

**Yale** SCHOOL OF PUBLIC HEALTH  
*Epidemiology of Microbial Diseases*

**EMD Seminar Series**

**Derek Cummings, PhD**

**Professor**

**Department of Biology and Emerging Pathogens Institute  
University of Florida**

**“Antigenic and genetic evolution of dengue viruses”**

Derek Cummings is an infectious disease epidemiologist who studies the transmission dynamics of dengue, influenza, coronaviruses, Zika and other pathogens. His work is focused on developing effective strategies for the control these infectious diseases using a combination of field, trial and theoretical techniques. Much of his work is focused on immunity in individuals and populations and its impact on the ecology, evolution and transmission dynamics of pathogens. His recent work includes a study of the phylodynamics and antigenic landscapes of dengue viruses in Thailand, a randomized trial of mosquito interventions against dengue in Brazil, work to characterize serological responses to SARS-CoV-2 and studies of the immune landscapes of human influenza in Southern China (the FluScape study).

**12:00 PM Wednesday, February 16, 2022**

**Host: N. Grubaugh/R. Heimer/A. Wyllie**

**47 College St., Rm. 106B and Zoom**