



**OMNI** | **RÉUNIS**

One Health Modelling Network  
for Emerging Infections

Réseau une seule santé sur la  
modélisation des infections

# OMNI-REUNIS Super-Spreader Seminar Series

These seminar series is intended to provide faculty members, OMNI-RÉUNIS affiliates and HQPs a platform to present their research, share experiences and foster collaboration among OMNI-RÉUNIS, the Emerging Infectious Disease Modelling (EIDM) networks, and the scientific community.

## A RETROSPECTIVE MODELLING ANALYSIS ON THE EFFECTS OF CONTROL MEASURES ON SARS-COV-2 TRANSMISSION IN CANADA



Zoom (Virtual Seminar)



Thursday, Feb 15, 2024



11:00 am-12:00 pm EDT

**REGISTER HERE**

### MEET THE PRESENTER

Tanya Philippsen is an Interdisciplinary Ph.D. student at the University of Victoria under the joint supervision of Dr. Junling Ma, Dr. Matthew Little, and Dr. Pauline van den Driessche. Her current research area is at the intersection of public health and mathematical modelling of infectious diseases, with a particular focus on emerging/re-emerging diseases, public health policy, and the social determinants of health.



**TANYA PHILIPPSEN**

Funded &  
Supported by:



Conseil de recherches  
en sciences naturelles et  
en génie du Canada



Public Health  
Agency of Canada

Agence de la santé  
publique du Canada

science



Follow us:



omni-reunis.ca



@OMNI\_REUNIS



@OMNI-REUNIS



@OMNI-REUNIS



4700 Keele St.  
Toronto, ON  
M3J 1P3 CA



**OMNI** | **RÉUNIS**

One Health Modelling Network  
for Emerging Infections

Réseau une seule santé sur la  
modélisation des infections

# OMNI-REUNIS Super-Spreader Seminar Series

These seminar series is intended to provide faculty members, OMNI-RÉUNIS affiliates and HQPs a platform to present their research, share experiences and foster collaboration among OMNI-RÉUNIS, the Emerging Infectious Disease Modelling (EIDM) networks, and the scientific community.

## SEMINAR TITLE AND ABSTRACT

### A RETROSPECTIVE MODELLING ANALYSIS ON THE EFFECTS OF CONTROL MEASURES ON SARS-COV-2 TRANSMISSION IN CANADA

We consider the SARS-CoV-2 pandemic between March 2020 to February 2021 in three Canadian regions: Greater Vancouver, Greater Toronto, and Calgary. This period was dominated by the wild-type strain of SARS-CoV-2 and occurred prior to widespread vaccination roll-out. To assess the effectiveness of age-specific control measures on viral transmission, we construct a Susceptible-Exposed-Infectious-Recovered (SEIR) deterministic model with two age groups: youth (0-19 years), and adults (20+ years). We fit this model to SARS-CoV-2 case data over sequential time frames that capture the changes in public health control measures in each region. The age-specific control parameters of the fitted model are then adjusted to simulate alternative policy scenarios and assess their relative potential effectiveness in reducing the Fall/Winter epidemic peaks.



Zoom (Virtual Seminar)



Thursday, Feb 15, 2024



11:00 am-12:00 pm EDT

**REGISTER HERE**



Funded &  
Supported by:



Conseil de recherches  
en sciences naturelles et  
en génie du Canada



Public Health  
Agency of Canada

Agence de la santé  
publique du Canada

science



Follow us:



omni-reunis.ca



@OMNI\_REUNIS



@OMNI-REUNIS



@OMNI-REUNIS



4700 Keele St.  
Toronto, ON  
M3J 1P3 CA