



Ben-Gurion University of the Negev

Jacob Blaustein Institutes for Desert Research

The Swiss Institute for Dryland Environmental and Energy Research

Mitrani Department of Desert Ecology

Seminar

Amit Huppert

Sackler Faculty of Medicine

Tel Aviv University

Tuesday, April 17, 2018, 12:00

Seminar Room, Old Administration Building

Participants are invited to meet the seminar speaker at the MDDE meeting room immediately after the seminar (~ 13:00). Please bring your lunch; snacks will be provided.

Challenges in Infectious Disease Modeling

I will discuss on how to employ data, combined with population modeling, with the aim to address some of the important biological questions regarding the population dynamics in a more realistic way. An especially promising approach, which also raises methodological challenges, is to develop methods to improve our ability of combining different types of data sets, each with its own unique features, in order to piece together a faithful portrait of the underlying forces, which govern the dynamical processes. In the case of an outbreak, the goal is to utilize data in order to first estimate the model parameters and conduct model selection. In the second phase, the model is used to study different control methods with the aim of reducing and/or curtailing the outbreak in an optimal way.

