It is with great pleasure and pride that I am able to send you our COVID-19 Appeal Impact Report.

This report has been compiled on behalf of many scientists dedicated to tackling this virus, to show their heartfelt appreciation for your generous support since we joined the fight in April, and to show you how your wonderful gift has been busily employed within their specific research.

Thanks to individuals like yourself we can operate in this fast-changing global environment and create a tangible, positive impact with your gift.

It was very difficult to select just a handful of COVID-19 research projects to showcase in our Donor Impact Report, and I look forward to being able to share many more in 2021 as we start to release results of studies and trials.

Thanks in part to the wonderful momentum you created this year, I am delighted to let you know that our researchers have recently received a $5 million dollar boost to further their understanding of COVID-19 from the Queensland Government. To be supported and recognised by the government is uplifting news for our researchers, and indicates the quality and credibility of the work they are doing. It will further help us accelerate our existing research, and also enable us to kickstart some new projects.

As our steadfast supporters, you can feel very proud of your role in bringing this research to the forefront. More details of what exciting research we can now hope to achieve with this funding is detailed within this report.

I offer my heartfelt gratitude for your continued support of the scientific community at QIMR Berghofer Medical Research Institute.

I look forward to keeping you updated on the impact of your support.

Yours sincerely,

Professor Fabienne Mackay
Director and CEO
QIMR Berghofer
Look at what your gift achieved:

Your donation helped establish a new purpose-built high biosecurity PC3 lab to experiment on SARS-CoV-2, allowing us to evaluate drugs and vaccines.

Here are just a few examples of your gift in action in the PC3 lab:

**Establishment of a COVID-19 laboratory***:

- $10,000: New decontamination equipment
- $40,000: Two freezers set to -80C
- $20,000: Two microscopes with camera and monitor
- $800: Containment chamber for transporting SARS-CoV-2 cultures

**Maintenance of the facility over one year***:

- $10,000: Air pressure containment testing
- $25,000: Personal Protective Equipment (gloves, masks, gowns) and disposals
- $30,000: Annual decontamination of COVID-19 suites
- $70,000: Building Management System (BMS) maintenance and developments

*The above figures provide an example of a selection of approximate costs of establishing a COVID-19 laboratory and procuring specialist technologies, and typical costs of maintaining the facility over one year.
Attacking the virus from all sides

We are expanding and fast-tracking our research into COVID-19 thanks to your wonderful support, and with the recent boost of a $5 million funding injection from the Queensland Government.

The investment has allowed 5 existing, priority research projects to accelerate to the next stage, and will allow another 4 new projects to start. None of these would have been possible without the initial generosity and support of individuals like you!

<table>
<thead>
<tr>
<th>Project Title</th>
<th>Description</th>
<th>Status</th>
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<tbody>
<tr>
<td>Immunity in COVID-19</td>
<td>This research team has already developed a way of testing whether or not COVID-19 patients’ immune systems are gearing up to fight the SARS-CoV-2 virus. The State Government funding will allow the team to now work towards developing a cellular immunotherapy, which they hope would reduce death rates among severe COVID-19 patients.</td>
<td>Underway</td>
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<tr>
<td>Discovery of drugs for treating cardiac dysfunction</td>
<td>To date the team have discovered the biology underpinning the heart problems that occur in two thirds of COVID-19 patients, and have discovered a class of drugs that could potentially be rapidly repurposed to prevent this damage. The funding will allow this research to progress to clinical trial to determine if this class of drugs does indeed prevent heart injury during acute infection with COVID-19, and whether it can treat heart injury in patients with COVID-19.</td>
<td>Underway</td>
</tr>
<tr>
<td>First-in-class drugs to prevent severe stage COVID-19</td>
<td>Two programs of research are underway. One project will continue to work towards developing a new anti-viral drug that blocks the SARS-CoV-2 virus from infecting cells in the airways. The second project will continue to test an existing, approved anti-viral drug in the hope that it could be repurposed to prevent human cells from becoming infected with the SARS-CoV-2 virus.</td>
<td>Underway</td>
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<tr>
<td>Queensland-specific modelling of the pandemic</td>
<td>The State Government’s funding will allow the team to continue work to develop a modelling tool to predict how best to control and prevent any potential future outbreaks of COVID-19 in Queensland. This tool would help inform Queensland Government policy, and the best strategy for the rollout of a vaccine.</td>
<td>Underway</td>
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<tr>
<td>Mental health impacts in Queensland community</td>
<td>We are investigating the mental health impacts in Queensland from the COVID-19 pandemic, and the pandemic control measures.</td>
<td>Underway</td>
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<tr>
<td>Inflammation in the brain due to COVID-19</td>
<td>This project will use brain organoids (miniature brains in a Petri dish) to identify existing, approved drugs that could help protect the brain against the ‘cytokine storm’ (acute inflammation) that occurs in COVID-19 patients.</td>
<td>Ready to start</td>
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<tr>
<td>The role of Ferritin in severe COVID-19 cases</td>
<td>The team will investigate whether the molecule Ferritin promotes the immune system’s inflammatory response in severe COVID-19 cases. The team will also evaluate whether existing, approved drugs can help to block Ferritin (and therefore prevent the inflammatory response it contributes to). They will do this using heart and lung organoids (mini organs in a Petri dish).</td>
<td>Ready to start</td>
</tr>
<tr>
<td>Virus-induced inflammation in the blood brain barrier</td>
<td>The team will try to understand how COVID-19 infection impacts on the blood-brain barrier, as well as identify treatments that could help protect and/or restore the function of the blood-brain barrier, during virus-induced inflammation.</td>
<td>Ready to start</td>
</tr>
<tr>
<td>Establish the Queensland Alliance for the Control of Infectious Diseases (QACID).</td>
<td>QACID will identify research capabilities and capacity in Queensland, will develop mechanisms for coordinating between key researchers/institutions in Queensland, and will be ready to help support future outbreaks of infectious diseases.</td>
<td>Ready to start</td>
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For the full list of QIMR Berghofer COVID-19 research and trials, visit our website: www.qimrberghofer.edu.au/COVID-19
YOU GAVE US

$1.9 million for priority COVID-19 research from Australian individuals, with support across the country.

1337 gifts received from 1296 donors – some people gave twice!

317 people gave to the Institute for the first time.

80 donors came back to us...for one individual donor, his last gift was 18 years ago – thank you and welcome back to our community!

The Queensland Government gave the COVID-19 projects a $5 million funding injection in December 2020.

With your continued support, QIMR Berghofer will continue to play an essential role on the world stage with our ground-breaking research and collaborations.

Total number of infections worldwide
74,087,090

Deaths globally
1,646,687

COVID-19 Worldwide Statistics

1 These figures are approximate and based on results on a specific COVID-19 emergency donor appeal in 2020, as well as special purpose gifts from major supporters of the Institute.