1125-92-331 **Suzanne Lenhart*** (lenhart@math.utk.edu), NIMBioS, University of Tennessee, Knoxville, TN 37996-3410. *Modeling Hantavirus Among Rodents in Paraguay.* Preliminary report.

Hantavirus in rodents are zoonotic pathogens that can cause disease in humans through inhalation of rodent excreta. Using data collected from a survey of rodents in a reserve in Paraguay to formulate and parameterize a mathematical model, we investigate the prevalence of the Jabora virus over time within its rodent reservoir by using multiple age classes and a unique infection class progression feature. This model incorporates three types of infection over the lifetime of the rodent as well as a recovered class. A new feature of the model allows regression from the latent to the persistently infected class. This project was a part of the Summer Research Experiences for Undergraduates program at the National Institute for Mathematical and Biological Synthesis. (Received August 27, 2016)