# CHAPTER 5 Research excellence

## **Building on our strengths**

5.1 Australia has a robust, internationally renowned research sector. Our researchers are creative and motivated, and they work in diverse disciplines at institutions across the nation.

5.2 One of the key elements of the government's reform package is its commitment to maintaining and promoting Australia's research standing. The government is investing substantially in research, and in ways that will deliver benefits to the nation and beyond. These historic reforms will help build a strong, competitive research sector in what could become the best higher education system in the world.

## **Investing for the future**

5.3 The Higher Education and Research Reform Amendment Bill (the bill) provides for an increase in funding for research, and allows students assisted through the Research Training Scheme (RTS) to be charged capped contributions.<sup>1</sup> These measures are necessary in light of the former Labor government's failure to set aside funds to maintain the National Collaborative Research Infrastructure Strategy (NCRIS) beyond 20 June 2015, and for future rounds of the Future Fellowship for mid-career researchers.<sup>2</sup>

There was no provision for any new awards for the Future Fellowships program that supports midcareer researchers to undertake world-class research in Australia. Not a cent.<sup>3</sup>

5.4 In recognition of the increasingly integral role that research excellence and innovation play 'in the advancement of knowledge and technology, enhancing prosperity through the development, adoption and diffusion of more productive technologies and processes',<sup>4</sup> as part of the 2014–15 Budget package the government announced its significant investment in Australia's research future.

As part of the higher education reform package, the government will invest \$11 billion over four years in research in Australian universities, including

<sup>1</sup> Higher Education and Research Reform Amendment Bill 2014, schedule 5.

<sup>2</sup> The Hon. Mr Christopher Pyne, MP, Leader of the House and Minister for Education, Higher Education and Research Reform Amendment Bill 2014, second reading speech, *House of Representatives Hansard*, 28 August 2014, p. 4.

<sup>3</sup> The Hon. Mr Christopher Pyne, MP, Leader of the House and Minister for Education, Higher Education and Research Reform Amendment Bill 2014, second reading speech, *House of Representatives Hansard*, 28 August 2014, p. 4.

<sup>4</sup> Department of Education, *Submission* 98, p. 3.

\$139 million for the Future Fellowships scheme and \$150 million in 2015-16 to continue the National Collaborative Research Infrastructure Strategy.<sup>5</sup>

5.5 Having identified that the reform package will have some impact on the quality research that occurs in all universities across Australia, the department argued that the continuation of the NCRIS would ensure researchers were supported.

Through NCRIS, partnerships between the research sector, business, industry and governments have been established to ensure that Australian research continues to be competitive and rank highly on international scales. NCRIS enables over an estimated 30 000 researchers to access world leading equipment and facilities. It consists of 12 capabilities made up of 27 projects and facilities that employ more than 1500 highly skilled scientific and technical experts in 222 institutions.<sup>6</sup>

5.6 In assessing the reform package with respect to its potential impact on research, the committee considered relevant the 2012 Australian Research Council (ARC) evaluation of *Excellence in Research for Australia*. This evaluation involved a comprehensive assessment by discipline into the quality of Australia's higher education institutions research activity. The results by fields of research confirmed that researchers at Australian universities compete with the world's best in a wide range of disciplines.<sup>7</sup> Further, the ERA results by institution demonstrated that universities in all States and Territories of varied size deliver research performance at a world standard.<sup>8</sup>

#### Future Fellowships scheme

5.7 The measures seek to amend the *Australian Research Council Act 2001* (ARC Act) to update appropriation amounts by applying indexation and increasing the funding cap for the last financial year of the forward estimates to support financial assistance for approved research administered by the ARC.

The measure taken in this Bill will result in a substantial increase in funding to the ARC in the 2017-18 financial year and will promote the quality of research and research training. The programmes supported will fund the high-quality research Australia needs to address the great challenges of our time, to improve the quality of people's lives, to support the development of new industries and to remain competitive in the global knowledge economy.<sup>9</sup>

<sup>5</sup> The Hon. Mr Christopher Pyne, MP, Leader of the House and Minister for Education, Higher Education and Research Reform Amendment Bill 2014, second reading speech, *House of Representatives Hansard*, 28 August 2014, p. 4.

<sup>6</sup> Department of Education, *Submission* 98, pp 10–11.

<sup>7</sup> Australian Government, Australian Research Council, *Excellence in Research for Australia* 2012, National Report, 2012, Section 2.

<sup>8</sup> Australian Government, Australian Research Council, *Excellence in Research for Australia* 2012, National Report, 2012, Section 4 and p. II.

<sup>9</sup> Explanatory Memorandum, Higher Education and Research Reform Amendment Bill 2014, p. 3.

5.8 The reforms provide for 100 four year Future Fellowships each year on an ongoing basis.

The government's commitment to ARC funding for [F]uture [F]ellowships, where the previous government left a funding cliff, means that ARC funding is increased by this legislation well above what was proposed by the previous government in forward estimates. Funding for [F]uture [F]ellowships and for the National Collaborative Research Infrastructure Strategy are integral parts of the government's higher education reform package, and depend on the passage of this legislation.<sup>10</sup>

5.9 The reforms to the Future Fellowship scheme received the widespread support of the research community.<sup>11</sup> ARC undertook an evaluation of the Future Fellowships scheme in 2013 that evidenced its success:

A common sentiment expressed in interviews was that a Future Fellowship provides the scope and scale to accelerate a recipient's research effort. It provides the opportunity to focus almost exclusively, over an extended period of time, on a research question. It also provides fellows with the profile to expand collaborative networks, particularly internationally, and attract high-quality students.<sup>12</sup>

### One-off efficiency dividend

5.10 Currently through the RTS, the government provides universities with approximately \$675 million per annum to support the training of domestic higher degree by research students. Presently degree by research students are supported solely under the RTS by funding of research programs under the ARC Act. Students do not make any financial contribution to their course.<sup>13</sup> The reforms propose to introduce the option for a small RTS student financial contribution.

The reform bill will also allow universities, if they wish, to require Research Training Scheme (RTS) students to make a small contribution to the cost of undertaking a higher degree by research course. The government will expand HELP to allow eligible RTS students to defer paying their contribution until they are earning a decent wage.<sup>14</sup>

5.11 The department also provided evidence before the committee that '[u]niversities may choose to offer scholarships to cover these costs.'<sup>15</sup> Further, the

<sup>10</sup> The Hon. Mr Christopher Pyne, MP, Leader of the House and Minister for Education, Higher Education and Research Reform Amendment Bill 2014, second reading speech, *House of Representatives Hansard*, 28 August 2014, p. 4.

<sup>11</sup> Australian Research Council, *Submission* 97, p. 2.

<sup>12</sup> Australian Research Council, *Submission* 97, p. 2.

<sup>13</sup> Explanatory Memorandum, Higher Education and Research Reform Amendment Bill 2014, pp 68–69.

<sup>14</sup> The Hon. Mr Christopher Pyne, MP, Leader of the House and Minister for Education, Higher Education and Research Reform Amendment Bill 2014, second reading speech, *House of Representatives Hansard*, 28 August 2014, p. 4.

<sup>15</sup> Department of Education, *Submission* 98, pp 10–11.

explanatory memorandum emphasised that such costs 'will not restrict access to tertiary education or higher degrees by research and will ensure the long-term sustainability of RTS funding'<sup>16</sup> as any tuition fee would be deferrable through HELP.<sup>17</sup>

Higher education providers would be able to charge a student contribution up to a maximum of \$3900 per equivalent full-time student load (EFTSL) for high cost courses and \$1700 per EFTSL for low cost courses. It will be up to the discretion of individual institutions as to whether they charge this contribution to HDR students or absorb the reduced funding in some other way.<sup>18</sup>

5.12 The ability for universities to charge fees for RTS students received some criticism from the research industry. Innovative Research Universities alleged that the amendments ignored the contribution of researchers or research teams.

The amendments treat research students solely as students consuming resources for a potential payoff following graduation....A thorough rethink of the place of research students is required to address the mechanisms by which Government supports their development and their living costs. This should ensure coherence with undergraduate funding where universities are funded for all students who enrol. The Government should be encouraging additional research students not discouraging enrolments.<sup>19</sup>

5.13 Similarly, the Council of Deans and Directors of Graduate Research submitted that the proposed amendments will negatively impact on the quantity and quality of Australia's research graduates and decimate Australia's research workforce.

The driver for charging fees is in part to meet shortfalls in the research training scheme (RTS) as a result of the proposed budget cuts. The need for a highly trained research workforce across industry, business, government and the academy is clear and higher education institutions have been working towards enhancing programs to produce better qualified graduates more prepared for roles across multiple sectors. Cutting the RTS is counter-productive and will place additional financial pressure on institutions and will stifle their ongoing efforts to enhance the quality of research training by focussing on and providing broader skills development in the HDR graduates.<sup>20</sup>

5.14 Professor Jacqueline K. Phillips raised concerns that the reforms would result in talented individuals going elsewhere for higher degrees by research.

<sup>16</sup> Explanatory Memorandum, Higher Education and Research Reform Amendment Bill 2014, p. 10.

<sup>17</sup> Explanatory Memorandum, Higher Education and Research Reform Amendment Bill 2014, p. 9.

<sup>18</sup> Department of Education, *Submission 98*, pp 10–11.

<sup>19</sup> Innovative Research Universities, *Submission* 98, p. 10.

<sup>20</sup> Council of Deans and Directors of Graduate Research, *Submission 118*, p. 1.

Attracting domestic postgraduate students to research in the current Australian climate is already difficult and many students make significant sacrifices to gain their higher degrees. The typical PhD student is no longer fresh out of University; they often have families and financial commitments, and sacrifice income to undertake doctoral degrees. The current level of scholarship is only \$25,392 and they are expected to work full-time for the 3-4 years it takes to do a PhD degree. Contrast this to the level of international student fees of between \$27,000-\$35,000 per year.<sup>21</sup>

#### 5.15 In rebuttal, the department submitted that:

Recent data indicates that higher degree research graduates will enjoy a lifetime earnings advantage over bachelor degree holders, despite starting out later in their employment. In 2013 the median salary for new postgraduates in full-time employment was around \$79 000, whereas, the median salary for bachelor degree graduates was around \$55 000.14.<sup>22</sup>

#### **Consultation**

5.16 The committee understands that, as with the whole reform package, measures relating to research were informed by public debate and considerable consultation. This included consultation conducted through the Review of the Demand Driven Funding System and the National Commission of Audit (NCOA). Some submitters with concerns about the bill chose not to make submissions to either of these processes.<sup>23</sup>

#### Committee view

5.17 The committee notes that Australian universities have a long history of being at the forefront of research in a competitive global market. The committee acknowledges the importance of research activity, and the government's critical role in developing and nurturing the quality of Australia's research sector.

5.18 The committee knows that targeted research investment will help maintain and build on this history. These reforms will foster world-class research capacity at universities in all states and territories, irrespective of their size or location.

5.19 The committee is convinced that the investment in the Future Fellowships scheme will ensure Australia supports midcareer researchers to undertake world-class research in Australia. The committee supports the government's renewed commitment to the continuation of the NCRIS to ensure researchers are supported and that Australian research will continue to be competitive in the international market.

5.20 The committee acknowledges concerns that were raised with respect to the amendments to the ARC Act that would allow universities to charge fees for RTS students. However, as HELP loans will be available so that eligible RTS students do not have to meet these costs up front, the committee is satisfied that the measures are

<sup>21</sup> Professor Jacqueline K. Phillips, *Submission 1*, pp 1–2.

<sup>22</sup> Department of Education, *Submission 98*, pp 10–11.

<sup>23</sup> Department of Education, answer to question on notice, 10 October 2014, p. 3.

reasonable and proportional to the legislative intent, and notes that universities may choose to offer scholarships to cover these costs. Furthermore, HELP loans available for RTS fees will minimise any impact on the demand for higher degree by research.

5.21 Research excellence is a key element of the government's vision for a strong higher education sector and a globally competitive national economy. Evidence before the committee clearly demonstrates that these reforms will help create a system which nurtures innovation and recognises that there are no limits to aspiration for upward mobility.

5.22 The committee is satisfied that, as with the rest of the measures contained in the bill, the changes proposed to the research sector are necessary to ensure the stability and success of Australia's higher education system into the future.

5.23 For this reason, the committee believes that the amendments proposed in this report will enhance the quality of the reform package and complement the bill.

# **Recommendation 5**

# 5.24 The committee recommends that the bill be passed.