

# Spotlight on CITF-FUNDED RESEARCH



### **CITF Events**



Seminar Series Research Results & Implications

> The Omicron tsunami



### Thank you for making our eighth *Research Results & Implications* seminar such a success

Nearly 400 people attended our seminar, *The Omicron tsunami*, on June 23.

Thanks to all who participated and a big **thank you** to our presenters: **Dr. David Buckeridge** of McGill University; **Harriet Ware** of SeroTracker (University of Calgary); **Dr. Ciriaco Piccirillo** of McGill University; **Dr. Michael Grant** of Memorial University of Newfoundland; and **Dr. Catherine**  Hankins, Co-Chair of the COVID-19 Immunity Task Force.

See the presentation

Watch the video



### **CITF-Funded Research Results**

### Kidney transplant recipients do not produce as robust an antibody response to COVID-19 vaccines as healthy individuals

A preprint, not yet peer-reviewed, CITF-funded study found that only 45% of kidney transplant recipients (KTRs) developed Omicron-specific neutralizing antibodies one month following a third vaccine dose. Fewer KTRs developed an antibody response to Omicron as compared with their response to the original SARS-CoV-2 virus, or Delta and Beta variants. In contrast, 100% of those in the non-KTR control group developed neutralizing antibodies, although in this group, too, the response to Omicron was several times lower than for other variants.

**Read more** 

### Using an *in vivo* model to ascertain how COVID-19 convalescent plasma therapy may be more effective to treat patients

Convalescent plasma therapy (CPT), which entails using plasma containing anti-SARS-CoV-2 antibodies taken from recovered individuals, has achieved mixed results in treating aged or immunosuppressed individuals suffering from severe COVID-19. In a preprint, not yet peer-reviewed, CITF-funded researcher Dr. Andrés Finzi (Université de Montréal) and colleagues used a murine (or mouse) *in vivo* model to ascertain the mechanisms by which COVID-19 convalescent plasma (CCPs) may be more effective.

## Research finds that frailty is a critical factor in mortality from COVID-19

A recent CITF-funded study published in the *Canadian Geriatrics Journal* concluded that frailty is a critical clinical factor in predicting outcomes of COVID-19 among a group of COVID-19 patients with a median age of 71. Both frailty and older age correlated with higher rates of mortality in this population.

**Read more** 

### Whole genome analysis technique to speed up SARS-CoV-2 sequencing

A recent CITF-funded study published in the *Journal of Applied Laboratory Medicine* presents a whole-genome sequencing technique that would enable clinical laboratories and public health teams to promptly investigate potential outbreaks of COVID-19, cases of SARS-CoV-2 re-infection or postvaccination breakthroughs, and to monitor for new or emerging variants of concern.

**Read more** 



### **Preprint to Publication**

### COVID-19's toll on South Asians living in Ontario

Nearly a quarter (23.6%) of a sample of South Asians living primarily in Ontario's Peel Region had evidence of prior infection with SARS-CoV-2 by the end of the pandemic's third wave in July 2021, according to a CITF-funded study published in the *Canadian Medical Association Journal (Open)*. The paper expands on the factors that render this region a hot spot for COVID-19, including the high concentration of people whose jobs required that they work in person during the pandemic and high number who live in multigenerational family homes.

**Read more** 



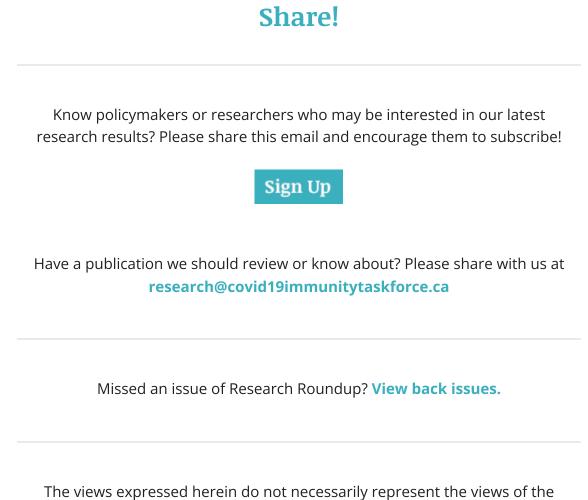
### Infographics

### Seroprevalence and risk factors for SARS-CoV-2 among incarcerated adult men in Quebec

As part of their knowledge translation efforts, CITF-funded researcher Dr. Nadine Kronfli and colleagues created a "Thank you" card that was circulated to 24 community organizations in the Montreal area to acknowledge participants for their contribution to her research study. The infographic illustrates their findings about COVID-19 infection among incarcerated men in Quebec. During the pre-Omicron period, seroprevalence ranged from 15% to 27% within provincial institutions. Factors that were associated with increased seroprevalence included: longer amount of time spent in prison, shared meal consumption, employment during incarceration, and being incarcerated in a facility that recently had a COVID-19 outbreak.

#### **Read more**





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