economy to continuously improve. Universities also provide our graduates with the education and skills to navigate not just the challenges of the present but the unknowns of the future.

Our world, notwithstanding the events of 2020, is a globally interconnected system. The ability of a country to deliver on its social and economic aspirations is strongly related to its ability to effectively connect with the world around it and utilise the knowledge and resources to its advantage.

There are few industries or endeavours that match the interconnected nature of the global research system. Globally, \$US 2 trillion is invested in research every year. Australia represents about one per cent of this expenditure. In knowledge generation terms, we generate 4.2 per cent of the world's scientific publications but comprise only 0.3 per cent of its population.¹ We make the most of every dollar invested and boost our impact through global connections. Domestically, universities perform 90 per cent of basic research in Australia. This is where new ideas spring from. Universities drive not only the basic research that provides some of the most transformative breakthroughs, but also the applied research which enables the translation of the ideas into services, products, and systems that underpin every aspect of our lives.

The success of our universities is predicated on their ability to engage, and to collaborate with our international partners.

In managing their collaboration, universities are conscious that our connected world presents not only opportunities but risks. Universities have a long history of managing their international engagement in a national security context. An example of this is the close work between Government and the university sector on the Defence Trade Controls Act. Universities continue to build on such successes in partnership with Government to further strengthen their resilience to foreign interference.

The clearest expression of this has been the establishment of the University Foreign Interference Taskforce (UFIT), comprising both Government and university representatives. Soon after its commencement, UFIT released the *Guidelines to Counter Foreign Interference in the Australian University Sector*. Both these initiatives are recognised by our international counterparts as examples of best practice.

¹ World Bank Group. 2020 World Development Indicators.

In spite of the unprecedented disruptions due to COVID-19, universities have made significant progress in the implementation of the guidelines. UA looks forward to working further with Government on strengthening the resilience of the sector and seeks the Government's assistance in ensuring that the policies, regulations and legislation in this space are coordinated, coherent and proportionate. The success of efforts to date is due to the collaborative partnership between Government and the sector.

RECOMMENDATIONS

- That there be greater focus by Government on ensuring policies across departments and agencies are coordinated, coherent and proportionate to risk.
- That the University Foreign Interference Taskforce (UFIT) be regarded as the primary mechanism, distinguished by its genuine partnership approach between Government and universities, to bolster the defences of Australian universities against foreign interference.
- That a mechanism be developed that provides individual universities access to timely, tailored advice based on information and expertise held by Government.

KEY POINTS

- Australian universities are global in their operations through their core functions of teaching and research.
- International education and collaboration are an integral part of Australia's social and economic fabric and future.
- Australia cannot afford to isolate its education and research systems but must find ways to collaborate internationally in ways that effectively and proportionately balance national security with the social and economic benefits.
- Universities have worked collaboratively with Government agencies to strengthen the resilience of the sector to foreign interference. This includes the establishment of the University Foreign Interference Taskforce (UFIT), and the development of the Countering Foreign Interference in the University sector guidelines (the guidelines).
- Both of these initiatives are seen as international best practice, with Governments and the university sector seeking to replicate the effective partnership approach.
- Care needs to be taken to ensure that Government policies are coordinated, coherent, and proportionate.
- Universities have made significant advances since the release of the guidelines in building their resilience and will continue to progress this work.

CONTEXT

Australian universities, like businesses, Government and other actors in Australian society and the economy, are part of global open networks which touch almost every aspect of our lives, from communication, to trade, to education and research. In relation to the core functions of universities, both teaching and research are global enterprises which require universities to think and operate in a global environment.

The benefits of these are manifold, both tangible and intangible. Tangible benefits include international research engagement that provides an important source of ideas and networks; and international education, which contributes to Australia's export earnings. Intangible benefits include 'soft power' benefits such as the contribution to regional understanding and stability, and respect and knowledge of Australia that is engendered by personal contacts and experiences.

UNIVERSITIES ARE A KEY PART OF THE SOCIAL AND ECONOMIC FABRIC OF AUSTRALIA

Australia's university system has evolved to fulfil a range of functions which, individually and collectively, help to drive public good outcomes, increased opportunities for individuals and national prosperity. Universities have three core functions – to undertake high quality research, provide a quality learning experience, and engage with their local and regional communities.

Australian universities nurture talent – domestic and international

Universities educate the workforce. In 2018, 1,426,594 students studied at Australia's 39 comprehensive universities. Of these, 71 per cent (or 1,014,027) were domestic students and the remaining 29 per cent (or 412,567) were international students.²

Of the domestic students, 73 per cent were studying Bachelor degrees, 17 per cent were studying for postgraduate coursework degrees and a further four per cent were studying postgraduate research degrees.

The latest Graduate Outcomes Survey (2020) found that four months after completing their undergraduate degrees, around 73 per cent of all graduates are in full-time work. This proportion increases to 90 per cent after three years. The results were even stronger for people who did a postgraduate coursework degree – with 86 per cent in full time jobs four months after graduating and 94 per cent within three years.³ This compares to 64 per cent full-time employment across the Australian labour force in June 2020.⁴

International student enrolments have risen strongly, more than doubling from 157,427 in 2001 to 412,567 in 2018. The share of international students who are enrolled in postgraduate studies – both coursework and research – has increased from 35 per cent in 2001 to 47 per cent in 2018, while the share of students pursuing a Bachelor degree has declined from 60 to 48 per cent over the same period.⁵

International students represent a significant portion of Australia's STEM capability, along with foreign-born Australians

The top fields of education for international students in 2018 were Management and Commerce (39 per cent of enrolments); Engineering and Related Technologies (12 per cent); and IT (13 per cent). For

² Universities Australia, Higher Education: Facts and Figures 2020.

³ 2020 Graduate Outcomes Survey National Report.

⁴ ABS Cat no. 6202.0 Labour Force, Australia (Oct 2020). Table 1.

⁵ Universities Australia, Higher Education: Facts and Figures 2020.

domestic students it was Society and Culture (24 per cent); Health (19 per cent); and Management and Commerce (16 per cent).

These patterns reflect a broader trend in Australian society where foreign-born university graduates comprise the majority of Australia's STEM workforce (56 per cent).⁶

Education is our largest services export and fourth largest export behind iron ore, gas and coal

In economic terms, international education is Australia's fourth largest export – and the largest services export industry – generating \$40.3 billion in export income in 2019. International education export income increased by 153 per cent from 2008 to 2019. The higher education sector contributed around 70 per cent – or \$27.8 billion – of the international education export income in 2019. Of this, 52.8 per cent of export income was international students spending on goods and services from Australian businesses, driving vital economic activity. International education is a significant job creator through goods and services required by the students. The number of full-time equivalent jobs supported by international education in 2018 has been estimated at 247,454.⁷

These trends are in line with the general export characteristics across the economy, in particular the concentration of exports to China. In 2018-19, Australia's top three exports included iron ore and concentrates (\$77.2 billion, 16.4 per cent of total); coal (69.6 billion, 14.8 per cent); and natural gas (49.7 billion, 10.6 per cent). As an export destination, China accounted for 82 per cent of total iron ore exports, 20 per cent of coal, and 33 per cent of natural gas.⁸ Education services exports to China were 32 per cent.

This general point was also the subject of the recent inquiry into diversifying Australia's trade and investment profile.

THE AUSTRALIAN RESEARCH SYSTEM

The national research system has become more reliant on university research

Despite the significant growth in Government incentives to encourage business research and development (R&D), Australia's business expenditure on R&D (BERD) is going backwards. The latest ABS data shows that BERD declined by seven per cent between 2013–14 and 2017–18, or \$1.4 billion (from \$18.8 billion to \$17.4 billion).⁹

While 61 per cent of Australia's gross expenditure on R&D (GERD) was contributed by the business sector in 2008–09, this proportion had declined to 53 per cent by 2017–18. At the same time, the higher education sector has increased its contribution to the nation's research effort, from 24 per cent in 2008–09 to 34 per cent in 2017–18.

Australia's total investment in R&D as a percentage of GDP has declined from 2.25 per cent in 2008–09 to 1.79 per cent in 2017–18.

Universities have become increasingly reliant on internal sources of funding to drive R&D. In 2018, 56 per cent of the \$12.2 billion higher education expenditure on R&D was self-funded by universities from general university funds.

⁶ Office of the Chief Scientist. 2020 Australia's STEM workforce Report.

⁷ Department of Education and Training, Jobs supported by international students studying in Australia. [March 2019](#).

⁸ Department of Foreign Affairs and Trade, Composition of Trade Australia 2018-19. January 2020.

⁹ ABS (2019), Research and Experimental Development, Businesses, Australia.

Universities are at the forefront of Australia’s applied research capacity

In 2018, universities performed approximately 43 per cent of all applied research in Australia compared to the 40 per cent performed by businesses. Businesses are most active in the experimental development area of research, comprising 83 per cent nationally. At the same time, Government has reduced its investment in R&D as a share of GDP to its lowest level on record (since 1981). In 2018 (latest), Government expenditure on R&D was 0.17 per cent, compared to 0.27 per cent in 2008 and 0.33 per cent in 1998.

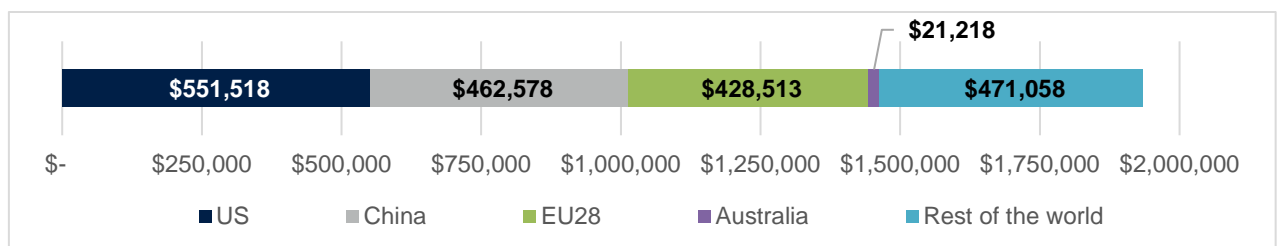
In 2018 (latest), universities performed 90 per cent of pure basic research in Australia (relative to 84 per cent in 2006-07).¹⁰ Research is a continuum from basic, to applied and to experimental development. Whilst discoveries arise from all three types, the transformative discoveries that revolutionise a field of research tend to come from basic research. Australia’s dependence on universities as the primary supplier of basic research means that it has a critical role in the research system.

THE IMPORTANCE AND BENEFITS OF UNIVERSITY COLLABORATION

Australia cannot afford to isolate its research system

In 2018, global R&D expenditure was approximately \$US 1.94 trillion. In the same year, the US spent \$US 551.5 billion on R&D, compared to China \$US 462.6 billion and the European Union (EU28) \$US 428.5 billion. Australia’s expenditure was \$US 21.2 billion.

Global R&D expenditure in 2018 (\$US million).



Source: OECD (2020), Main Science and Technology Indicators database.¹¹

The implication of this expenditure pattern is stark. **Australia has to maintain its strategy of connecting globally to leverage the 99 per cent of investment that occurs outside our borders.** Research and development is concentrated predominantly in the US (29 per cent of global expenditure), China (24 per cent) and the EU (22 per cent). R&D expenditure does not only allow the invention of new products and services but equally importantly, it allows knowledge from outside of Australia to come in, a process known as absorptive capacity. The more we reach outside our borders, the more benefit is drawn back home.

Australia’s ability to convert research into innovation depends on collaboration

The importance of absorptive capacity has been recently highlighted by the Prime Minister, as part of his address to the Australian e-Commerce Virtual Summit, where he identified technological adoption as a key priority of the Government.¹²

“... This is about using the gains we’ve just made this year as a springboard to become a leading digital economy by 2030.

¹⁰ ABS Catalogues 8111.0, 8104.0, 8109, 8112.0 (various years) and UA calculations.

¹¹ R&D expenditure is measured in USD constant prices (2015) and Purchasing Power Parities (PPP).

¹² Speech by the Prime Minister to the Australian E-Commerce Virtual Summit. 21 October 2020. Link to speech [here](#).

I said that after the last election. That's where I want to see Australia go, because there's jobs there, there's incomes there, there's wages there, there's investments there, there's opportunity there.

An economy where our leading industry sectors, mining, agriculture, manufacturing, services, as well as small businesses all around the country, are at the global frontier of technological adaptation, enable them to scale up and grow.

Australian universities contribute about 34 per cent of Australia's total R&D expenditure, alongside business (53 per cent), Government (10 per cent) and the not-for-profit sector (3 per cent). Universities are the only research performers that have the capacity to conduct R&D and collaborate at scale across all areas fields of research. As noted earlier, universities also undertake 43 per cent of applied research, with business conducting 41 per cent. This is a demonstration of the significance of universities in the adoption and development of new products and processes.

Recent estimates valued the return on investment of business collaboration with universities at \$4.50 for every \$1 invested.¹³ R&D income sourced from industry by Australian universities has increased by 54 per cent over a period of ten years from \$338 million (2008) to \$522 million (2018).

Australia's collaboration patterns have changed in line with global R&D flows

As outlined above, Australia must pursue a strategy of international collaboration and engagement to ensure that it is able to adopt and integrate the knowledge generated outside of Australia. For universities, this means collaborating through mechanisms such as co-publishing with an international author, formal research collaborations, and student and staff mobility programs. These channels provide the knowledge and skills that enable universities to greatly leverage the domestic investment in research.

In the case of research publications, **78 per cent of Australia's mostly highly cited publications are attributed to international collaboration across all research disciplines. In science and engineering, this rises to 82 per cent.** Citation is a measure of the impact and influence of the research. Publications that are highly cited have the greatest impact.¹⁴

Examples of the benefits of successful international collaboration

A very small sample of examples of significant international collaborations involving Australia that resulted in breakthroughs include: a Monash University-led partnership with the United States resulting in discoveries revolutionising lithium extraction processes; Australian-German collaborations advancing biomedical 3D printing capabilities; a team of University of Wollongong, Korean, American and Chinese researchers' artificial muscle development discoveries; and crucial progresses in food security and wheat resistance uncovered by a team of Australian, US and UK-based researchers.¹⁵

Scientific output metrics demonstrate that the collaboration patterns of Australian universities follow global R&D expenditure patterns. The US, China and EU countries are key partners.

¹³ Universities Australia (2020), [Clever Collaborations](#). Modelling by EY.

¹⁴ The measure used is Australia's share of publications among the World's top 1 per cent most-cited literature. In 2015, Australia's share of the World's top 1 per cent of highly cited publications across all disciplines was 7.3 per cent and in science and engineering was 6.93 per cent. Of these, 78 per cent involved an international collaborator across all disciplines and 82 per cent in the sciences and engineering research disciplines. Source: Australian Government (2016). Australian Innovation System Report 2016, p. 108, Table A9(b). Link to report [here](#).

¹⁵ See: Monash University (2020), Powering the future with revolutionary lithium extraction technique; QUT (2020) World-first for Brisbane's biomedical 3D printing interdisciplinary team; Miu et al. (2019) 'Sheath-run artificial muscles', *Science*: 150-155; University of Sydney (2017), Wheat disease breakthrough to help feed the world.

In 2019, Australia-China collaborations comprised 16.2 per cent of total Australian scientific publications, up from 3.1 per cent in 2005. The US (15.5 per cent), UK (11.7 per cent), Germany (5.9 per cent) and Canada (5.0 per cent) round out Australia's top five international partners.

Even a country as robust in research sovereignty as the US recognises the benefits of external collaboration. 2019 saw 56,487 US scientific publications involve a China-affiliated researcher. This was a 6.8 per cent increase on 2018 and meant the proportion of US-China research grew from 9.8 per cent to 10.7 per cent of total US scientific publications.

In addition to co-publications, Australian universities in 2018 had approximately 10,392 links with foreign institutions in 124 different countries. Furthermore, there were approximately 19,101 different arrangements – including research collaborations, student exchange, staff exchange, short-term mobility programs and study abroad programs.

COUNTERING FOREIGN INTERFERENCE IN THE UNIVERSITY SECTOR

Terms of Reference B: The Sector's awareness of foreign interference, undisclosed foreign influence, data theft and espionage, and its capacity to identify and respond to these threats

Universities continue to demonstrate their awareness and strong commitment to national security

Universities have a long history of working with Government departments and security agencies to counter foreign interference. In recent times, universities have heard the call from security agencies regarding the increasing levels of foreign interference in Australia. They have also experienced first-hand the impacts of it through incidents such as large-scale cybersecurity breaches.

Universities interact with and receive briefings from security agencies on a regular basis. These can be instigated by universities or agencies. Respectful relationships have been built between agencies and the sector as a whole and individual institutions over many years. Universities look to the intelligence agencies as their primary source of information regarding the scale and extent of threats.

Defence Export Trade Controls – a history of university leadership in managing sensitive research

Whilst the threat of foreign interference has risen in recent years, universities have a long history of managing research and research collaboration in a national security context.

An example of this is the compliance with the Defence Trade Controls Act 2012 (DTC Act 2012). Prior to the DTC Act 2012, Australia's export controls legislation worked through:¹⁶

- The *Customs Act 1901* through *Regulation 13E of the Customs (Prohibited Exports) Regulations 1958*
- The *Weapons of Mass Destruction (Prevention of Proliferation) Act 1995*
- *The Charter of the United Nations Act 1945*

Universities continue to have systems and checks to ensure compliance with defence sensitive technologies. Feedback from Government officials suggests an abundance of caution and over-reporting to Government agencies, rather than a dearth.

The regulatory and legislative requirements on universities continue to grow. Existing requirements include (but are not limited to) the *DTC Act 2012*; the *Foreign Influence and Transparency Scheme Act 2018*; the

¹⁶ *Defence Trade Controls Bill 2011. Explanatory Memorandum. Annex B, p. 41.*

Autonomous Sanctions Act 2011; and updating the Government on foreign interference activities through the Compacts agreement between the Commonwealth and higher education providers.

Universities are also in the scope of proposed and recently passed legislation that includes foreign interference— *Australia’s Foreign Relations (State and Territory Arrangements) Bill 2020* (passed 3 Dec 2020); and the exposure draft of the *Security Legislation Amendment (Critical Infrastructure) Bill 2020*.

The cumulative impact of all foreign interference related measures is as yet unclear but is expected to be significant. Universities urge Government to be mindful of how to best balance the risks of foreign interference and risk mitigation measures with ensuring universities can make the best possible contribution to society, through education and research. A wholistic regulatory impact estimate by Government may assist in this.

Government and universities are working together to define roles, responsibilities, and handover points

Term of Reference C addresses Government responses. As detailed below, universities are in the process of increasing their capabilities to counter foreign interference through a range of mechanisms. A key challenge is the delineation of roles and responsibilities around the points where university capabilities to manage foreign interference reach their limit and where Government responsibilities begin or complement university activities. It is important that responsibilities and actions are shared appropriately.

In the instance of due diligence (as an example), universities can establish processes and procedures to ensure that conflict of interest registers and accompanying policies and requirements are clear, routinely adhered to and regularly updated. However, they cannot undertake complex security vetting of individual personnel. The latter is the remit of Government agencies.

These challenges can only be resolved through continuous engagement and active collaboration between the sector and Government.

The establishment of UFIT and the guidelines

There has long been engagement between individual universities and Australia’s security agencies. Over recent years, there has been an increasing number of briefings and contacts between the sector as a whole, universities and security agencies, including briefing to Vice-Chancellors on cyber security. Universities Australia, recognising the need for better sector-wide guidance and better communication mechanisms between universities and Government, worked with officials to develop the concept that became the University Foreign Interference Taskforce.

The Minister for Education, Dan Tehan, formally announced the establishment of the [University Foreign Interference Taskforce](#) (UFIT) on 28 August 2019. At the time of the announcement, Universities Australia was in close discussion with security agencies on the development of a framework for collaboration. The [Framework for the development of principles-based guidelines to counter foreign interference in the Australian university sector](#) was released through the Department of Education at the end of August. However, this document is no longer part of the process.

The UFIT Steering Group comprises an equal proportion of representatives from Government, including national security agencies; Vice-Chancellors, Universities Australia and the Group of Eight. The taskforce is led by the National Counter Foreign Interference Coordinator (Chair) and a Vice-Chancellor (Deputy Chair).

The initial role of the taskforce was to provide strategic direction to the development of principles-based guidelines for countering foreign interference in the university sector. To do this, four working groups were established, with equal numbers of Government and university representatives on each, to provide expertise on key topics covered in the guidelines.

The underpinning approach to countering foreign interference, reflected in both the composition of the taskforce and the development and content of the guidelines, is one of partnership between Government and the university sector. There is recognition that there needs to be a trusted, ongoing relationship between universities and Government, particularly to enable timely sharing of information and best practice.

The [Guidelines to Counter Foreign Interference in the Australian University Sector](#) (the guidelines) were developed in this spirit, and were released by the Education Minister in November 2019. The guidelines help the university sector manage and engage with risk to deepen resilience against foreign interference in the university sector. They are designed to build on risk management policies and security practices already implemented by Australian universities, as well as assist decision makers to assess the risks from foreign interference. See below for an outline of the timeline of the development of UFIT.

UFIT and the guidelines are international best practice

Term of Reference D asks about responses to this issue in other countries. UA and its international counterparts in the five eyes countries and Germany have established an ongoing strategic dialogue to discuss best practice in foreign interference. Member countries are the UK, US, Canada, NZ and Germany. This has allowed a global perspective on the challenges facing universities in countering foreign interference, and the sharing of ideas and practices.

Within this circle, the Australian university sector has been regarded as a leader. The attractiveness of “the Australian model” is due to its collaborative approach between Government and universities, and that it seeks to create an environment in which collaboration between nations can thrive in a secure environment. The model is regarded as a truly innovative approach and one that other countries have sought to adapt to their circumstances.

Keep it flexible and acknowledge progress

It is important to ensure that the approach between Government and the university sector continues to be flexible as circumstances evolve. It is critical that Government policies are coordinated, coherent, and mindful of the overlaps between different policies, as well as the overall burden on the sector.

UA and universities have worked with Government to establish UFIT and develop the guidelines, understanding that co-operation is more effective than legislation.

Since its inception, the taskforce has enabled both Government and universities to collaborate and learn from each other. In late 2020, the taskforce has undertaken to refresh the guidelines as developments in the sector have evolved.

Current work includes the *Enhancing Cyber Security across Australia's University Sector* initiative. This is a \$1.6 million initiative, announced by the Minister for Education on 28 June 2020. The Federal Government will fund:

- a threat intelligence-sharing network;
- sector-wide threat modelling; and
- A national cybersecurity forum that will meet three times a year.

Universities are developing and sharing best practice across the five key themes in the guidelines—Governance and Risk Frameworks; Due Diligence; Communication and Education; Knowledge Sharing; and Cyber Security.

The work of Australian universities continues and, as the section below outlines, have made significant progress over the last year.

Achievements include the partnership between the sector and the Department of Defence. The majority of Defence's engagement with universities is undertaken under the Defence Science Partnerships (DSP) program. The program provides a common pre-agreed framework under which Australian universities can work with Defence. It provides for all types of agreements, including:

- Research Agreements
- Bilateral Collaborative Project Agreements
- Multi-Party Collaborative Project Agreements
- Staff Secondments and Exchange Agreements
- Centre for Advanced Defence Research Agreements
- Academic Funding Agreements
- Postdoc Funding Agreements
- Infrastructure Access Agreements
- Equipment Loan Agreements
- Material Transfer Agreements
- Defence Staff PhD Studies Agreements
- Scholarship (No Project) Agreements
- Scholarship (Project-based) Agreements
- Student Participation Deed
- Variation Agreements

Every public university in Australia has signed on to the DSP, making it the largest program of its kind in Australia.

A crowded policy space

The globally engaged nature of our universities is indispensable to their success. Indeed, it is the bedrock of their competitiveness. There is a careful balance to be struck. The shared objective of both universities and Government is to safeguard the security of Australia's university sector without undermining the invaluable asset of its openness, which optimises benefits to our community.

International engagement for Australia is not an optional extra but a necessity to ensure that we continue to prosper both economically and socially. It is indeed a part of the national interest. Other policy objectives that require reconciling national security include: *Open access* (the idea that research funded by Government should be made available to the public); and the commercialisation of research.

The COVID-19 pandemic is a clear demonstration of the importance of the former policy objective. Without the sharing of research results across national boundaries, both the development of a vaccine, and the management of the public health response would have been greatly diminished.

One recent example of this is the work done by the University of Sydney on near real-time genomic sequencing as the COVID-19 pandemic spread to Australia in early 2020.¹⁷ The genomic sequencing and mathematical modelling gave important insights into the 'parentage' of cases and likely spread of the disease in New South Wales. This informed Government action to effectively reduce local community transmission. This work made use of earlier discoveries in 2020 from research institutions across China.¹⁸

On the issue of research commercialisation, international engagement can often be an essential input into the pre-competitive phase of the generation of intellectual property and important in ensuring that the products of the research are fit for a global market.

¹⁷ University of Sydney, 10 July 2020. Genetic 'fingerprints' of first COVID-19 cases help manage pandemic. Link [here](#).

¹⁸ Nature Medicine (2020), *Revealing COVID-19 transmission in Australia by SARS-CoV-2 genome sequencing and agent-based modeling*, Vol. 26, pp. 1398-1404.

STRENGTHENING OF UNIVERSITIES IN COUNTERING FOREIGN INTERFERENCE

The guidelines developed by UFIT serve as the basis for strengthening university policies, practices and procedures on countering foreign interference. Universities over the last 12 months have been active across all key themes, notwithstanding the impact of COVID-19 on the operations. Examples of work under each theme is listed below.

Theme: Governance and risk frameworks

Objective: Universities have policies, structures, and frameworks in place to promote and strengthen a culture of security, and resilience to foreign interference.

Examples of work being undertaken:

The University of Melbourne has established a foreign interference working group championed and chaired by the Deputy Vice-Chancellor (International) and Deputy Vice-Chancellor (Research). Membership of this working group includes representatives from human resources, information technology, legal, risk and compliance, and the research office.

Griffith University has established a countering foreign interference working group that draws upon senior representation from across the professional and academic units of the university. It has designated a single point of responsibility for the coordination of the university's planning and actions in countering foreign interference.

Monash University has established a transparency and integrity committee, which reports to the Vice-Chancellor's group (the university's core leadership team). Chaired by the Deputy Vice-Chancellor (Global Engagement), this committee is monitoring Monash University's overall framework to counter potential foreign interference by ensuring an integrated, cross-organisational approach. It also reviews projects with higher exposure to foreign interference risk. It is supported by a working group composed of a faculty and professional staff that has undertaken an analysis of existing controls to the requirements under the guidelines.

Theme: Due diligence

Objective: The nature and purpose of collaboration with international entities is transparent, undertaken with full knowledge and consent, and in a manner that avoids harm to Australia's interests. Agreements with international partners comply with Australian law and address potential threats to the integrity of the research and reputation of the university and identify emerging or potential risks, including any foreign interference and security risks.

Universities are aware of foreign influence issues, are proactive in addressing them, and are taking a responsible approach while defending and supporting the notion of research and discovery remaining fundamentally a global and shared endeavour.

Example of work being undertaken:

The University of Queensland - Disclosure registers

In the June report, The University of Queensland provided information about its four disclosure and management of interests registers. The fourth – the foreign influence register was then in the planning phase.

The university reports that this register will be released to staff at the end of September, including a decision tree to assist with decision making (**Attachment B**). All academic staff, and some very senior professional staff, will be required to make a disclosure. The university consulted with the Commonwealth in the development of the register to confirm the suitability of approach and confirm the scope of registerable activities.

The University of Queensland (UQ) is adding an additional element to its online registration of disclosures system. From 2020, UQ will be requiring staff to complete four online registers as part of a new annual process. These registers will ensure, in a proactive manner, that staff are made aware of their obligations, and provide online workflows to senior managers where approvals are required. University-wide reporting of all activities will be available to senior managers. The registers improve visibility and compliance regarding UQ work activities in accordance with UQ policies, community expectations and state and Commonwealth legislation.

The four disclosure and management of interests registers are:

- *conflict of interest;*
- *secondary employment;*
- *sensitive research; and*
- *foreign influence (in planning phase).*

University-wide reporting of all activities will be available to senior managers. The requirements for individual staff members vary according to their roles and seniority. The registers are accompanied by clear workflow diagrams (including identification of decision makers) so issues raised can be appropriately managed.

Theme: Communication and education

Objective: Universities with assistance from Government agencies, provide training to staff and Higher Degree Research (HDR) students on how foreign interference activities may manifest and provide information on the supports in place should they become aware of foreign interference.

Example of work being undertaken:

University of Canberra – Information for clubs and societies

The University of Canberra (UC) reported that Clubs and Societies were identified as being an area to monitor in terms of foreign influence. A clause on foreign influence and the need to comply with the *Foreign Influence Transparency Scheme Act 2018* was included in *Club Affiliation Rules* (which all clubs must comply with in order to remain supported and funded by the University) in late 2019, and resources have been provided to assist staff who manage these clubs.

UC has developed a guidance document specific to student clubs and societies that includes information about the Foreign Influence Transparency Scheme, signs to look for that are specific to activities undertaken by clubs, registration obligations and consequences, some useful examples, and where to go for more information.

UC will continue to roll out a suite of guidelines on foreign influence and foreign interference, tailored to the various working and learning environments and challenges faced by different groups of staff and students.

A training module on foreign influence and foreign interference is currently under development that will be available to all staff, and staff of controlled entities. This training will be initially developed into an online module to become part of staff mandatory training, with plans to develop it into a face to face module once COVID-19 allows.

Theme: Knowledge sharing

Objective: Universities and the Government raise awareness of emerging threats and experiences of foreign interference by sharing examples among the sector.

Examples of work being undertaken:

The University of Technology Sydney has commenced an internal awareness campaign with multiple communications to staff highlighting the positive benefits of international collaboration for the university and to ensure staff are aware of their regulatory obligations.

The university has also developed a central international engagement and collaboration portal, including information about shared institutional and individual obligations to minimise the risks of foreign interference. The portal assists with compliance with Australia's sanctions regime, Defence Trade Controls and the Foreign Influence Transparency Scheme.

The University of Sydney is developing an integrated university international collaboration intranet and education resource centre, as well as strengthening its external interest declaration and management processes and systems and processes for the 2020 exercise.

At **Edith Cowan University**, face-to-face training is delivered by the Legal and Integrity team. This generally encompasses each school and service centre in the course of a year. The training addresses issues relating to sanctions, Defence Trade Controls, Foreign Interference Transparency Scheme together with integrity aspects (conflicts of interests, secondary employment, gifts etc). There is also induction training for higher degree by research supervisors with materials addressing sanctions and Defence Trade Controls content.

The university has prepared an online integrity module with content which includes modules on foreign interference, conflicts of interest and secondary employment. This module is currently being finalised with a current implementation date of January 2021. It is intended that this training will be mandatory for all staff. Cyber security related information is provided at events and also at computer-based training sessions.

There are channels across various levels of the university which enable knowledge sharing including formal bodies such as the Society of University Lawyers, Public Sector Integrity Managers' Forum and informal channels between peers across institutions. In addition, cyber security information is shared through groups such as Council of University Directors of Information Technology (CAUDIT).

Theme: Cyber security

Objective: University digital systems seek to thwart unauthorised access, manipulation, disruption or damage, and ensure the confidentiality, integrity and availability of information.

Example of work being undertaken:

RMIT University – Cyber security program

1. Use of network security technologies and tools

RMIT University utilise network security technologies across all regions which are used to assist with preventing and detecting cyber threats. These include:

- security monitoring and detection analytics;
- 24/7 Security Operations Centre (SOC) capability for incident detection and log analysis;
- firewall rules management with Intrusion Detection Systems (IDS) / Intrusion Prevention Systems (IPS);
- single sign-on enabled on all network accounts; and
- automated access provisioning with base-level privileges.

2. Development and implementation of a global IT security standard

A global IT security standard has been developed and is utilised to configure technologies and tools in a secure manner across all regions (including Vietnam and Barcelona) and delivery modes and purposes (including online and training).

3. Development and implementation of an incident response program

A Crisis & Incident Management Team (CIMT) has been developed to respond to all incidents defined at a certain risk threshold. The CIMT incorporates all business units across RMIT University and is tested annually through simulation activities.

4. Training and awareness for all new staff

An IT induction is provided to all new staff that join RMIT that covers cyber security topics (e.g. password management, email phishing, remote access, and acceptable internet & email use). Advanced phishing and spoofing campaigns have been delivered to the wider business and targeted management stakeholders.

CONCLUSION

Australian universities are acutely aware of the risks of foreign interference and have been actively collaborating with Government, as well as working independently, on strengthening the sector against foreign interference.

The University Foreign Interference Taskforce (UFIT) and the guidelines provide a framework to achieve this. There is a great deal of existing legislation in place or in train that deals with aspects of foreign interference, to which universities are subject. Care needs to be taken that coherent and coordinated policy environment is maintained that fosters collaboration and minimises reporting burden on institutions.

UFIT's partnership provides a collaborative mechanism that is agile and responsive enough to adapt to evolving circumstances. It should be seen as the primary tool for universities and Government when navigating this complex and delicate space. The UFIT partnership approach has been recognised by international Governments and universities for its innovation and effectiveness.