Climate Change and Disease Ecology

You are invited to join Drew Harvell, Kelly Zamudio, and Laura Harrington for a lunch and discussion on Sept 3 at 12:30 supported by Cornell's Center for a Sustainable Future (CCSF) on "Climate Change and Disease Ecology". Our goal is to provide a forum for discussion of ideas and opportunities by bringing together Cornell faculty with expertise and interest in integrated studies of disease ecology and climate change. We are interesting to discuss initially effects of environmental drivers on both host immunity and pathogen virulence. We suggest that development of immune genomics capacity at Cornell could improve our linkages with the Life Sciences initiative and capacity to predict host immune responses to climate change. Additionally, our group is writing a CCSF seed proposal to develop forecasting models for comparative study of the impacts of climate change on three key systems: Coral reef diseases, mosquito-borne diseases and amphibian diseases. These specific projects are already underway in some form with funding from Global Environmental Fund (Coral Disease and Climate Drivers), Gates Challenge (Mosquito dynamics) and National Science Foundation (all), and so provide an opportunity to test forecasting algorithms with data already collected. We invite suggestions and ideas for extension of this concept from interested colleagues. The goal of the "Climate Change and Disease Ecology Lunch" is to 1) bring diverse faculty with similar interests in this topic across campus together to share ideas; 2) to identify priorities for fostering a collaborative group of disease ecology faculty across campus in the future; and 3) to discuss potential collaborations in the area of climate change and genetics/genomics of immunity within the context of disease ecology.