

Your weekly review on COVID-related research



# **International Research Review**

### T cell immunity appears to play an important role in long lasting protection against SARS-CoV-2

Scientists are still trying to actively investigate the immune responses to SARS-CoV-2 infection. While it has been established that both cellular and humoral immunity are involved, the extent to which either contributes to long-lasting protection is not well defined. A recent study by Bonifacius et al. published in Immunity aims to address these critical questions.

**Read Summary** 

# Heading in the right direction: a comparison of COVID-19 scenarios

In this blog post, we present two studies representing opposite scenarios. One study in Brazil found that up to 66% of the population may have been infected at one point in the pandemic, with levels of antibodies decreasing over time. On the other hand, there is promising news from Israel where vaccination against COVID-19 is helping to reduce the number of cases and hospitalizations.

# Close relatives to SARS-CoV-2 found in bats across a large region of Asia

The leading theory for the origin of the current pandemic virus is that a virus crossed over from a bat into another animal quite some time ago and that there, it mutated into a variant that could now infect humans. Bats harbouring viruses similar to SARS-CoV-2 have been found in Thailand. In this blog post, we discuss these recent findings, why bats are extraordinarily good at carrying assorted viruses and the impact of animal surveillance efforts in outbreak prevention.

**Read Summary** 



## Spotlight on CITF-funded Research

### Two studies to determine the impact of COVID-19 vaccines in residents of long-term care facilities in BC and Alberta

Two studies supported by the CITF have begun in BC and Alberta investigating how the immune systems of elderly residents and staff in longterm care facilities respond to COVID-19 infection and vaccination. Researchers from UBC, Providence Health Care, SFU, and the BC Centre for Excellence in HIV/AIDS will also assess the viral, immunological and social factors that have contributed to COVID-19 outbreaks in long-term care facilities. Meanwhile the study out of the University of Alberta and Alberta Health Services is also monitoring sewage wastewater as to develop an early warning system to detect and monitor outbreaks in long-term care facilities.

### Two studies look at SARS-CoV-2 transmission and immunity among students and staff on university campuses

While many university classes across Canada are being held online, some programs require in-person learning and access to on- and off-campus research and learning facilities. The CITF is supporting two research studies looking at SARS-CoV-2 transmission and immunity on university campuses. Researchers at the University of Waterloo will investigate the immune response and how the virus affects people of different sexes, blood types, as well as age and ethnic groups. Researchers from Queen's University will investigate students from the Faculty of Health Sciences to identify asymptomatic carriers and to evaluate antibody levels over a eight months to see whether they can be linked to immunity.

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# Vaccination should be mandatory for health care workers: article

Provincial and territorial governments in Canada should instate mandatory COVID-19 vaccination for health care workers that cut across all public and private settings, according to an article in the Canadian Medical Association Journal. In the article, Dr. Kumanan Wilson and colleagues from the University of Ottawa conclude such rules would also survive a Charter challenge. This work is part of a research project funded by the Government of Canada through its COVID-19 Immunity Task Force, as well as by the Canadian Institutes for Health Research.

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# **Request for Applications**

## TODAY is the deadline to submit proposals for research assessing the safety and effectiveness of current and future SARS-CoV-2 vaccines

In this fast-tracked process, Canada's Vaccine Surveillance Reference Group, in partnership with the CITF, and with the support of the Public Health Agency of Canada, is inviting the Canadian research community to apply for funding to assess the safety and effectiveness of current and future SARS-CoV-2 vaccines deployed in Canada. The deadline is **today!** 

Learn More



## Share your Research

Have a publication we should review or know about? Please share with us at research@covid19immunitytaskforce.ca