Building an investment in our future

A proposal to deliver exceptional returns on investment to Australia by extending health & medical research funding

Australia is on a wave of knowledge and opportunity

In 1999, the Federal Government injected an additional $614 million into Australian health and medical research over a 5 year period, doubling the budget of the National Health and Medical Research Council. This has placed Australia on a wave of knowledge and opportunity

Our track record is excellent.

Australian health and medical researchers are world leaders. The outcomes of their research have been crucial in preventing disease and injury, and in providing better health for Australians. Here are just a few examples.

- **Depression** – Australian research led to the discovery of lithium, one of the major treatments for depression.
- **Cardiovascular disease** - Australian-led research showed that cholesterol-lowering treatment in people who have had a heart attack dramatically reduces the risk of another attack.
- **Cancer** – Australian researchers are world-leaders in cancer treatment, leading to the development of commonly used chemotherapy drugs. More recently, tailoring treatments to individual patients is being explored.
- **Children** – Australian researchers led the way in understanding and preventing the tragedy of spina bifida and Sudden Infant Death Syndrome. Death rates have reduced dramatically. Australian scientists also invented the first bionic ear (the Cochlear Implant) bringing sound to deaf children across the world.
- **New treatments** – Australian researchers discovered that bacteria cause stomach ulcers, which can now be treated with an antibiotic and they found an effective treatment for influenza – Relenza.

Australia still trails behind the world.

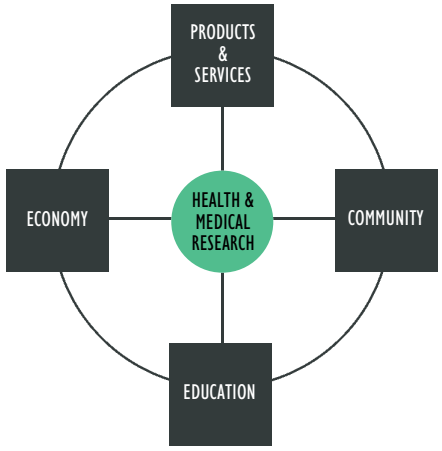
Currently, Australia ranks at the lower end of the OECD spectrum for health and medical research expenditure. Even after allowing for the 1999-2004 budget increase, Australia trails behind Canada, US, UK, Switzerland, France and Japan. Public sector funding of Australian health and medical research is actually declining by international standards.

It is crucial we stay on the wave of success.

The lessons learnt from funding Olympic sport show how crucial it is to stay on the wave of success by building on the investment.

- **Health threats** - to control threats (such as the obesity epidemic) that are poised to place Australia in financial crisis.
- **Aging population** – to fight chronic diseases such as dementia, arthritis, cardiovascular disease and cancer affecting our aging baby boomer population.[1]
- **Global threats** - to become self-sufficient in fighting emerging international health threats such as SARS.
- **Knowledge leaders** - to apply and exploit new knowledge for the benefit of all Australians and become global health leaders.

Returns from health R & D can be measured in better health and greater productivity, as well as direct and indirect economic returns.



PRODUCTS & SERVICES – for better health care, to prevent disease and build wealth
ECONOMY – lower health care costs, increased productivity, more jobs, spin-off applications, growth in biotechnology
EDUCATION – of smart, young Australians to lead the way in this knowledge-based industry
COMMUNITY – better health for all throughout life, ability to pursue aspirations, national pride

The Federal Government must show leadership in funding beyond 2004/5

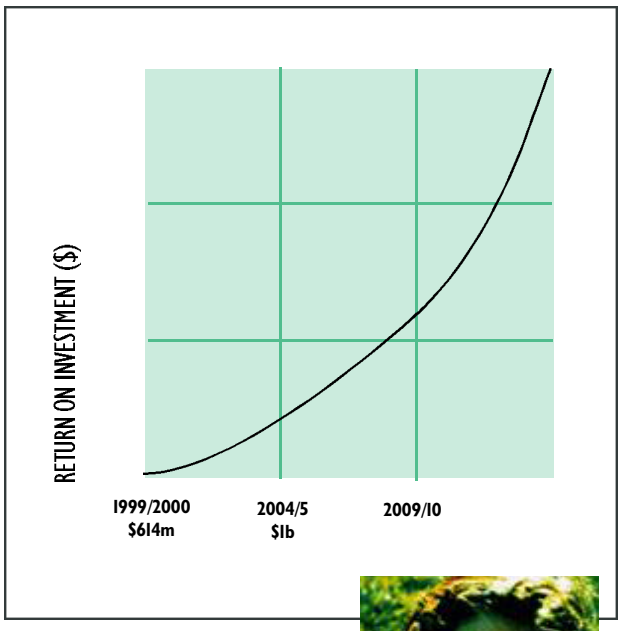
The Australian Society for Medical Research calls on the Federal Government to show leadership by committing to an additional $1 billion support for Australian health and medical research to be phased in over the five years beyond 2004/05.

Health R&D generates exceptional return on investment.

The returns from health research and development are so extraordinarily high that the pay-off from any strategic investment is enormous. Every dollar spent on health R&D returns at least $5 in national economic benefit.[2]

Returns for riding the health R&D wave beyond 2004/5.

Future R&D gains, even relatively small, have potentially stunning impacts. Health R&D that further reduced cancer deaths by just 20%, would be worth $184bn to Australians, more than total forecast Commonwealth spending in the current fiscal year. [3]



Successes since funding was doubled in 1999.

The returns from increased investment since 1999 have built on Australia's proud track record of outcomes in this vital enterprise.

- **Jobs** - Record numbers of new research fellows are being appointed and research stars are being attracted back to Australia (including Nobel Prize winner – Peter Doherty).
- **Industry** – Private funding of Australian health and medical research is increasing! New industry-research sector partnerships have been established.
- **Biotechnology** - The biotechnology sector ranks highest among Australian new technologies in terms of strength and rate of growth. The 14 health-related biotech companies established over the last 5 years gave a 65% return on investment. Australian biotech patents in the US have increased by double that of all US patents. Most of the research papers cited in our patent applications are from publicly funded institutions.
- **Global leadership** - 4% of the World Health Organisation collaborating centres are in Australia (more than ten times the expected number based on our population).
- **International funding** - 100% increase ($30 million) leveraged from the National Institutes of Health U.S.A. by NHMRC researchers from 2000 to 2002.[4]
- **Funding for health** – New funding schemes (Program Grants, Population Health Capacity Building Grants, Centres of Clinical Research Excellence) are tackling issues of major health importance.

Why is this so important?

Australia is riding on a wave, benefiting from standards of living never before experienced. For a country of Australia's size we have made enormous achievements in health R&D. Our task is to build on this to overcome the challenges of the future for ourselves and our children.

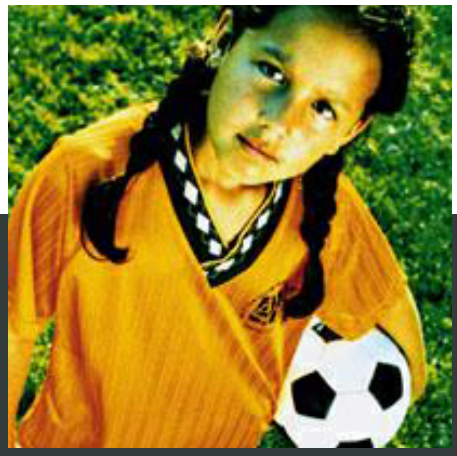
Every dollar invested in health and medical research has historically been recouped, in most cases, many times over. Today health and medical research represents an exceptional opportunity to invest in the future of Australia, with the prospect of exceptional returns.[5]

How should future investment be spent?

Health R&D must be seen as an investment in wellness with exceptional returns.

- Priorities need to be balanced with risk in our R&D portfolio, so that promising lines of attack against minor sources of mortality and morbidity are included as well as higher risk investigations against major ones.
- Partnerships with the private sector should be carefully and strategically nurtured, particularly with a view to attracting ongoing high level of funding growth from overseas sources.
- It is also vital that, due to 'critical mass' and serendipity, a broad coverage of research areas is maintained.

In the coming decades, the effects of demographic aging will place unprecedented demands on the Australian health system in particular in relation to chronic conditions of aging such as dementia, arthritis, cardiovascular disease and cancer. The projected direct and indirect costs of chronic illness are forecast to present a challenging burden whose greatest hope is new R&D discoveries.[6]



"One can be confident that we are only at the beginning of reaping the benefits of the truly impressive scientific progress achieved over the past 50 years. As a nation we must, however, support the continued funding of this research."
(Kelley, 2003)[7]

For more information

Contact the Australian Society for Medical Research.

Call: 02 9256 5450
Web: www.asmr.org.au
Email: asmr@world.net

1 'Intergenerational Report 2002/3', Commonwealth Government Budget Paper No.5
2, 3, 4, 5, 6, 7 'Exceptional Returns: The Value of Investing in Health R&D in Australia', Access Economics Report, September, 2003.

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BRINGING HEALTH TO LIFE