

Johns Hopkins University

Department of Biology Seminar Series

Thursdays, 4:00pm

For more information go to:

<https://bio.jhu.edu/events>

Mudd Room 100 - April 3, 2025



Niels Ringstad

Professor

Department of Cell Biology

NYU Grossman School of
Medicine

Hosts: Gira Bhabha and Cristina
Santarossa

Modulation of behavior by host-microbe interactions

Microbes exert powerful effects on animal physiology either as pathogens or as commensals. I will describe our efforts to understand how host-microbe interactions affect the animal nervous system to influence behavior. Using behavioral genetics of the nematode *C. elegans*, we have identified neural circuits and molecular mechanisms that mediate powerful effects of environmental microbes on foraging and reproductive behaviors of *C. elegans*. In parallel studies, we have developed screening approaches to identify neuroactive microbial metabolites, and I will discuss our progress towards the discovery of compounds that impact serotonin signaling in vivo.