Computational and Mathematical Population Dynamics 5, May 19-24, 2019
Proposal for Mini-Symposium "Mathematical Epidemiology"

1. Organizer:

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2. Mini-Symposium Title/Description/Schedule:

"*Mathematical Epidemiology*"

Brief Description: Mathematical modeling and approaches have played an important role in understanding the spread and control of infectious diseases in populations. The aims are to unravel important factors involved in both large epidemic outbreaks and in low-level maintenance for a wide variety of pathogens, and to provide key insights into policies for vaccination, quarantine and treatment. This mini-symposium will gather researchers with broad interests in mathematical investigations of infectious disease models and their applications to public health problems.

Schedule: We would like to request two scheduling blocks (8 speakers in total), if possible. At the moment we have confirmed 6 speakers, while the other 2 to be confirmed.

3. List of speakers

Name	**Institution**	**Tentative Title**
Julien Arino	University of Manitoba	*TBA*
Fred Brauer	University of British Columbia	*A singular perturbation approach to vector-borne epidemic models*
Jing Chen	Nova Southeastern University	*Analysis of a dengue model with vertical transmission*
Hongbin Guo	Public Health Agency of Canada	*Global stability for epidemiological models with multiple stage structure and multiple age structure*
Xi Huo	University of Miami	*A conceptual model for optimizing dengue vaccine coverage*
Pauline van den Driessche	University of Victoria	*Demographic population cycles and R_0 in discrete-time epidemic models*
Xueying Wang	Washington State University	*Traveling waves for a class of diffusive disease-transmission models with network structures*
Gail Wolkowicz	McMaster University	*Pest control by generalist parasitoids*