Dr. Caroline Colijn works at the interface of mathematics, evolution, infection and public health, and leads the MAGPIE research group at Simon Fraser University. She moved from Imperial College London to join SFU's Mathematics Department in 2018 as a Canada 150 Research Chair in Mathematics for Infection, Evolution and Public Health. She has broad interests in applications of mathematics to questions in evolution and public health, and has been working with public health throughout the pandemic on a range of modelling and estimation topics. She is a co-director of the Canadian Network for Modelling Infectious Diseases (CANMOD).

Dr. Sharmistha Mishra is an infectious disease epidemiologist and physician at University of Toronto and St. Michael’s Hospital. Her lab’s work is centered around the causes and consequences of heterogeneity in onward transmission risks in the context of HIV and other sexually transmitted infections. Her lab’s work on COVID-19 has similarly focused on structural and social inequalities and networks as mechanistic determinants of transmission risks, and how mechanistic and data-driven clarity around local transmission dynamics could be harnessed for a more specific (prioritized and tailored) public health response. Her field experience includes data-driven outbreak management and program/implementation science in diverse epidemiologic and health-system contexts. She holds a Tier 2 Canada Research Chair in Mathematical Modeling and Program Science.
**Transformative Disaster Risk Governance Webinar Series**

**Benefits of modelling and data linkage to inform pandemic inequality and genomic epidemiology**

**Panelists**

**Dr. James Orbinski** is a professor and the inaugural Director of York University's Dahdaleh Institute for Global Health Research. As a medical doctor, a humanitarian practitioner and advocate, a best-selling author, and a leading scholar in global health, Dr. Orbinski believes in actively engaging and shaping our world so that it is more just, fair and humane. A champion of health and humanitarianism throughout his career, Dr. Orbinski has extensive leadership, advocacy, and research experience in global health. He has worked providing medical humanitarian relief in situations of war, famine, epidemic disease and genocide with Médecins Sans Frontières /Doctors Without Borders (MSF). He was elected International President of MSF from 1998-2001, accepted the Nobel Peace Prize awarded to MSF in 1999.

![Dr. James Orbinski](image)

**Dr. Yvonne Su** is an Assistant Professor in the Department of Equity Studies at York University, Canada. Dr. Su is a specialist on forced migration, climate change-induced displacement, queer migration and poverty and inequality. Dr. Su currently holds four SSHRC grants to explore the topics of forced displacement and queer migration. She holds a PhD from the University of Guelph and a Masters from the University of Oxford.

![Dr. Yvonne Su](image)
Dr. Jianhong Wu is the founding Director of the Laboratory for Industrial and Applied Mathematics at York University, and the Scientific Director of the Advanced Disaster, Emergency and Rapid Response Simulation initiative (ADERSIM) at York University. He holds the life-time title of University Distinguished Research Professor, and has been a senior Canada Research Chair in Industrial and Applied Mathematics at York University since 2001. In 2017, he was awarded the NSERC/Sanofi Industrial Research Chair in Vaccine Mathematics, Modelling and Manufacturing.

Agenda

3:30   Jianhong Wu  Introduction
3:35   Caroline Colijn  Genomic epidemiology of SARS-CoV-2 and the benefits of data linkage
4:05   Sharmistha Mishra  How might structural and social inequalities have shaped the transmission dynamics of SARS-CoV-2?
4:35   Panel discussion
5:00   Jianhong Wu  Closing remarks

Date/Time and Location

Oct 13, 2021
3:30 pm-5:00 pm EDT, Online.

Registration

Please register here.

Contact:
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