



Invited Speaker



Dr. Judy D. Day

Assistant Professor of Mathematics
University of Tennessee

“Modeling the host response to inhalation anthrax to uncover the mechanisms driving risk of disease”

Tuesday, April 14, 2015 • 276 Science Building • 4:00pm

Abstract

Bacillus anthracis, the causative agent of anthrax, can exist in the form of highly robust spores, making it a potential bio-terror threat. Once inhaled, the spores can germinate into vegetative bacteria capable of quick replication, leading to progressive disease and death. There is a critical need to better quantify the risk of disease from different inhalation exposure scenarios. Key to this effort is the use of mathematical and computational modeling to uncover the mechanisms driving risk. To this end, this presentation will discuss ongoing work on the development of models and methods that explore the host response to inhalation anthrax and provide insight into the mechanisms that drive the risk of disease. This is joint work is joint University of Tennessee graduate student Buddhi Pantha, and the NIMBioS Working Group on Modeling Anthrax Exposure.