

Australian Medical Research and Innovation Five Year Strategy

Title: Using Psychological Science to Facilitate Change

Submitted by: Australian Psychological Society

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The Australian Psychological Society (APS) is the peak body and leading organisation for psychology in Australia, representing over 22,000 members. Psychologists comprise the largest non-medical health profession in Australia. Psychological science can provide many cost-effective answers, derived from cutting-edge science by Australian psychology researchers, to health, mental health and other societal problems.

The APS agrees that the Medical Research Future Fund (MRFF) should support the entire spectrum of medical and health research, from lab based research, relevant behavioural research, translational research, health services research to evidence-based policy. In particular, the MRFF can fill funding gaps in clinical and translational research from the laboratory to the bedside and from the clinic to policy.

Australia has an outstanding record in medical and health innovation, but there is a gap in attention to the need for psychological science, as many of these innovations require behaviour change to be implemented so as to achieve maximum outcomes for consumers, health practitioners and health services in a cost-effective and efficient manner.

A major challenge in any innovation system is to get practitioners, their clients, and health services to adopt new procedures and initiatives. These challenges apply to any system change, but are especially critical to address for those health affirming life style adjustments necessary to improve community health and thus reduce the burden of illness. Behavioural science has a proven track record in addressing these challenges, shown for example in the success of the Sun Smart and anti-smoking campaigns.

The Australian Psychological Society recommends that the Australian Medical Research and Innovation Five Year Strategy acknowledge the importance of psychological knowledge and skills for preventing physical and mental illness and for maintaining good health, and integrate an explicit focus on supporting psychological science-based research.

As a diverse and strongly evidence-based discipline, psychological science can make significant contributions to the MRFF strategic priority areas, specifically in relation to health technology, e-health, chronic disease, mental health, substance abuse, learning and development, and to health challenges for children, women, Aboriginal and Torres Strait Islander people and residents of rural and remote regions, and other people and communities with special needs.

Psychological science can help address the burden of physical disease. Most chronic diseases (e.g., heart disease, diabetes and cancer) are related to behaviour and lifestyle, the fundamental research subject matter and expertise of psychology. Cigarette smoking, alcohol consumption, obesity, sleep disturbance, many types of headaches and pain management amongst others are behaviour-based, and hence the subject of intensive research by psychologists.

Mental health related disorders also represent a huge burden of disease and psychologists are experts in researching all facets related to mental health. Behavioural research, more generally, is an important component of much basic research on mental health disorders and the behavioural adjustments for the individual, family, and social environment to mitigate or alleviate the sequelae of the condition.

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Psychological research provides the foundations for other cutting-edge innovative areas of science. One such area is the burgeoning field of Cognitive Neuroscience, which seeks to understand the brain mechanisms underlying simple and complex cognitive processes. This field often appears to be driven by new brain research tools but it rests on the foundation of psychological science and its subtle tools for analysing cognition. There is a significant need to keep supporting this basic research to maintain

the pace of innovation. This will be increasingly important for the success of, for example, neural prosthetics (such as the bionic eye and bionic ear), where cognitive training to exploit the new devices is the final stage of effective research translation.

It is further recommended that the Australian Medical Research and Innovation Five Year Strategy also include increased research on innovative models of healthcare and services that improve outcomes by integrating medical/biological and behavioural interventions, and that promote prevention and early intervention. Furthermore, the pursuit of excellence in evidence-based policy and its evaluation fits with our focus on funding gaps in the spectrum of clinical and translational research.

The substantial community benefit possible means that a systematic investment in such research would be a desirable focus for the MRFF.

The MRFF states the following as some of the strategic priorities - and psychology and psychological science have a clear and significant contribution to make in all of these areas:

<ul style="list-style-type: none">• e-Health• Health technology• Medicare• Rural health services• Women's health• Aboriginal and Torres Strait Islander health• Children's health• Learning and development	<ul style="list-style-type: none">• Chronic disease• Mental health• Alcohol, tobacco, drugs and substance abuse• Preventative health• Environmental health• Information Technology• Strategic Policy• Policy Development
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The MRFF also aims to offer the opportunity to strategically fund research and address national priorities in a cohesive and coordinated way. It complements existing medical research and innovation funding to improve health outcomes by distributing new funding in more diverse ways to support stronger partnerships between researchers, healthcare professionals, governments and the community.

It makes good sense to put behavioural factors at the centre of innovation in medical and health research. Psychologists bring wide-ranging expertise and capability, not only in the area of research but also in its translation to preventative and clinical service provision. In addition to the areas listed in the table above, psychologists' expertise includes health issues such as obesity, diabetes, and sleep; sensory systems research (e.g., the bionic eye); the interface between behaviour and genetics, and between the brain and cognitive function. As members of multidisciplinary research teams, psychologists contribute their statistical (e.g., computational modeling of complex datasets) and human factors expertise, as well as their knowledge of attention, learning, decision-making and risk taking, all of which are relevant to both basic science and the translation of research into clinical practice outcomes.

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Below are several specific suggestions of potential focus for the five-year medical research and innovation strategy:

- Clinical health researchers – bringing behavioural factors into “bedside” work, and into prevention and early intervention
- Facilitating “team” approaches to health priorities
- Collaboration between specific State and Territory health departments and hospitals to set up validation sites for the Academic Centres of Health Excellence. Consideration needs to be given to regional, as well as rural and remote services
- Support primary care human laboratories with expertise in specific areas (e.g., ageing, e-therapy, cancer) and undertake team-based translational research.

In summary, the APS suggests for the five-year strategy to address the challenges to the performance and delivery of outcomes from health and medical research and innovation and to fund research into areas where the expertise in psychological science and behavioural change is critical for positive health outcomes.