The Workshop will be held at the National Institute for Mathematical and Biological Synthesis and will have instructors from across North America whose research expertise is mathematical modeling in biological systems using real data. Some of the techniques to be covered include Maximum likelihood and Bayesian approaches to inference, parameter estimation, model identifiability, uncertainty and sensitivity analysis, and data assimilation. Applications of connecting data to models will come from epidemiology, ecology (including global change biology), evolution, microbiology, physiology, pharmacokinetics, and systems biology. Each day will include a combination of lectures and computer activities. Each student will work on a research project over the duration of the program with a team of four or five participants.

Members of the organizing committee are: Ben Bolker (McMaster University); Ariel Cintron-Arias (East Tennessee State University); Marisa Eisenberg (University of Michigan, Ann Arbor); Gregor Fussmann (McGill University); Suzanne Lenhart (University of Tennessee, Knoxville); Brian Leung (McGill University); Russell Zaretzki (University of Tennessee, Knoxville).

Graduate students from the mathematical, physical and life sciences are encouraged to apply. If needed, the math institutes can provide support (travel, lodging) for attendees.

To apply for this program visit:

http://nimbios.org/education/WS_grad2013

Applications received by January 15, 2013, will receive full consideration.