

Access to overseas-based grant schemes

6.1 This chapter examines the access to overseas-based grant schemes by Australian researchers, namely:

- US funding schemes
- European funding schemes
- Funding from overseas philanthropic organisations.

6.2 Another consequence of international research collaboration is that Australian researchers have the potential to gain access to funding from overseas-based schemes.¹ This allows Australian researchers to pursue funding that isn't available through domestic schemes, and to increase their contacts and exposure overseas.

6.3 The Committee was advised by several witnesses that researchers were still behind their overseas counterparts in accessing offshore research grants, but that Australian researchers had begun to seek funding from foreign sources:

What I am noticing on the ground in my research community is that researchers are starting to talk about international research funding and international research collaboration in a way they were not doing five years ago. They are seeing it more as a possibility, rather than something that is just too hard.

... In the past I think they would have considered it too hard because of lack of funding and lack of knowledge, and because it was too time-consuming to engage in the collaborations.²

1 QUT, *submission 15*, p. 1; Universities Australia, *submission 61*, p. 8.

2 ARMS, *transcript of evidence*, 8 April 2010, p. 49.

- 6.4 The Committee asked witnesses why there were so few applications to overseas ventures, with one witness noting that bureaucracy was a difficulty faced by researchers and that many researchers still remained unaware of foreign funding opportunities or lacked an understanding of how these funding schemes operated.³

US funding schemes

- 6.5 Two of the largest US-based research institutes that have funding schemes open to Australian researchers are the National Institute of Health (NIH) and the National Science Foundation (NSF). Given the limited amount of funding available to Australian researchers through the ARC and NHMRC, several witnesses believed Australian researchers should be doing more to access funding through these schemes when eligible:

In relation to this inquiry, I think another implication of this is that we should be facilitating people to try and get into more international schemes. We are always, in a way, going to be limited by the pot of money that the ARC and the NHMRC have. Some of those American funds in particular are huge. We are not always eligible, but we should be facilitating people to get into some of those big funds.⁴

- 6.6 A witness from RMIT University added:

If you look at the NIH, Australia actually features – I cannot remember now – about sixth of external people getting money from them. They do not care if it stays in the USA or not. They are quite happy to fund Australian researchers. We do not have as much funding, so we can understand that you are not wanting it to go offshore. The ARC and NHMRC have opened up to having international, so that is a really good move in the right direction, but we are still limited by the length of the grant proposals, by the core funding that we have.⁵

- 6.7 It was noted that there were opportunities available for Australian researchers to secure funding from the United States, as the US institutes were far more willing to fund researchers based overseas, but that they would only fund top-quality science:

3 UoN, *transcript of evidence*, 8 April 2010, p. 13.

4 UoM, *transcript of evidence*, 9 April 2010, p. 12.

5 RMIT University, *transcript of evidence*, 9 April 2010, p. 12.

The only reason you get some US money into something – and we do in Australia – is because you have got expertise that is not available in the States.⁶

- 6.8 The benefit of accessing US funding and using it to improve the diversity of Australian knowledge and the strength of Australian research was also discussed:

So you come back to this fundamental question ‘Why spend money on international collaboration?’ and the answer is dead simple: because it is actually a more effective way of getting whatever it is, the science area, up to being absolutely world class. That is the demonstrated track record. You can expand into all sorts of areas – two per cent [of global knowledge generated in Australia], which allows us to tap into the other 98, or three per cent and 97, whatever arithmetic you care to use, but it is that sort of order, and you can expand it in terms of, we get more ideas than we give and all sorts of quite valid arguments.⁷

- 6.9 Examining NIH and NSF funding opportunities from the tertiary education sector, the Committee heard that grants took two forms:

Essentially there are two sorts of NIH and NSF opportunities. One is the open grant opportunity, similar to our ARC Discovery grants or NHMRC project grants. To participate in those you have to have an American colleague and be part of an American application, but as well as those applications, there are so-called contract applications – I have forgotten the official names for the two schemes – in which there is work that needs to be done and the Americans are more than willing to fund that work anywhere in the world. You have to put up a very strong case that you can do it. We have some very good examples. The Bionic Ear Institute at Melbourne University, formerly led by Graeme Clark, in funding the cochlear implant largely depended on that sort of work for their fundamental development of the electrode interface with hearing and, subsequently, with the brain. With that sort of work the Americans were interested in funding the best place in the world that would do the work. They did not mind where it was.⁸

6 AATSE, *transcript of evidence*, 9 April 2010, p. 48.

7 AATSE, *transcript of evidence*, 9 April 2010, pp. 48-9.

8 UoN, *transcript of evidence*, 8 April 2010, pp. 12-13.

European funding schemes

- 6.10 Many submitters and witnesses noted there were many cutting edge projects that were well funded taking place in Europe under the European Union Framework Program 7. The Committee heard that the focuses of Framework Program 7 were areas of Australian strength, including biotechnology, food security, climate change, and energy.⁹
- 6.11 The Committee heard that it was very difficult for Australian researchers to break into Europe to participate in Framework Program projects due to the inward looking nature of the program.¹⁰
- 6.12 The Committee was informed that it was possible to take part in Framework Program projects, but that it required strong relationships with partners in Europe and joint grant applications.¹¹
- 6.13 The University of Melbourne reported that Australian researchers had difficulty getting involved in European Union Framework Program projects as they were generally unable to bring sufficient research funds to the table.¹² It noted there was one funding body that was the exception, as the NHMRC offered \$2m in funding specifically for collaboration in Framework Program projects.¹³
- 6.14 Monash University indicated that this lack of funding for leverage had the potential to act as a disincentive to European research organisations to involve Australian research bodies.¹⁴
- 6.15 Noting the strong linguistic and cultural links between Australia and Europe, the Committee inquired whether these links were being exploited adequately to maximise opportunities for Australian researchers. A witness from the University of Sydney indicated that he believed Australian universities did not have a cohesive strategy, and that there was room for improvement in this area.¹⁵
- 6.16 The NTEU noted that European institutions and researchers were somewhat unaware of the internationalised nature of Australia, with the

9 USYD, *transcript of evidence*, 8 April 2010, p. 14.

10 USYD, *transcript of evidence*, 8 April 2010, p. 14; CRCA, *submission 2*, p. 4.

11 USYD, *transcript of evidence*, 8 April 2010, p. 14.

12 UoM, *submission 51*, p. 5.

13 UoM, *submission 51*, p. 6.

14 Monash University, *submission 59*, p. 16.

15 USYD, *transcript of evidence*, 8 April 2010, p. 15.

NTEU suggesting that there was capacity through several EU programs for Australia to develop more effective research linkages.¹⁶

Funding from overseas philanthropic organisations

- 6.17 Australian researchers, especially those in the field of medical research, are now also starting to explore funding options from philanthropic organisations based overseas.¹⁷
- 6.18 The University of Adelaide noted that universities and other research organisations needed to begin to consider non-governmental sources of funding such as the Bill and Melinda Gates foundation as a source of funding in addition to the usual sources.¹⁸
- 6.19 Several of these organisations are focused on obtaining research breakthroughs for patients and are less restricted in where they can send funding. Witnesses from Research Australia noted the untapped potential of philanthropic organisations for Australian researchers:

The other area where there is potential for collaboration is in the area of international philanthropy. We have seen success from the Gates Foundation and from other international philanthropic agencies. Research Australia believes that there is a greater source of funding available if only we had the capacity to tap it. We have set up Research Australia Philanthropy as a unit of our organisation which is building capacity within Australia to link grant makers and researchers in a more effective relationship that will in turn provide further inducement and attraction to Australian philanthropy and we believe that this is a model that could be applied internationally.

International collaboration on health and medical research is a messy, uncoordinated and complex challenge, but there are signs of how we might build on what we currently have and ensure that our nation benefits from it. It would be an enticing opportunity to grasp if only we knew more about how to do it, but we need the legwork to tackle it strategically.¹⁹

16 NTEU, *transcript of evidence*, 9 April 2010, p. 75.

17 Professor Graeme Batten, *submission 7*, p. 2.

18 UoA, *submission 11*, p. 4.

19 Research Australia, *transcript of evidence*, 9 April 2010, p. 56.

- 6.20 The witnesses from Research Australia noted there was still no strategic approach to attracting philanthropic funding from overseas:

We do not tap into it particularly, other than through a few of the well-known channels – the Gates Foundation and we receive a little bit of funding from the Wellcome Trust in the UK. But we have no strategic approach to attracting international philanthropic funding. We know that in the UK and the USA a high proportion of research is funded from philanthropic sources; less so here in Australia. So it is a very large question mark. We have only, in the last 12 months, got a handle on philanthropy in Australia in terms of health and medical research. We did not understand it, but we think we do now – we are starting to – but it is just a big question mark in terms of opportunities overseas.

No-one has actually gone over and done a tour and talked to some of the major philanthropic organisations to understand whether they would be interested in supporting Australian researchers, particularly as the boundaries between borders break down and countries are not tending to want to go and invest where there is excellence to invest in. You would have to say that philanthropy is well suited. We do know that Australians are very sought after in terms of global health improvement and infectious disease. We do receive philanthropic funding to resolve global health issues for the Third World and developing nations, so I would expect there would be opportunities to explore that further.²⁰

Committee comment

- 6.21 Just as researchers and information flow relatively freely across borders, funding for research has begun to do the same. The more sources of funding available for Australian researchers, the more chance they have of having research funded and of being involved in successful research projects with overseas collaborators.
- 6.22 The Committee believes it is clear that universities and research organisations have to do more to familiarise themselves with offshore sources of research funding, and with the relevant application processes.
- 6.23 Accessing the US-based National Institute of Health and the National Science Foundation funding schemes would benefit Australian researchers in several ways. Firstly, they could secure funding for projects that were

20 Research Australia, *transcript of evidence*, 9 April 2010, p. 61.

not funded under Australian funding schemes. Secondly, they could more readily find partners based in the United States with similar research interests, increasing chances for international collaboration, and thirdly, involvement in these schemes naturally increases the exposure of Australian scientists and Australian science.

- 6.24 One witness observed that the United States funding bodies were no longer interested in where a project came from, just that it was coming from top quality scientists with relevant expertise. Given Australia has considerable strength in several areas of scientific endeavour, there is merit to suggest these fields of science should, first and foremost, seek to be funded through the more lucrative United States schemes to reduce demand on Australian funding schemes.

Recommendation 15

The Committee recommends that the Department of Innovation, Industry, Science and Research familiarise itself with the grant application requirements of the US National Institute of Health and the US National Science Foundation and make this information available to Australian universities and research institutions.

- 6.25 A commonly made observation by witnesses and submitters to the Committee was that it had become increasingly difficult to collaborate with European Union member states, as they had become more 'Eurocentric', in part due to the successes of their Framework Program schemes.
- 6.26 It is a natural consequence of European integration that some of their international bodies should become more inward-looking as they seek to consolidate the strength of their resources into one strategic direction, however, Australian research bodies should still seek to engage with Europe to remain on the cutting edge of global science.
- 6.27 Several areas chosen by the EU in the last European Framework Program were Australian areas of strength, such as biotechnology, food security and climate change. Witnesses and submitters were of the impression that Australia had somewhat 'missed the boat'.
- 6.28 It is regretful that Australia has been unable to participate fully in the European Framework Program schemes, as there have been many successful breakthroughs made through the program and the nature of the

program means that all participants benefit from discoveries made through the program.

- 6.29 Australia has considerable strengths and advantages to exploit in improving scientific links with Europe. Strong linguistic and cultural linkages and scientific strengths in areas desirable to Europe have to be taken advantage of, and the Committee encourages the university sector to develop a cohesive strategy for engagement with Europe.
- 6.30 The Committee heard the only way to access the program was to have strong relationships with partners in Europe, and to submit joint grant applications. Establishing partnerships and preparing joint grant applications requires knowledge of collaborative opportunities with European colleagues, time, and the ability to travel to forge real links with potential collaborators. The Committee is of the belief that the implementation of its recommendations will improve the opportunities for Australian researchers in the European sphere.
- 6.31 The lack of funding available for leveraging against European funding is an impediment to working with European research groups on Framework Program projects. The Committee believes that implementation of its recommendation supporting the expenditure of Australian research funds offshore will help alleviate this problem.
- 6.32 Philanthropic organisations are a natural source of funding for Australian researchers. By their nature, philanthropic organisations are more interested in outcomes for their beneficiaries than where research is conducted, or who it is conducted by.
- 6.33 More often than not, philanthropic organisations are concerned with medical research and finding cures and making breakthroughs on disease. Australia has some considerable areas of strength in medical research and the successes of organisations such as the Juvenile Diabetes Research Foundation should be studied and duplicated by Australian medical research organisations.
- 6.34 The Committee notes that research organisations are now beginning to concentrate on improving their knowledge of funding opportunities through international philanthropy, and their contacts in the philanthropic sector. We support their endeavours on this front and encourage them to improve their links and maximise their opportunities through this sector, as it benefits the philanthropists, researchers, and, most importantly, patients and their families.