

Department of Biological Sciences Seminar Series

Seth Bordenstein, Ph.D.
Vanderbilt University



Thursday,
September 6th

4:10 pm

1220 MRBIII

Tea Time

3:45

MRBIII Lobby

"Animal-microbe interactions: Collusion and cooperation in the symbiotic world."

Interactions between dissimilar organisms are fundamental to life. Large, visible organisms are akin to a patina on a planet dominated by microorganisms and viruses. Consequently, hosts regularly thwart or embrace the vast microbial world in stable or transient associations. The Bordenstein laboratory's scholarship disentangles host-microbe interactions to gain a fundamental understanding of "What are the major principles that shape associations between animals, bacteria, and viruses, and what are the consequences and applications of these associations?" Towards solving these questions, the lab employs hypothesis-driven approaches to study two types of animal-microbe interactions: intimate symbioses (between animals, inherited bacteria, and viruses) that significantly impact animal reproduction and mosquito borne diseases, and facultative associations (between animals and their microbiomes) that shape animal evolution and human health.