

X 5 Submission No:

For reply please quote: SocPol - 08/99 - 08/183

17 JUN 2008

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Dear Ms Vamvakinou

Thank you for your letter of 24 April 2008 concerning the inquiry into research training and research workforce issues in Australian universities being conducted by the Standing Committee on Industry, Science and Innovation.

Our Government recognises the importance of building our State's research capacity, in terms of facilities and workforce. Under the *Smart State Strategy: Investing in Science: Research, Education and Innovation and Smart State Strategy 2005-2015: laying the foundation*, the Queensland Government has made a significant investment in establishing 36 new research institutes and more than 230 research scholarships and fellowships. This investment into research infrastructure was based on the principle that by establishing world class research facilities, Queensland would attract and retain world class researchers.

A successful example of this principle is demonstrated by the Queensland Brain Institute, which opened in November 2007 at the University of Queensland. Since its establishment, the Institute has attracted Professor Bartlett, a world renowned neuroscientist from Victoria, who now heads a team of researchers in Neural Plasticity Research. The establishment of the Queensland Brain Institute has also attracted a significant number of researchers from interstate and overseas.

Following this investment in establishment of a number of research institutes, the newly released *Smart State Strategy 2008-2012: a new direction* is now focusing on investing in people. As a result, the Queensland Government has doubled its previous investment in the Innovation Skills Fund to place greater emphasis on collaboration and the application of research in industry, government and the community to improve economic, social and environmental outcomes.



The Innovation Skills Fund offers fellowships, scholarships and internships as well as two new Fellowship programs: the Smart State International Fellowships and the Commercialisation Fellowships for Researchers and Entrepreneurs-in-Residence.

Please find a Queensland Government response to relevant terms of reference enclosed.

Again, thank you for the opportunity to provide a submission on these matters.

Yours sincerely

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PAUL LUCAS MP Acting Premier

*Encl.

Attachment One – Response to Relevant Terms of Reference

1. The contribution that Australian universities make to research in Australia, including:

a) The contribution of research training programs to Australia's competitiveness in the areas of science, research and innovation

The following comments are provided in relation to the potential improvement of Australia's competitiveness in the areas of innovation.

The provision of vouchers direct to innovators or businesses with innovative ideas so that they could purchase research expertise within the Australian universities would enable businesses in cutting edge industries (such as environmental technologies and services) to have research done that is directly related to their business, for example, new product development or R&D that would enhance their competitive advantage.

In addition, as part of their training, researchers in areas in which innovation is a focus could undertake an industry placement the business/industry area in which they have an interest. This would enable them to develop an understanding of the broad business principles in the industry, potential commercial applications of their work and pathways to commercialisation, including barriers and pitfalls. This may better position researchers when they are innovating or adapting their design or systems to have direct relevance to the market and assist knowledge transfer between business and universities.

b) The effectiveness of current Commonwealth research training schemes

It is proposed that the effectiveness of these programs could be enhanced by:

- having a period of industry or practical scientific experience as an "intern" as part of researchers' training (as outlined in the above section). This could assist researchers to adopt and a strategic business case approach to their research;
- holding research colloquiums with researchers from a network of universities so that there is a cross-fertilisation of ideas and across related disciplines and have the possibility of "exchanges" between academic institutions so that research ideas are shared between universities rather than have universities operate in research silos;
- including, as a formal part of researchers' training, engagement with stakeholders in their area of research (for example, peak industry bodies, innovative businesses, state and local government agencies) to broaden the researchers' experience of the beneficiaries of their research. This could be done via internships, inviting these parties to research colloquiums and having research collegiums open to special interest groups. This could also assist trainee researchers to broaden their approach to innovation on a wider front (for example, to look at sustainability research from a region wide sustainability perspective rather than just a business, organisational or institutional perspective).
- during their training, researchers could be exposed to the "best of the best" thinking not only in their research area, but in general (for example, in innovation and entrepreneurship and business practice to expand their horizons beyond their area of academic research specialty).

c) The adequacy of current research training schemes to support Australia's anticipated future requirements for tertiary-qualified professionals in a wide range of disciplines

Currently, Australia is facing a shortage of skilled professionals in a large number of industries. Similarly, Australian universities have one of the oldest workforces of any industry in the country, and as current academics reach retirement age, more PhD graduates will be required to fill these positions. In order for current research training schemes to support future demand for qualified professionals, the Commonwealth Government must provide adequate financial support for those engaged in research. This includes funding provided to students undertaking research PhDs and Masters. During the recent Federal election campaign, the Australian Labor Party pledged to more than double the number of Australian Postgraduate Awards (APAs) from 1,580 to 3,500, to be offered by 2012. While this was welcomed by the higher education sector, the amount provided by each APA needs to be reviewed. APAs are currently funded at \$20,007 per annum and research undertaken by the Council of Australian Postgraduate Associations shows that students on these scholarships will fall below the poverty line. The demand for research degrees has dropped in recent years, and increasing APA funding could help to arrest this decline.