

EMPOWERING RESEARCH, FOR A HEALTHY AND EQUITABLE AUSTRALIA

2022 ASMR POSITION
DOCUMENT



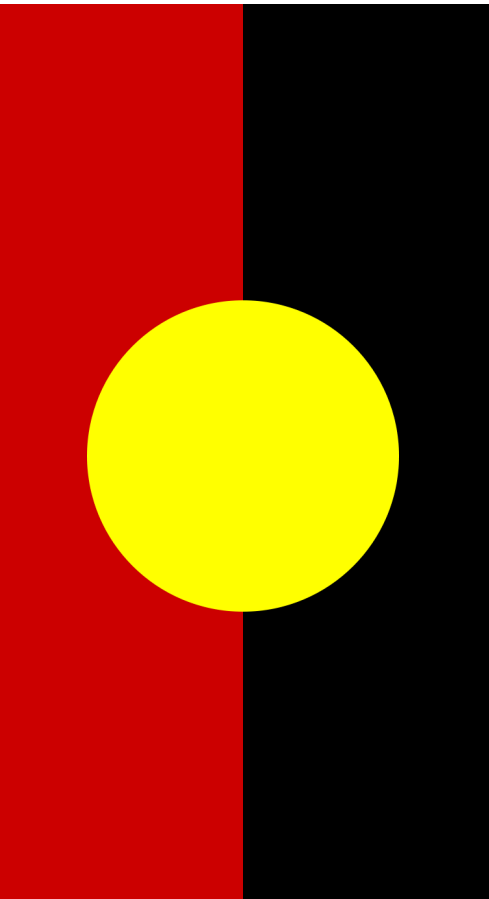
Public, Political, Scientific Advocacy

Prepared by the Australian Society for Medical Research
www.asmr.org.au



Public, Political, Scientific Advocacy

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ACKNOWLEDGEMENT OF COUNTRY

The Australian Society for Medical Research acknowledges that for more than 60,000 years the Aboriginal and Torres Strait Islander people have been and continue to be the traditional owners of the land that we share. We recognise their continuing connection to land, water and culture. We pay our respect to their elders past and present.





The ASMR calls on all political parties to commit to

1 / IMMEDIATE DOUBLING OF INVESTMENT IN THE NHMRC TO SUPPORT INNOVATION AND DISCOVERY

2 / COMMIT TO LONG-TERM SUSTAINABLE INVESTMENT INTO HEALTH AND MEDICAL RESEARCH, WITH THE ULTIMATE GOAL OF 3% OF TOTAL HEALTH EXPENDITURE

3 / HONESTY, INTEGRITY AND TRANSPARENCY IN ALL ASPECTS OF HMR FUNDING

SUMMARY

Australia is privileged to have one of the best evidence-driven health care systems in the world, underpinned by the best health and medical researchers. The COVID-19 pandemic has shown us that as we face ever increasing health challenges, we must plan and prepare to safeguard the health and prosperity of all Australians as we face future health demands from an ageing population, climate change and infectious pandemics .

The Australian Society for Medical Research (ASMR) has outlined an evidence-based plan to deliver a dynamic and vibrant research pipeline, providing the security and freedom to imagine, create and innovate.

THE ASMR

Now in its 60th year, the Australian Society for Medical Research (ASMR) has been the peak professional body and the unifying voice representing Australian health and medical researchers. In addition to the more than 1000 direct members, ASMR represents the sector through over 70 affiliated professional societies, medical Colleges and patient groups, 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 an interest in health and medical research into association with ASMR.

Our mission is to empower research for health and well-being, with a vision for a healthy and equitable Australia.

The ASMR is comprised of research active health and medical researchers from across the sector. This group is best placed to identify new trends and expectations for the next generation of research leaders. The ASMR has an unparalleled record of investigating and quantifying the engagement and benefits of research to the Australian community and economy. In 2003, the ASMR broke new ground, commissioning the first report of its kind to quantify the health and economic benefits of medical research. Since that time, the ASMR has commissioned a further five reports from Access Economics and Deloitte Access Economics that support the need for greater investment into a sector that forms one of Australia's economic pillars. This evidence informs the ASMR election position statement for 2022



FROM THE PRESIDENT

The COVID-19 pandemic has provided a timely reminder of the fragility of our health and the enormous importance that a healthy society plays in the economic and social prosperity of Australia. As we emerge from the COVID-19 global pandemic we do so with an acute awareness of the value of good health, ongoing health challenges and new crises on the horizon.

The Federal Government's 2021 *Intergenerational Report* identified health as a priority area, and that “over coming decades Australia must prepare for known pressures and unexpected risks”. It is critical then that the

Government capitalises on this "golden opportunity" to strengthen Australia's health and medical research capacity. This clearly places political leaders of all persuasions on notice to accept their duty and responsibility to the country and its citizens by enabling the health and medical research community to continue to grow the exceptional capabilities so clearly displayed in response to the COVID-19 pandemic.

A fact which cannot and should not be ignored by any government is that peer-reviewed, NHMRC funded research has contributed enormously to the health, social and economic well-being of Australians, returning \$3.20 for every \$1.00 invested.

This election presents an opportunity for vision beyond a 3 year term of office, for the implementation of a legacy that squares up to the challenges identified in the 2021 Intergenerational Report. A bold commitment to invest in support of the NHMRC and arrest the loss of intellectual capital that has resulted from years of static (in real terms, declining) investment.

A handwritten signature in black ink, appearing to read 'Tony Kenna', located below the main text.

Tony Kenna
ASMR President, 2022

INTRODUCTION

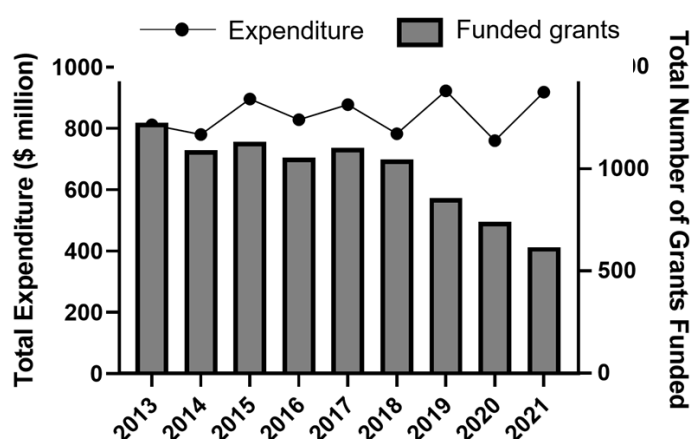
Australia is a nation where discovery and curiosity are interwoven throughout its history; where for more than 60,000 years, its people have been driven by an innate desire to understand the natural world around them and apply this knowledge for the benefit of all. From the First Nation's people using the movements of the moon and the stars that allowed them to understand the tides and navigate the land, their detailed knowledge of plants and the land that translated into medicine and agriculture. Fast forward to modern Australia, where people from all backgrounds continue to make remarkable contributions to our understanding of science and medicine.

We are living in a dynamic and challenging world. The COVID-19 pandemic has provided a timely reminder of the global challenges to our health and the enormous importance that a healthy society plays in the economic and social prosperity of Australia. The health and medical research sector can reflect with pride on the enormous contributions made by the sector in protecting Australians. The speed and breadth of responses, such as delivery of vaccines, design of novel anti-viral medications and in implementation of evidence-based public health policies, were underpinned by decades of health and medical research.

As we think of a world beyond COVID-19 we must prepare for new health challenges that loom on the horizon. Government must invest in the HMR sector now to allow time for the development of new ways to treat the many health problems we inevitably face as our population ages and climate changes.

HEALTH & MEDICAL RESEARCH AT CRISIS POINT

- There was a 16% loss of full-time equivalent personnel supported by the NHMRC Project Grant scheme between 2013 and 2017
- Boosting the workforce by 40% could deliver returns of \$35 billion to Australia



In 2008 a House of Representatives Standing Committee on Industry, Science and Innovation recommended that science grant funding success rates should be ~40%.

Current NHMRC grant success rates are 14.8% (Investigator grants) and 9.9% (Ideas grants). International benchmarks sit at ~25%. Our early-mid career researchers, the future leaders of Australian HMR, are demoralised by success rates as low as 5.4% (2021 Ideas grants). In 2021, one third of all Ideas grants rated by peer review as “Outstanding by international standards” were unable to be funded.

Over a decade of static investment in the NHMRC is causing a loss of intellectual capital. It may take decades to replace the loss of talent the health & medical research sector is experiencing. Static investment is also diminishing economic returns on health & medical research. The difference in projected returns on current investment levels versus recommended investment levels is >\$35 Billion

HOW DOES AUSTRALIA COMPARE?

"PUNCHING ABOVE OUR WEIGHT" - BUT FOR HOW MUCH LONGER?

- The USA spends \$178 per person on health and medical research through its National Institutes of Health
- Australia currently spends \$58 per person through the NHMRC & MRFF

Despite having one of the most expensive healthcare systems in the world, the US still invests 1.1% of their total health expenditure directly into health and medical research. The NIH budget tripled between 2013 and 2019 to US\$39B (equivalent to ~\$54.6B AUD) and will increase again in 2022 to US\$50.4B (\$71.3B AUD). From 2013-2021 the NHMRC budget increased by just 11%.

In 2020, during the COVID-19 pandemic, Germany announced that funding increases into health and medical research of 3% per annum would occur over the next decade, equating to an additional €17B (~\$26B AUD).

What is your health worth?

USA
\$178
per person



Australia
\$58
per person

A SUSTAINABLE INVESTMENT MODEL

Australia's current investment in health and medical research equates to 0.7% of total health expenditure.

Every dollar invested in HMR returns over \$3 to the economy. Our investment model will create a predictable and sustainable health and medical research ecosystem. It will ensure that Australia's army of scientists and researchers are primed to address immediate and emerging health challenges.



"FUNDAMENTAL AND TRANSLATIONAL RESEARCH ARE BOTH PART OF THE SAME THING - KNOWLEDGE - YOU REALLY CAN'T HAVE ONE WITHOUT THE OTHER. CUTTING INTO ONE OF THEM NECESSARILY DIMINISHES THE OTHER." – PROFESSOR HOPE JAHREN, 2018 ASMR MEDALLIST

Success of the MRFF can only be ensured by creating a long-term investment strategy for the NHMRC with the purpose of supporting a sustainable health & medical research pipeline. This will ensure continued health and economic gains that will assist in mitigating the rising and unsustainable cost of health care and the burden of disease Australia is facing.



**IMMEDIATE DOUBLING OF
NHMRC BUDGET &
SUSTAINED INVESTMENT
TO 3% OF FEDERAL
HEALTH BUDGET**

The ASMR advocates for an immediate doubling of annual NHMRC investment to mitigate the decline in the health & medical research workforce and put the sector back on a sound footing.

\$58B

NET ECONOMIC
BENEFITS

60K

NEW JOBS

3K

LIFESAVING
RESEARCH
PROJECTS
PER YEAR

The ASMR then calls for implementation of the 2012 McKeon Review recommendations, which included incremental increase in annual HMR investment to a final benchmark of 3% of total health expenditure. This will generate \$58 billion in health and economic benefits, build dynamic capacity in our HMR workforce, and also lead to ongoing growth of our science and innovation economy.

AUSTRALIANS MAKING A DIFFERENCE

In the last 80 years, there have been 11 Australian recipients of a Nobel Prize, for their work and contributions to a better understanding of human health and disease.

Don't let this legacy of innovation die through government underfunding of the NHMRC.



IN VITRO FERTILISATION

- In vitro fertilisation (IVF) was first proposed by Neil W. Moore as a way of correcting human infertility at the 1968 Australian Society of Animal Reproduction Conference
- In 1973, Professor Alan Trounson and Professor Carl Wood at the Monash Institute of Reproduction and Development were the first to report a biochemical pregnancy using human IVF to produce a human embryo for transplantation to an infertile patient.
- This pioneering fundamental science enabled the first human IVF birth in 1978
- IVF has changed the lives of millions of families., Between 1978 and 2018 more than 8 million children were born through IVF
- Today, 1 in 20 Australian births are the result of IVF

COCHLEAR IMPLANT



- Profound deafness affects approximately 10,000 to 12,000 adults and 1,400 children in Australia.. A cochlear implant is a device used to provide the sensation of sound to the profoundly deaf.
- In 1967 Prof Graeme Clark, conducted basic research on the pathophysiology of profound deafness in animals and on the tolerability of implanted materials.
- This ground-breaking research led to the formation of Cochlear. The first Cochlear implant received FDA approval in 1989.
- Cochlear implants are considered a gold-standard, reliable way to restore hearing in patients with severe to profound hearing loss and has been an approved method of treatment since the mid-1980s
- Cochlear's products are supplied to more than 100 countries internationally. As of 2020, more than 500,000 registered Cochlear implants have been inserted worldwide. Sales revenue of Cochlear for FY20 was \$1,352M.

COMMIT TO HONESTY, INTEGRITY AND TRANSPARENCY IN ALL ASPECTS OF HMR FUNDING

PEER REVIEW: THE CORNERSTONE OF EXCELLENCE IN SCIENCE

Genuine progress in any field of endeavour can only be achieved through the advancement of novel ideas that subsequently withstand questioning and criticism from experts in that field. Deciding the merits of one research pursuit relative to another is a matter of judgement and debate; it requires a broad range of expertise, the absence of bias and adherence to consistent and transparent processes. It is not a task that should rest with a single person.

The honesty, integrity and transparency of this decision-making process is particularly important in the context of awarding research funding through competitive schemes. To achieve integrity, the international research community relies on a process of independent expert (or peer) review, where non-conflicted experts are solicited to provide constructive feedback on a research proposal and assess it against explicit criteria. The process of independent expert review ensures a level of rigour that provides confidence, for both the research sector and the general public, that funding is awarded based on merit.

ASMR POSITION

- All decisions to award public funds to research are only made following (i) an open call for applications, with clear assessment criteria, category descriptors and a realistic deadline, and (ii) a rigorous and transparent process of independent expert review of applications.
- Remove any political interference from the awarding of research funds.
- Increase transparency around how funding initiatives align with the MRFF Strategies and Priorities.

CONCLUSION

- Immediately double the NHMRC budget to sustain the HMR workforce and support innovation and discovery.
- HMR by reaching an aspirational benchmark of 3% of total health expenditure
- Protect honesty, integrity and transparency of research funding processes

"EMPOWERING RESEARCH FOR HEALTH AND WELL-BEING WITH A VISION FOR A HEALTHY AND EQUITABLE AUSTRALIA"

The ASMR has developed a sound, economic business case to protect Australians from the economic and health challenges facing our nation. The ASMR's recommendations will ensure the health and prosperity of our Nation and the consolidation of a world leading knowledge economy.

KEY RESOURCES

- Deloitte Access Economics. Australia's health and medical research workforce: expert people providing exceptional returns, 2016,
- ASMR Health and Medical Research Workforce Survey. Building knowledge, supporting innovation, 2016.
- Deloitte Access Economics. Extrapolated returns from investment in medical research future fund (MRFF), 2014.
- Deloitte Access Economics. Extrapolated Returns on Investment in NHMRC Medical Research, 2012.
- Deloitte Access Economics. Returns on NHMRC funded Research and Development, 2011.
- Deloitte Access Economics. Exceptional Returns The Value of Investing in Health R&D in Australia, 2008.
- Deloitte Access Economics. Exceptional Returns The Value of Investing in Health R&D in Australia, 2008.
- Access Economics. Exceptional Returns: The Value of Investing in Health R&D in Australia, 2003

These reports and other information can be found at www.asmr.org.au/factsheet-and-reports