

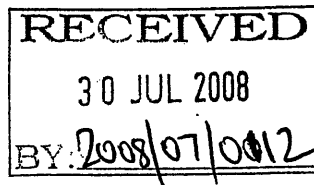


25th July 2008

Professor Denise Bradley
Secretariat
Review of Australian Higher Education
GPO Box 9880
Canberra
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Dear Professor Bradley,

Re: Submission to the Review of Australian Higher Education

Thank you for asking me to make a submission to the review.

I have addressed three of the questions within the June 2008 Review of Australian Higher Education Discussion Paper.

3.5 Higher education's role in the national innovation system – Financing of University Research (Page 50)

Question 19 – By what mechanisms should research activities in Australian Universities be supported?

Question 20 – On what principles and for what purposes should research activity be concentrated in particular universities or types of universities?

3.8 Resourcing the system (Page 66)

Question 28 – What incentives or unintended consequences are there in the current arrangements for higher education funding?

I must emphasise that the views expressed in this submission are my views, not necessarily the views of the University of Western Australia, the Centre for Medical Research of the University of Western Australia or the Western Australian Institute for Medical Research where I work. I do however know from statements made and published that all are in favour of moving from partial to full funding of research at Australian universities.

Yours sincerely

Nigel G Laing

Submission to the Review of Australian Higher Education.

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I should like to address three of the questions in the June 2008 Review of Australian Higher Education Discussion Paper:

3.5 Higher education's role in the national innovation system – Financing of University Research (Page 50)

Question 19 – By what mechanisms should research activities in Australian Universities be supported?

Question 20 – On what principles and for what purposes should research activity be concentrated in particular universities or types of universities?

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Question 28 – What incentives or unintended consequences are there in the current arrangements for higher education funding?

3.5 Higher education's role in the national innovation system – Financing of University Research (Page 50)

Question 19 – By what mechanisms should research activities in Australian Universities be supported?

On page 48 of the discussion paper the issue of the partial funding of research by the Commonwealth major competitive grants schemes – the Australian Research Council (ARC) and the National Health and Medical Research Council (NH&MRC) is raised. Partial funding of research by the NH&MRC is, I would argue, the two biggest problems facing NH&MRC-funded medical research in Australia, the other being that there is still simply not enough funding in the system.

The National Health and Medical Research Council (NH&MRC) is the peak funding body for medical research in Australia, providing Federal Government funding for medical research. The NH&MRC also provides the major support for careers in medical research in Australia, with the pinnacle of an NH&MRC-funded research career being an NH&MRC Fellowship.

The problem with awarded NH&MRC research grants is that the NH&MRC does not use host institution salary scales to calculate the amount of money given to a successful grant applicant to cover the costs of the salary of a researcher employed on an NH&MRC grant. Instead, the NH&MRC uses its own system of Personnel Support Packages (PSPs) and Fellowships, which have gradually and completely lost touch with the reality of higher education salaries. The NH&MRC has six levels of Personnel Support Packages. The value of each PSP in 2008 is listed in Table 1

PSP Level	Description	Value
PSP1	Technical support - non-graduate personnel	\$47,250
PSP2	Junior graduate research assistant	\$59,000
PSP3	Experienced graduate research assistant/Junior postdoctoral research officer	\$64,750
PSP4	Experienced postdoctoral researcher	\$76,500
PSP5	Senior experienced postdoctoral researcher	\$82,500
PSP6	Senior researcher	\$97,750

Therefore, an NH&MRC PSP3 is what a grant winner receives if the NH&MRC grant review panel decides that a junior post-doctoral researcher (someone recently awarded their PhD) is required to do the research. Calculated current and predicted gaps between NH&MRC PSP3s and a junior post-doctoral researcher salary on host institution salary scales are shown in Table 2.

Year	Salary ^a	Plus oncosts of 31% ^b	PSP3 from NH&MRC ^c	Gap	% Gap ^d	FTE ^e
Year 1 - 2008	\$63,681	\$83,422	\$64,750	\$18,672	29%	0.78
Year 2 - 2009	\$66,021	\$86,487	\$66,000	\$20,487	31%	0.76
Year 3 - 2010	\$68,358	\$89,941	\$67,125	\$22,816	34%	0.75

^a The host institution salary scales are set in collective bargaining agreements principally between the host institutions and the National Tertiary Education Union (NTEU).

^b The oncosts of 31% used in this calculation are in the middle of those charged at institutions around Australia.

^c The PSP3 has incremented by \$1,250 for each of the last four years.

^d The percentage Gap is calculated by dividing the amount of the Gap by the value of the PSP3.

^e FTE is how much of a full time equivalent salary (FTE) the NH&MRC PSP3 will purchase.

From Table 2 it can be seen that successful NH&MRC grant applicants (normally just over 1:5 grants are successful) can easily, immediately, have close to a 30% gap between what they receive in an NH&MRC PSP3 and what they need to pay a junior post-doctoral researcher and can therefore only afford to employ the junior post-doctoral researcher for 4 days a week or less. Similar Gaps occur at other PSP levels.

Gaps also exist for Fellows, the pinnacle of NH&MRC personnel support. Indeed, Professor Warwick Anderson, Chief Executive Officer of the NH&MRC on his recent visit to Western Australia, made this exact point, saying that the NH&MRC only pays Fellows for four days a week and that on the fifth day they can find another form of employment and earn money that way. This could be taken as indicating that the NH&MRC, the Australian Commonwealth Government funding body for medical research, regards medical research as a part-time occupation. Medical research is *not* a part-time occupation. It is much more than a part-time occupation. It is usually all consuming, especially when major advances are being made.

To my knowledge, the NH&MRC is the only grant funding body in the world that uses this approach. I consider it unlikely that any other part of the Commonwealth Government, or any State Government, deliberately underpays its staff, or deliberately pays them for only four days a week or less.

NH&MRC-funded medical research in its current form is not viable. No business is viable when those in the business are forced to accept contracts that are insufficient to pay the required staff.

The Role of the Department of Education, Employment and Workplace Relations (DEEWR)
The NH&MRC and each host institution sign off on a Deed of Agreement for every NH&MRC grant the host institution holds. This Deed, amongst many other things states:

2.2 In performance of the Projects, The Institution shall:

d) Meet the expenses of the amount of any salary and other entitlements or conditions of service payable as a result of an enterprise or other agreement which is in excess of the amount of the Personnel Support Package levels provided for under the NH&MRC Research Funding Schemes.

This appears to suggest that the host institution should pay any Gap, but this is not what it says. It does not say that an appropriate salary has to be paid, only that if any salary is paid that costs more than what is received from the NH&MRC, the cost will be paid by the host institution. Most host institutions around Australia do not cover the Gap. Their argument is that in the current budgetary conditions they face, with the erosion of the Research Infrastructure Block Grant (RIBG), they simply cannot afford to pay the gap.

In the absence of the Gap being covered, the NH&MRC grant holder has to live within the PSP funding received from the NH&MRC. For a PSP3 this means that in 2008, the grant holder would only be able to pay the junior post-doctoral researcher \$49,427 pa., assuming 31% oncosts (\$64,750 ÷ 1.31). This is below the minimum that can be paid to someone with a PhD on academic scales, even though the work they are doing is as an academic researcher.

The NH&MRC grant holder can follow a number of strategies to try to overcome the Gap. These include:

- i) trying to win a second grant (at odds of 1:5 again) to cover costs associated with the first grant (most funding agencies look dimly on providing top-up funding for another grant);
- ii) if there are two positions on the grant perhaps only fill one position;
- iii) employing a researcher part-time or not for the full period of the grant, say two years instead of three;
- iv) employing someone with lower qualifications at an appropriately lower level that can be afforded from the PSP provided (this usually means that the lower qualified person is not in fact capable of doing the work required).

All these options are detrimental to medical research and penalise medical researchers. The lower salaries for medical researchers and poorer conditions resulting because of the NH&MRC PSP Gaps are making NH&MRC-funded research staff an underclass in higher education institutions. It makes medical research unattractive. Morale amongst medical researchers is being severely eroded. The PSP system is a disincentive to pursuing or continuing a career in medical research in Australia. The PSP system decreases output, not least because of the amount of time and effort the grant holder has to put in to trying to find ways to cover the Gap. The Gap makes medical research much harder in Australia and less competitive internationally. It is a problem affecting medical researchers throughout Australia.

The Australian Society of Medical Research (ASMR) has recently performed a survey of its members holding NH&MRC funding, on the effect of the NH&MRC salary gaps. The results of the survey are not published yet, but I understand catalogue the perceived effects of the gaps on morale in the sector and also on the quantity and quality of research output.

Possible actions to remedy the NH&MRC salary gap problem

Medical research at Australian universities has to be fully funded. Either the NH&MRC has to change its policy and use host institution salary scales to calculate salaries on NH&MRC grants, as the Australian Research Council (ARC) does, or the RIBG has to be increased so that the host institutions can cover the gap or both. My preferred option would be the most transparent one, that the NH&MRC uses host institution salary scales and the universities continue to receive RIBG funding to allow them flexibility in research. Productivity and ultimately the benefit to the Australian public and budget savings would increase.

3.5 Higher education's role in the national innovation system – Financing of University Research (Page 50)

Question 20 – On what principles and for what purposes should research activity be concentrated in particular universities or types of universities?

I have no input to make into deciding which universities should do what research. I would however strongly argue for the encouragement of aggregation of researchers within individual universities into large research centres, thus creating the much-discussed critical masses of researchers. When multiple researchers capable of different, leading edge techniques are brought together in the one place, then it is easy to piggyback on the abilities of those around you. This facilitates and speeds multiple areas of research. What would have been difficult to organise by a group working in isolation, can be very easy when there are multiple groups in the one centre. This increases research progress and allows work to be accomplished that otherwise would not be done, perhaps would not be done in Australia. Researchers should be encouraged, perhaps by grants or infrastructure support; to move as much as possible into large research centres. Perhaps there could be bridging grants to bring at least part of the activities of individual researchers or small groups into the larger centres, to allow them the opportunity to benefit from the critical mass effect.

3.8 Resourcing the system (Page 66)

Question 28 – What incentives or unintended consequences are there in the current arrangements for higher education funding?

DEEWR PhD payments are currently heavily weighted towards completion of the PhD. The current PhD payment system results in supervisors receiving funding for PhD students mostly from 3 to 5 years after the PhD is completed. During the PhD, the supervisor receives very little funding, perhaps between \$2,000 and \$4,000 per year. However, a PhD student in an expensive research field will cost \$20,000 a year in consumables. This means that during the time of the PhD, the supervisor has a \$16,000 to \$18,000 hole in their budget. This is a *disincentive* to supervisors taking on PhD students, especially if they already have a hole in their budget because of NH&MRC PSP gaps.

The DEEWR funding model for post-graduate students needs to be moved back more towards ongoing funding during the time of the post-graduate studies, with a considerably decreased proportion upon completion.