Canadian Centre for Disease Modelling

Distinguished Lecture Series

Modeling and Control of Infectious Diseases

Epidemiological parameters and mathematical models of COVID-19

Dr. Daihai He

Hong Kong Polytechnic University

Thursday October 15, 2020

10:30 am – 11:30 am (Eastern Time)

Webinar: Connect at https://yorku.zoom.us/j/99459742714?pwd=cTA2Unp3VXR5SnozWTk4Vktxa24rdz09
Also see announcement at cdm.yorku.ca

Abstract: I will review some results of my team on the epidemiology of the COVID-19, including the estimation of key epidemiological parameters, the impact of the varying reporting rate on the basic reproductive number estimation, the impact of isolation measures on the generation interval estimation, and the climate impact on the initial growth rate in China, the decreased case-fatality-rate in the second wave, the ratio of COVID-19 and influenza cases among influenza-like-illness, and mathematical models of COVID-19.

Bio: Dr. Daihai He is an associate professor in the Department of Applied Mathematics of the Hong Kong Polytechnic University. He received a Ph.D. in Engineering from Xi'an Jiaotong University in 1999 and a Ph.D. in Mathematics from McMaster University in Canada in 2006. His research interests are infectious disease modeling and statistical analysis of data. His work on the modeling of yellow fever in Angola Africa won the best scientific contribution paper of the International Society for Disease Surveillance in 2018 (second place). His work on COVID-19 led to four highly cited papers and two hot papers.

Panelists: Julien Arino (U Manitoba), Jacques Belair (U Montreal), Jane Heffernan (YorkU), Jude Kong (York U), Michael Li (U Alberta), Junling Ma (U Victoria) James Watmough (U NewBrunswick), Huaiping Zhu (York U)

Organizers: Canadian Centre for Disease Modeling (CCDM)

Contact: Jude Kong and Elena Aruffo <cdmdesk@yorku.ca>

Supported by:

CDM Centre for Disease Modelling | CMM Centre de la modélisation des maladies

YORK UNIVERSITÉ UNIVERSITY

Society for Mathematical Biology

FIELDS

CRM

PIMS

AARMS

CAIMS SCMAI