



NIMBioS

National Institute for Mathematical
and Biological Synthesis



Species' Range Shifts in a Warming World *A NIMBioS Investigative Workshop*

May 3-5, 2017

NIMBioS at the Univ. of Tennessee, Knoxville

This workshop aims to improve our ability to understand species' and community response to climate change by identifying new modeling and analytical tools for integrating currently isolated datasets and fields of research on large-scale ecosystem shifts. The workshop will focus on integrating paleoclimatic niche modeling, fossil pollen data, simulations of forest stand processes, and genetic marker data. Participants from diverse fields will: explicate the advantages and assumptions of each data type; discuss ways to analyze disparate data in a statistically coherent manner, while quantifying uncertainty across scales; and define a framework to examine species jointly at the community level rather than individually, leveraging power from many datasets. Accomplishing these goals requires combining mathematical and computational approaches from very different fields – an exciting prospect. The workshop will help link and utilize large but underused datasets developed over decades and lay foundations for genuinely interdisciplinary, collaborative paleoecological science.

Participation is by application only. Individuals with a strong interest in the topic are encouraged to apply, and successful applicants will be notified within two weeks of the application deadline. If needed, financial support for travel, meals, and lodging is available for workshop attendees.

Application deadline: February 1, 2017

For more information about the workshop and a link to the online application form, go to http://www.nimbios.org/workshops/WS_rangeshifts

The National Institute for Mathematical and Biological Synthesis (NIMBioS) brings together researchers from around the world to collaborate across disciplinary boundaries to investigate solutions to basic and applied problems in the life sciences. NIMBioS is sponsored by the National Science Foundation, through NSF Award #DBI-1300426, with additional support from the University of Tennessee, Knoxville.

