## Response ID ANON-QZ7X-DDAY-V

Submitted to Medical Research Future Fund consultation to inform the third Australian Medical Research and Innovation Priorities 2020-2022 Submitted on 2020-09-16 14:32:59

## Introduction

1 Full name

**Full Name:** 

**RACHEL SMITH** 

2 Submission type

Organisation affiliated

3 Organisation type

Non-government

4 Organisation sub-type

Other

5 Residential state or territory

Victoria

6 Do the current Priorities remain relevant in the contemporary environment for continuation for a further 12 months?

#### 250 word limit:

Yes

7 Should any of the Priorities be emphasised or de-emphasised for the next 12 month period?

## If you answered YES, please indicate what specific priorities and why? (max 250 words):

In relation to emphasised:

Mental health research (individual initiatives) due to the COVID-19 pandemic and restrictions which will have long lasting impact on mental health.

Global Health and Health Security and One Health (Strategic and International Horizons) - measures to prevent future pandemics are a clear priority.

Drug repurposing (priority trials and translation) has been shown to be effective during the COVID-19 pandemic and could be more widely considered, particularly with the opportunity of the national drug discovery centre.

HRA is particularly supportive of the stem cell therapies mission and genomics health future mission as human-relevant technologies.

If you answered NO, please indicate what specific priorities and why? (max 250):

8 Are there any unaddressed gaps in knowledge, capacity and effort across the healthcare continuum and research pipeline that would warrant changes to the Priorities?

# If you identified a gap, please explain how it should be addressed in the 2020-2022 MRFF Priorities (max 250 words):

In relation to researcher exchange and development within industry:

There are very few incentives, or financial resources, available to researchers to pursue alternatives research. By 'alternatives', HRA is referring to the many in-vitro, in-silico methods available, as detailed in the report 'Better Ways to Do Research'.

https://www.humaneresearch.org.au/wp-content/uploads/2020/06/BetterWaysToDoResearch.pdf

Many of these technologies require expertise in 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.

It is therefore apparent that an urgent need exists to provide these incentives to Australian researchers to be at the forefront in these escalating and promising areas of research.

Research and biotech organisations around the world are developing technologies such as organs-on- chips and it is extremely important that the Australian health and medical research industry collaborates on the validation of new methods and technologies. Incentives and funding to researchers to attend conferences solely for alternatives collaboration should be awarded.

If you identified a second gap please explain how it needs to be addressed in the 2020-2022 MRFF Priorities (max 250 words):

In relation to national critical research infrastructure:

It is widely accepted that animal research incurs the high ongoing costs of purchasing, caring for and disposing of animals. Alternatives are more cost efficient, as well as more effective. However, as with any transitioning industry, there are costs associated with training staff in new methods, and any potential investment in infrastructure or technology, dependent on the alternative method that it to be used. However, any initial costs outlaid can be returned over the long term. For example, tissue culture requires a high infrastructure and high level of training yet automated processes can test thousands of substances in parallel.

## 9 Is there an opportunity to consolidate the Priorities for the remaining twelve months of the Strategy?

## Max 250 words:

## 10 Do you have any additional comments in regards to the Priorities for 2020-2022?

#### May 250 words

HRA proposes that research data, which includes animal- based research data, should be shared in a timely manner to prevent unnecessary duplication in research and duplication of resources. This is particularly crucial for animal-based research to prevent unnecessary repetition of research and to adhere to the 3Rs,

We present that research funding allocated by the MRFF should be broken down into animal research/non animal research to enable measurement of productivity and impact of animal-based research on the health in the wider community. Currently, this breakdown is not provided on request from HRA.

## 11 Do you consent to components of your submission being made publicly available?

Yes