



Clinic on Meaningful Modeling of Epidemiological Data

May 27 – June 7, 2019

African Institute of Mathematical Sciences, South Africa

Program Information

Overview

This 2-week modeling clinic will bring together graduate students, postdoctoral scientists, and other researchers, with the goal of engaging the participants in epidemiological modeling projects that use data to grapple with practical questions in a meaningful way.

The Clinic will consist of a series of interactive lectures and tutorials that will guide participants through the process of data-driven epidemiological modeling. Various modeling paradigms will be discussed, and participants will be given guidance regarding the appropriate use of models to address their own research questions. Computer exercises and group projects will reinforce and extend the concepts covered in lectures and discussions. ***All participants will work closely with Clinic faculty and other participants on a group project during the second week of the Clinic. Each group will be required to submit a written report by August 1.*** Participants are encouraged to continue these projects after receiving feedback on the written report and, depending on the progress made, to work closely with the Clinic faculty to publish the work.

Note that we place a heavy emphasis on evaluation of the program and feedback from participants. The schedule will include 2 group feedback sessions run by our program evaluator, Mr. Masimba Paradza. Mr. Paradza will attend the entire program and compile feedback from these sessions and individual interviews to help us improve the Clinic for future years.

Ground rules

- All MMED participants are expected to engage fully in the clinic program. This includes attending all MMED sessions (other than those designated as optional).
- Please be aware that participants come from a wide variety of backgrounds and cultures. This diversity adds greatly to the MMED experience, and all participants should strive to create a welcoming, respectful learning environment.

The Clinic on Meaningful Modeling of Epidemiological Data (MMED) is part of the International Clinics on Infectious Disease Dynamics and Data (ICI3D) Program. ICI3D was launched with support from the National Institute of General Medical Science (NIGMS) of the U.S. National Institutes of Health (NIH) award R25GM102149. Support for MMED 2019 is provided by the South African DST-NRF Centre of Excellence in Epidemiological Modelling and Analysis (SACEMA), the African Institute for Mathematical Sciences (AIMS), and the Centre for Inference and Dynamics of Infectious Diseases (CIDID/MIDAS/NIGMS/NIH).

- Laptop use will not be allowed in the lecture hall during lectures or discussions.
- All MMED participants should follow the AIMS house rules, which will be made available via the logistics page on the MMED website. Because all MMED students are guests of AIMS, these rules apply whether you are housed in AIMS accommodations or across the street in the Empire Building.

Preparation

All of the materials you will need to prepare for the Clinic will be made available online. You will receive additional information on accessing the materials by May 1. Beginning in April, you will also receive weekly emails with reminders to complete specific tasks as the Clinic approaches.

Schedule

The *preliminary* MMED 2019 schedule is available through the MMED website:

<http://www.ici3d.org/mmed/schedule/>

Note that the MMED 2019 program includes a number of parallel sessions. In the first week, these sessions are split into tracks for participants with different backgrounds. **Track A** is designed for those with a mathematical background, particularly those who have extensive training and/or experience with differential equation models of infectious disease dynamics. **Track B** is designed for those with a background in epidemiology and/or statistics, particularly those who are involved in data collection for infectious disease systems. We request that each participant follow a single track for the whole week. Materials from both tracks will be available to all participants via the repository.

Travel preparation

If you are coming to the Clinic from outside South Africa, you are responsible for having an up-to-date passport with at least six months to go before expiration and at least two blank pages and for obtaining any visas that you need.

No visa is currently required for a US citizen to enter South Africa for a period of 90 days or less. ***If you are not a US citizen, we advise that you check visa requirements for entry into South Africa.*** Please begin processing your visa applications as soon as possible, and do not hesitate to contact us if we can help in any way.

Questions about preparation and logistics prior to your departure should be sent to admin@ici3d.org.

Logistics upon arrival

Accommodations have been arranged for all participants. You will be housed either in the AIMS residence hall or an apartment complex across the street. Most apartments have 2 or 3 bedrooms, so you are likely to share an apartment with 1-2 other MMED participants. **Meals** for all participants will be served in the AIMS dining hall.

Airport transfers will be arranged in advance and participants arriving at a similar time may share a ride (so you may have a small amount of time to kill at the airport). Additional details regarding where to meet the drivers will be provided closer to the Clinic dates. If you have any trouble meeting up with

the group, you can call AIMS – from within South Africa, dial 021 787 9320 (calling from abroad, you will need to dial the international dialing code + 27 21 787 9320). This is the AIMS main exchange, and you should ask to speak to Igsaan, who is the Facilities and Logistics Manager.

AIMS has a wonderful and hard-working **staff**, many of whom you will interact with during your stay. Please take the time to learn their names and to thank them for making AIMS such a great place to be. You can find pictures of the administrative staff here:

<https://aims.ac.za/about-us/our-team/staff>

Finally, we have created a **Google map of Muizenberg**

<http://goo.gl/maps/DN26j>

that shows the locations of AIMS, the Empire Building, and places to get essential items such as plug adapters and cash. Additional logistical information will be provided before your arrival.