



February 29, 2016
R&D Tax Incentive Review Secretariat
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Re: R&D Tax Incentive Review Submission

R&D Tax Incentive Review

Since 1961, the Australian Society for Medical Research (ASMR) has provided advice to government on behalf of the health and medical research sector. The ASMR represents more than 1700 direct members and an additional 120,000 Australians through our affiliated professional societies, medical colleges and corporate/disease related foundation members.

Advice from ASMR is always evidence based; our goal is to assist government in developing policies that allow our country's highly skilled health and medical research workforce to maintain and expand their contribution to the health and economic wellbeing of all Australians.

On 7 December 2015, the Government announced its National Innovation and Science Agenda. This vision for innovation, which pledges to turn scientific discoveries into improved health outcomes and economic returns, strengthen our standing as one of the global leaders in the field of medical research, and generate an "Ideas Boom" to drive the Australian economy into the future, plans to capitalise on Australia's winning formula - our world-class science and health and medical research workforce.

Innovation and Science Australia recently initiated a review of the R&D Tax Incentive, jointly chaired by Mr Bill Ferris AC (Innovation Australia), Dr Alan Finkel AO (Chief Scientist) and Mr John Fraser (Secretary of the Treasury). In order to achieve the Government's innovation vision, the R&D Tax Incentive, a broad programme that is accessible to all industry sectors, aims to encourage industry investment in R&D to improve effectiveness and integrity.

ASMR welcomes the R&D tax incentives and is confident that the cogent measures outlined will play an important role in enticing the private sector, including new and early stage investors, to support the translation of discoveries born from the health and medical research sector into licensing and the marketplace. The health and medical research sector in this country relies heavily on government support (60%), a system under extreme pressure due to the escalating and unsustainable cost of health care expenditure; increased investment from private and philanthropic sectors will provide much-needed support for the health and

medical research sector, expediting the translation of basic discoveries into better health outcomes and improved economic prosperity for the nation. A major source of Australian health and medical research funding (~26%) comes from the commercial sector¹. Stimulating industry to further invest in health and medical research should therefore be a major goal for Government to achieve sustained and appropriate funding of the health and medical research sector.

Positive cultural flow-on effects from the R&D Tax Incentives. ASMR believes the Tax Incentive measures will have positive flow-on effects on the culture of research by encouraging and enabling the trans-disciplinary collaborations and approaches that are essential for solving the big problems facing our health system. This will also facilitate linkages between research organisations and industry and their investors. Engagement of the private sector through the R&D Tax Incentives will help transform the current ‘fair go’, low-risk culture of investing into Australian science and innovation into the more adventurous ‘have a go’ culture that exists in most other countries and is imperative for increasing the outputs and ensuring the success of the Science and Innovation Agenda. In recent times Australia has been ranked poorly for innovation performance, measured in terms of marketplace outputs commercialised in Australia. Not surprisingly then, Australia’s rate of collaboration between research and industry sectors is one of the lowest in the OECD². According to the report ‘Health of Australian Science’, employment of scientists by Australian companies is amongst the lowest in the OECD - only employing 2.2 scientists with doctorates per 1000 people in the workforce, compared to 11 in the US, 20 in Germany and 28 in Switzerland². Australia’s highly skilled health and medical research workforce is underutilised by industry. Although we have a strong international reputations for quality and ideas, relative to the USA and European nations our industry is relatively small and thus many Australian discoveries go off-shore and are commercialised. Australia has the ability to commercialise as evidenced by some innovations that were commercialised here including the bionic ear, human Papilloma Virus vaccine, cause and treatment for stomach ulcers, and influenza drug.

Australians in general seem to be risk averse and conservative, usually preferring to invest in low-risk ventures such as property. We believe the R&D Tax Incentives will encourage investor confidence and promote diversification, resulting in a cultural change towards partnerships between research and industry sectors.

A cohesive and cogent R&D Tax Incentive programme between Commonwealth and state government is essential in order to maximise collaborations and partnerships across jurisdictions. Otherwise investors, presumably individuals, may be de-incentivised to invest. In addition, the R&D Tax Incentives should be long-term measures in nature, an essential requirement to nurture productive and long-term collaborations between researchers, industry and investors.

Investment into the National Health and Medical Research Council (NHMRC) has generated exceptional returns.

- In 2011, \$6.1 billion in commercial returns from NHMRC-funded research since 1970 (NHMRC provides Australia’s largest single pool of funding for health and medical research, representing 0.6% of the total federal Government Health spend)³.
- Investment in NHMRC Development Grant Scheme that funds proof of concept projects has been shown to highly productive. An independent and comprehensive review of 40 completed grants in 2012 showed 6 resulted in product to market, 80%

had found a commercial partner (majority being Australian biotechnology firms) and 55% were under some form of commercial development⁴.

The expertise of the health and medical research workforce underpins the exceptional value and returns on investment, producing remarkable health and economic outcomes for Australia. In order to meet the objectives of the Science and Innovation Agenda and take full advantage of the R&D Tax Incentives, it is important that the health and medical research workforce is sustained in a supportive and stable ecosystem.

Australia's best and brightest are being lost. The workforce is at serious risk as evidenced by:

- (1) A 16% loss of human capital (FTE researchers) from the major NHMRC Funding Scheme (Project Grants) within the last 3 years,
- (2) A reduction of 25% in the total number of researchers in the leadership tier of the NHMRC Fellowship Scheme (Senior and Principal Fellow) since 2011. This represents not only a loss of highly qualified, talented and motivated individuals in the short-term, but also a devastating loss of leaders equipped to collaborate with industry into the future.
- (3) Nearly a quarter of the health and medical research workforce being uncertain as to whether or not they have employment in 2016, as evidenced from an ASMR workforce survey conducted in November 2015.

Taken together, these losses to the health and medical research workforce equate directly to decreased productivity and innovation performance. R&D Tax Incentives and Science and Innovation initiatives are crucially important and welcomed, however *People Innovate* and without the intellectual capital of our workforce the broader vision will fail.

Yours sincerely



Sarah Meachem, PhD
President



Daniel Johnstone, PhD
President Elect

1. Access Economics. (2008) Exceptional Returns II: The Value of Investing in Health Research & Development in Australia
<http://www.asmr.org.au/Publications.html>.
2. Office of the Chief Scientist, Health of Australian Science, 2012
3. Deloitte Access Economics. Returns on NHMRC funded Research and Development. In: 2011,
<http://www.asmr.org.au/Publications.html>
Let me highlight 3 funding schemes
4. <https://www.nhmrc.gov.au/grants-funding/outcomes-funding-rounds/previous-outcomes-development-grants-funding-rounds>