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4 February 2010

Mr Anthony Overs Inquiry Secretary House of Representatives Parliament House Canberra. ACT 2600

Dear Mr Overs

RE: Parliamentary Inquiry into Australia's International Research Collaborations

I am writing on behalf of Professor Scott Bowman, Vice-Chancellor of CQUniversity, in response to an invitation for submissions regarding Australia's international research collaborations (dated 1 December 2009).

Please accept the enclosed document as CQUniversity's submission to the Inquiry. Should you have any questions regarding this response, please do not hesitate to contact me by telephone (07 4930 9369) or email (<u>j.kyd@cqu.edu.au</u>).

Yours sincerely

Jenalle Kyf

Professor Jennelle Kyd Deputy Vice-Chancellor (Research, Scholarship and Industry)

Inquiry into Australia's International Research Collaborations

CQUniversity Response

CQUniversity's international research engagement is outlined below in response to each of the terms of references:

1. The nature and extent of existing international research collaborations

CQUniversity enjoys collaborative research relationships with global partners in many disciplines. Some of those relationships involve joint funding (such as those listed below) and others are based on sharing expertise and knowledge. As a relatively young University with a local focus, a significant amount of our research outputs are more directly relevant to local industry and service agencies. However, within the regional context, many of the local industry partners are international corporations, such as Rio Tinto, Santos and Comalco Ltd, providing an international relevance to the local engagement. These onshore relationships with international corporations are not usually regarded as international collaborations, because the funding and research is undertaken in Australia. It is noteworthy that these international corporations often utilise the research outcomes achieved in Australia in their global operations.

Table 1: Current international projects with funding direct to the University, the amount of funding, and count	ry.

Project	Funding Amt	Country
Intelligent Train Monitor System	\$200,000.00	France
Screening of tomato germplasm for drought tolerance and high lycopene content	\$30,000.00	Taiwan
Evaluation of vaccine candidate antigens in animal models	\$45,540.00	Belgium
Assessing the diagnostic utility of animal abuse disclosure	\$8,266.00	USA
Agroforestry and sustainable vegetable production in SEA watersheds	\$21,215.00	USA / Philippines
Improving and maintaining productivity of bamboo for quality timber and shoots in Australia and the Philippines	\$149,999.00	Philippines
Relocation for specialist treatment for haematology patients and their families: The New Zealand experience	\$30,000.00	New Zealand
Vaccine development against bacterial infections	\$194,00.00	Austria
Solar powered nano sensors for data acquisition and surveying in remote areas	\$1,332,877.00	Italy

2. The benefits to Australia from engaging in international research collaborations

Australia benefits from international research collaborations in many ways, including but not limited to sharing of data and resources; technology transfer; access to equipment and infrastructure and the indirect benefit of enhanced reputation and co-authored publications. For CQUniversity, offshore research collaborations enable our researchers to engage with a broader range of experts in the field. Much of the University's international research collaboration is for contract research; however, the benefit of accessing specific expertise on joint applications for funding is also of value to CQUniversity. Assuming that the phenomenon of IP commercialisation often goes offshore is recognised as part of Australia's contribution to new product/technology/application development, the benefits to Australia of international research collaborations are very significant, with little identified detriment. The reputational value through perception as a nation with a commitment to research and innovation is beneficial to Australia.

3. The key drivers of international research collaboration at the government, institutional and researcher levels

The key drivers of international research collaborations at institutional level are directed by strategic statements to position the University internationally. This positioning is critical to securing the international position and profile of areas of strategic importance and reputation to the University. International collaborations are an important part of capacity building within the University. Enhanced opportunities to access funding increase competitiveness within the discipline, provide greater availability of expertise and enhance strategic focus within the institution. At the individual researcher level, international collaboration is influenced by the capacity of the researcher to successfully engage with parties outside Australia, which include a desire to benchmark their own research capability. Key drivers also include a desire to build a strong, international reputation as a researcher and for the institution at which they are based. An ability to be seen as a leader in a field, resulting in the tangible increases in citations and impact of internationally co-authored publications and international collaborations often lead to increased opportunity to access commercialisation pathways.

4. The impediments faced by Australian researchers when initiating and participating in international research collaborations and practical measures for addressing these

Research at CQUniversity includes international collaboration and the University is successful in those joint projects. However, physical distance can impede the capacity of Australian researchers to collaborate offshore. Researchers wishing to collaborate with counterparts in the Northern hemisphere are faced with significant costs for international travel and can often spend over 24 hours in the air just to reach their destination. It is not uncommon for a researcher to spend more time travelling than they do at their final destination. Distance and time zones can contribute to the challenges faced by researchers, although this is not the impediment that it once was with current technology for effective communication. However, a researcher still needs to be genuinely committed to a project to effectively manage overseas collaborations.

Better recognition of some requirement for face-to-face meetings with international collaborators in NCG funding or other competitive programs would assist, but it is not necessarily a solution to the problem. Most researchers would present a strong argument that access to additional funding for international travel would increase the number and quality/success rate of international collaborations.

5. Principles and strategies for supporting international research engagement

International research engagement is achieved by activities at all levels. Government policy and incentives will affect behaviour and a desire to position the University accordingly; therefore, the Government's role cannot be underestimated. An institution's strategic directions and international partnerships that deliver benefits against performance measures will frequently dictate a university's international collaborative partnerships. However, within research, it is frequently determined by the activities and advantageous international relationships for achieving mutual benefit established by research institutes, centres and individuals.

Balancing the 'brain drain' of Australians to overseas by ensuring opportunity to return and attraction of international researchers to Australian is important to ensuring the intellectual capital within Australia.

While there are opportunities to secure funding specifically aimed at international collaboration, there is sufficient demand to warrant a review of the current federally-funded programs to assess relevance to meeting objectives that position Australian researchers and their research amongst the internationally-leading research nations.

Submitted for consideration.

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Professor Jennelle Kyd

Deputy Vice-Chancellor (Research, Scholarship and Industry) CQUniversity Australia 4 February 2010