

January 14, 2009

Budget Policy Division Department of the Treasury Langton Crescent PARKES ACT 2600 Email: prebudgetsubs@treasury.gov.au

RE: Pre-Budget Submission

We write on behalf of the Australian Society for Medical Research (ASMR) for the continued support of Australia's world-class health and medical research sector and the protection of National Health and Medical Research Council (NHMRC) funding in the 2009 Federal Budget.

The ASMR is the peak body representing health and medical researchers (HMRs) in the country. In addition to the more than 1200 direct members, ASMR represents the sector through 55 affiliated professional societies and medical Colleges representing an additional 18,000 people actively involved in health and medical research. Our corporate and disease related foundation memberships bring a further 100,000 Australians with and interest in health and medical research into association with ASMR. Our mission is to foster excellence in Australian health and medical research and to promote community understanding and support through public, political and scientific advocacy.

The HMR sector has been an outstanding contributor to the health and wellbeing of Australians. The international standing and significance of Australia's HMR is unquestioned as shown by the consistently high output of fundamental research and translational outcomes in a cost-efficient manner. Australian HMR contributes 3.05% of the total world HMR R&D from only 1.1% of the expenditure and delivers twice the Organisation for Economic Co-operation and Development (OECD) average on a per capita basis - with a strikingly high international standing by citation. Furthermore, Australia has been awarded 5 Nobel Prizes in medicine or physiology, and our translational outcomes are impressive in global terms e.g. lithium for treating bipolar disorder, the bionic ear, antibiotic treatment of *Helicobacter pylori* in peptic ulcers, and a cervical cancer vaccine. Australia's HMR sector truly does punch way above its weight on the international stage.

In economic terms, investment in Australian health R&D generates exceptional returns and has made a major contribution to increased workforce productivity and the economic benefit of the nation. Significantly, the commercialisation of HMR in Australia has been growing at 16% and economic benefits include the generation of over 4,000 knowledge-based jobs resulting from the development of health and medical research discoveries. The Access Economics Report (*Exceptional Returns II – The Value of Investing in Health R&D in Australia*¹) indicated that for every \$1 invested in Health and Medical Research, there is an average of \$2.2, and up to a \$6 return, to Australia's Economy. Other impressive economic findings of the study include:

- Australian Health R&D expenditure between 1992/3 and 2004/5 was estimated to return a net benefit of around \$29.5 billion dollars
- Comparison of the returns on investment with other sectors, health R&D out-performs the market, manufacturing and agricultural sectors, and is less only than mining and the retail/wholesale trade sectors
- Case studies suggest that further investment in 4 areas critical for the future health of Australians (namely diabetes, dementia, cancer, and indigenous health) will yield considerable health and economic and benefits. Examples include:

- The development of Gardasil to vaccinate against 70% of cervical cancer has potential returns in wellbeing of 2.5 to 1.

- The prevention or delay of vision loss associated with diabetes will result in \$7.6 billion dollars of savings by 2025.

- Decreasing the incidence of Alzheimer's disease by 5% through Australian R&D will result in estimated savings of \$10.3 billion dollars by 2050 - with over half of these savings in the residential care sector.

- The value of a Group A Streptococci vaccine is predicted to provide health benefits valued at \$319 million per year of which \$78.4 million will be realised by indigenous Australians.

Furthermore, the Exceptional Returns II study reveals that although the greatest burden of disease is cancer (19% of Australia's total) and cardiovascular disease (18%), non-fatal diseases also play a significant and increasing role in the burden of disease and the years of healthy life lost due to disability. In particular, the projected cost and impact of the chronic diseases of aging is forecast to present a challenging burden and the greatest hope is new R&D breakthroughs. Unequivocally Australia has a comparative advantage in health R&D given the levels of discovery, output and quality of publications, and demonstrated impressive translational outcomes. In addition to the "good international citizen" arguments, the new report provides strong economic reasons for sustaining and enhancing health R&D investment in Australia.

It is also important to highlight that the Australian public strongly supports HMR with over 60% recognising that (i) new discoveries and inventions create new medicines, devices and vaccines, (ii) HMR creates jobs and new business through discoveries and inventions, and (iii) a lack of funding often results in Australian discoveries being commercially developed in other countries.

Funding for HMR in Australia is derived from a range of organisations across the public and private sectors, including the Commonwealth, state and local governments, the not-for profit sector, and industry. The largest single funder of HMR is the Australian Government, with the NHMRC being the primary source. Almost half of NHMRC funding is directed to basic medical research with universities and medical research institutes being the main recipients. The Commonwealth Government has demonstrated a steady increase in funding for HMR since 1995. In response to the Will's strategic review in 1999, the Australian Government doubled funding to HMR from 2000-2005, and in the 2006 federal budget an additional \$905 million was committed, that will result in a funding base of \$695 million by 2009-10. As detailed above, this increased investment in HMR is already producing substantial health and economic benefits. Despite these increases, government funding for HMR in Australia still ranks amongst the middle of similar OECD countries as we are facing increased competition from other developed and emerging countries that are investing heavily in biomedical science and providing substantial investment incentives to the private sector. To take full advantage of the government investment in HMR by Australia, sustainability beyond 2010 is critical, especially in light of the dramatic damaging effects of the recent flat-lining of the US National Institutes of Health budget. The current NHMRC funding cycle will be complete in 2010/11 and the prospect of NHMRC funding for HMR plateauing puts at risk Australia's investment to date and its position as a leader in the very competitive global HMR market.

Australia faces many future challenges in health, including the high incidence of disease within aboriginal communities, increasing prevalence of lifestyle diseases, a rapidly ageing population – with associated chronic disease, and the threat of disease linked to climate change. The challenge now is to lock-in investment in the HMR sector with sustainable funding that guarantees the strength and diversity of our world-class HMR sector, so that it can continue to deliver the strong economic returns and improved health outcomes to Australia. Clearly the recent global economic slowdown presents many challenges for Australia with associated budgetary pressures. In this difficult economic climate it will be critical for the HMR sector to at least maintain its current levels of support. In particular, it is imperative that the NHMRC budget is protected. The funds committed to the NHMRC in the 2006 federal budget are essential for Australian HMR to maintain its current workforce. The NHMRC budget has already plateaued and the pressures to maintain the already low % success rates of its granting schemes are extreme. At this time, any cuts to the NHMRC budget would have significant adverse effect on the stability of the HMR workforce. It should be highlighted that a number of indicators including the results of a recent survey commissioned by ASMR of its members to address

employment conditions and career structures, have suggested that there remains a significant degree of anxiety among the Australian HMR workforce, particularly in regards to the insecurity of employment in the sector and lack of financial support for research². Most striking was the statistic that half of respondents indicated that as a result of employment insecurity and/or lack of funding that they had moved overseas or were contemplating moving overseas. Additional tangible evidence that there is a "Brain Drain" problem in the Australian HMR sector is the well-publicised departure overseas of many leading researchers. These data indicate that the sizeable investment in Australia's HMR workforce is at risk of being lost if funding is not sustained which in turn will lead to knowledge-based social and economic loss.

In summary,

- Investment by the Australian Government in health and medical research has resulted in substantial economic and health benefits for Australians.
- In the current difficult economic climate it is important that support of the Australian HMR sector is maintained.
- It is critical to safeguard the NHMRC budget, particularly the funds committed in the 2006 federal budget.
- Any loss in funding would put pressure on Australia's highly skilled and valuable workforce and as a consequence place at risk the substantial investment in building this workforce and the future health and economic benefits to the country.

We would be delighted to provide clarification on the above or any additional information.

Yours sincerely,

Most Sates

fral. J. number

Dr Mark Hulett

Dr Sarah Meachem

ASMR Immediate-Past President

ASMR President

- 1. Access Economics. Exceptional Returns II: The Value of Investing in Health Research & Development in Australia. In; 2008. <u>http://www.asmr.org.au/Campaign/campaign.html</u>
- Kavallaris M., Meachem S., Hulett M., West C., Pitt R., Chesters J., Laffin W., Boreham P. and Khachigian L. *Perceptions of Health and Medical Research Careers: The Australian Society for Medical Research Workforce Survey*. Medical Journal of Australia. 2008 188:520-524.