

17 June 2020

Mr Aaron Harper MP Member for Thuringowa Chair, Health, Communities, Disability Services and Domestic and Family Violence Prevention Committee Parliament House Cnr George and Alice Streets Brisbane QLD 4000

Health@parliament.qld.gov.au

Dear Mr Harper,

# RE: Inquiry into the Queensland Government's health-related response to COVID-19

Thank you for the opportunity to make a written submission to the Health, Communities, Disability Services and Domestic and Family Violence Prevention Committee's inquiry into the Queensland Government's health-related response to COVID-19.

# About QIMR Berghofer

QIMR Berghofer Medical Research Institute is Queensland's medical research institute – a statutory authority established in 1945 to investigate infectious and tropical diseases that were of particular relevance to the people of Queensland.

Over the years, the Institute has maintained its leading role in infectious disease research. However, the Institute's research program has expanded and evolved to remain relevant to the needs of Queensland. Infectious Diseases is now one of the Institute's four research programs, the others being Cancer, Mental Health and Chronic Disorders.

In making this submission, the Institute draws on its rich tradition of infectious diseases research, as well as its expertise across the breadth of its four research programs.

### Effectiveness of the Queensland public health response

Overall, the Institute believes the Queensland Government's health-related response to COVID-19 has been outstanding and the State's public health authorities should be congratulated for their achievements. The numbers speak for themselves: at the time of writing there were only six active cases in Queensland, no new infections for several days and very few new infections for the last two weeks.

This result is no accident: it is the result of strong action taken to protect public health, including:

- border closures
- travel restrictions
- quarantining of returning travelers
- self-isolation of suspected cases
- testing
- thorough and swift contact tracing
- social distancing measures
- personal hygiene measures (e.g. cough etiquette, hand washing, etc.)
- clear communication about directives and regulations
- a strong focus on prevention.

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#### Lessons learned

The public health response to the emergence of COVID-19 was, by necessity, urgent and based on available, but incomplete, information. Of course, lessons have been learned that will assist in the response to future outbreaks of disease.

In January, very early in the pandemic, there was minimal information for workplaces about people returning from China. The risks posed by those returning was unclear, as were the provisions workplaces should have put in place to minimise risk to the returnee, other staff, clients/customers and the business as a whole.

Also early in the pandemic, the criteria for testing were very tight. Again, this was understandable given the uncertainty about the disease incubation period and the possibility of asymptomatic transmission, and concerns over the availability of testing kits and the capacity of the public health system to handle testing. Now that the initial phase of the pandemic has been negotiated, it will be important to review if the testing criteria were too tight, or targeted at the wrong people.

While the infection curve has been flattened, there is no room for complacency, especially as the restrictions on movement, public gathering and social distancing are progressively relaxed.

### **QIMR Berghofer COVID-19 priority research**

As the COVID-19 threat emerged, QIMR Berghofer researchers joined the global fight against the pandemic. The Institute boasts Queensland's most advanced biosecure PC3 facility, suitable for containing, growing and experimenting on dangerous airborne respiratory viruses such as SARS-CoV-2, the virus that causes COVID-19. This facility was rapidly repurposed to work on the virus and is the centerpiece of the Institute's COVID-19 program.

The Institute has reallocated resources to the COVID-19 challenge and put out a call to its donors and supporters for funds for COVID-19 research. To date, more than \$1.5 million has been received or pledged, allowing the Institute to begin work on nine of 14 priority COVID-19 research projects. These include:

- a trial of the efficacy of the drug tocilizumab on critically ill patients with COVID-19
- a human-challenge trial of the NL63 virus, a coronavirus related to the COVID-19 virus
- biobanking COVID-19 samples and searching for novel biomarkers
- development of cellular immunotherapies for COVID-19
- investigating links between COVID-19 and cardiac disease
- testing monoamine oxidase inhibitors to reduce the virus's ability to infect cells
- investigating how COVID-19 influences the treatment of cancer patients
- studying the genetics of COVID-19
- redevelopment of the acclaimed 'Magic glasses' animated video to promote hygiene messages to children.

#### **Opportunities**

With the passing of the initial wave of the pandemic in Queensland, the data collected should be thoroughly analysed to inform responses to the next pandemic. QIMR Berghofer has expertise in public health, including epidemiology and health economics, that would be invaluable in this work.

The research response to COVID-19 was, by necessity, extremely rapid. There has been very strong collaboration between hospitals, clinicians, researchers and research institutes. Approvals for research and clinical trials have been expedited. Could this be the 'new normal'?

The nature of the evolution and transmission of disease, and the highly interconnected modern world, means future pandemics are almost certain. We do not know when the next pandemic will occur, or what it will cost in human and economic terms. But we do know it will occur and there will be a heavy cost.

Any investment in medical research should be seen as an investment that will reduce the cost of future pandemics. Queensland has the opportunity to build on QIMR Berghofer's 75-year history of research into infectious diseases, scientific expertise and research infrastructure, to meet the challenge of emerging infectious diseases.

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### **Centre for Infectious Diseases Control and Pandemic Preparedness**

QIMR Berghofer is the natural home for a new 'Centre for Infectious Diseases Control and Pandemic Preparedness'.

This Centre would draw together QIMR Berghofer's existing strengths in infectious diseases, immunology, epidemiology and health economics. It would collaborate with other Queensland-based, Australian and international research institutions, including the University of Queensland, Queensland University of Technology, James Cook University, CSIRO and others, and it would recruit world-class experts to ensure Queensland's response to the next pandemic will be immediate and the solutions fast-tracked.

Such a Centre would require appropriate investment from the Queensland Government but would be in a position to leverage any such investment many times over through successful applications to the National Health and Medical Research Council (NHMRC), Medical Research Future Fund (MRFF), as well as national and international funding agencies and philanthropic foundations.

Current Queensland Government funding to QIMR Berghofer is highly leveraged, with about \$5 in external funding attracted for every \$1 invested by the Queensland Government. There is no reason to assume that a similar multiplier would not result from state government investment in this Centre.

#### Conclusion

I trust this information is of assistance. I would be very happy to provide further information or answer any questions the Committee might have.

Yours sincerely,

**Professor Fabienne Mackay** PhD FAHMS Director and CEO