



# RIVERSIDE

DEPARTMENT OF ENTOMOLOGY

ENTM250 Seminar Series



## Speaker:

Andrew J. MacDonald

Assistant Professor

Bren School of Environmental Science & Management  
University of California, Santa Barbara

**Date:** Monday, May 09, 2022

**Time:** 4:00 pm - 4:50 pm

**Format:** In-Person Seminar & Virtual Access

**Location:** Genomics Auditorium 1102A

**Zoom:** 948 0131 1028

**Passcode:** 347039

## Title:

“Infectious disease in a changing world: Land use and climate change impacts on vector-borne disease”

## Abstract:

Land use and climate change have profound and wide-ranging impacts on both human and natural systems. These processes of global change may also dramatically alter risk and transmission of infectious disease, including vector-borne diseases, which account for nearly 20% of all infectious disease globally and include some of the deadliest diseases in human history. In the midst of a global pandemic, understanding how infectious diseases will respond to global change has never been more urgent. In this talk, I will illustrate how ecology can help us to understand the environmental drivers of infectious disease transmission, and to forecast future risk under projected climate and land use change using Lyme disease in California as a case study. I will then briefly contrast this system with Lyme disease in eastern North America and malaria in the Amazon basin to illustrate the importance of social-ecological feedbacks in determining the ecology and human burden of disease.

*Please wear a mask if you plan to attend the seminar in person  
Refreshments will be served in the Entomology Building Courtyard at 3:00pm*