

# Response ID ANON-VUZH-JJPP-1

Submitted to MRFF Australian Medical Research and Innovation Strategy and Priorities consultation  
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## Introduction

### 1 Full name

Full Name:  
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### 2 Submission type

Organisation affiliated

### 3 Organisation type

Non-government

### 4 Organisation sub-type

Other

### 5 Residential state or territory

Victoria

## Strategy Consultation Questions

### 6 Could the current Strategy (2016-2021) be altered to better meet the purpose set out in the MRFF Act? If so, how?

Max 200 words :

### 7 What are the most critical current and future issues and factors impacting on the health system, including primary prevention, and on the health and medical research sector that the next Strategy needs to address?

Max 200 words :

### 8 Suggest options for how the next Strategy could address these critical issues and factors?

Max 200 words :

### 9 Given the new and significant impact of COVID-19 on health services and health research, how should the new Strategy address COVID-19 related topics and impacts?

Max 200 words :

## Priorities Consultation Questions

### 10 Could the current Priorities be improved to better address the requirements under the MRFF Act? If so, how? This could include consideration of what elements of the Priorities work well to guide MRFF investments and what could be improved for research translation and impact?

Max 200 words :

### 11 What are the most critical current and future issues for the health system and the health and medical research sector that the next Priorities need to address through research translation/implementation?

Max 200 words :

Approximately 90% of drugs found to be safe and effective in preclinical research, of which animal testing is currently mandatory, fail to make it to human clinical use.

As new technologies emerge, the range of human-relevant new approach methodologies continues to grow, which are more dependable and produce more accurate results than tests on species who differ from humans in their metabolism of toxins, absorption of chemicals, mechanisms of DNA repair and lifespan – all factors that have a profound effect on the efficacy of drugs.

The 2019 NHMRC Information Paper on the Implementation of the 3Rs in Australia identified barriers to implementation. 'All participant groups identified the lack of appropriate scientific or technological innovation as the primary barrier to implementation of the 3Rs. Other key barriers included comparability of data (identified by investigators) and insufficient funding available (identified by institutional representatives).'

HRA proposes an investment in non-animal research methods to address the failings of animal research and progress human relevant research with greater translational value.

12 Suggest options for how the next Priorities could address these critical issues?

Max 200 words :

Currently, Australian researchers interested in the field of alternatives are reliant on limited overseas funding and whilst there are some exciting projects underway in Australian, additional funding would facilitate more innovative research of this nature.

Researchers will 'follow the money' yet currently there is stagnation as no institution is taking responsibility for funding alternatives, despite a legislative obligation to only conduct research for which there is no alternative. If no funding is committed to develop, refine and validate alternatives, progress will remain stalled. Whilst it is argued that Australian researchers can rely on international alternatives data, a cultural change is needed to encourage adoption of alternatives and that can only be achieved through leadership, commitment and mentorship of Australian researchers, leading to generational change in research practices. Funding is a crucial first step.

Many of the new research technologies require expertise in areas such as bioengineering or computational systems and may fall outside the skills set of biomedical researchers; therefore, investment is required to develop this specialist workforce and infrastructure. Incentives could include scholarships, grants and sponsorships to attend relevant conferences and mentoring.

13 Given the new and significant impact of COVID-19 on health services and health research, how should the new priorities address COVID-19 related topics?

Max 200 words :