

## QUANTITATIVE & SYSTEMS BIOLOGY COLLOQUIUM:

Ecology of Extended Phenotypes: Stressor Effects on Coral Hosts and their Microbes



<u>Date:</u> 2/2/2024

<u>Time:</u> 12:30-1:45 PM

Location: GRAN 135

## Anya Brown

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## About The Speaker:

Anya Brown is an Assistant Professor at UC Davis in the Department of Evolution and Ecology, based at the Bodega Marine Lab. She received her master's from Cal State Northridge, and her PhD from the University of Georgia. She received two competitive post-doctoral fellowships before starting her current position, the John J. and Katherine C. Ewel Postdoctoral Fellowship Program at the University of Florida and the Woods Hole Oceanographic Institution Postdoctoral Scholar Program in Woods Hole. In her research, she examines how microbes influence their host's interactions with other species, and the population and community ecology of host-microbe marine organisms. She integrates host-microbe dynamics into the more traditional (i.e., microbe-free) approaches to marine population and community ecology by conducting field surveys, manipulative experiments, mechanistic studies and molecular analyses.

## Abstract:

Host-associated microbes are part of a host's extended phenotype, they can be host-specific, and influence host fitness as a trait of the host. The questions that I ask focus on the implications of variation of traits (including microbes) for organisms, populations and communities. Much of my work is focused on tropical corals and coral reefs. Corals show fantastic amounts of variation: among species, within species and in their physiology, symbionts, and response to stressors. In this seminar I will focus on coral interactions with a biotic stressor, the vermetid gastropod, Ceraesignum maximum, and coral disease and the implications of the intraspecific variation on coral populations and reef communities.