



QUANTITATIVE & SYSTEMS BIOLOGY COLLOQUIUM:

It isn't just what you say, but how you say it: Context-dependent signaling between partners in the squid-vibrio symbiosis

Date:

4/2/2021

Time:

10:30 AM-11:45 AM

Link:

Please contact snsgradstaff@ucmerced.edu for the Zoom link and passcode.

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Abstract:

Symbioses between animals and bacteria are widespread and can have profound effects on the physiologies of both partners. In one such system, the Hawaiian bobtail squid *Euprymna scolopes* houses *Vibrio fischeri*, its bioluminescent bacterial symbiont, in a specialized organ within its body and provides the bacteria with nutrients. In return, the bacterial cells produce light which the squid uses to escape predation from other animals in the water column. As the two partners live in direct contact with one another, bacterial cells and products are constantly presented to and perceived by the squid host in processes that are usually only studied in pathogenic interactions. This seminar will focus on the effects of MAMPs (Microbe-associated Molecular Patterns) on host physiology and cell morphology, and mechanisms by which the host attempts to modulate bacterial activity at the host-symbiont interface.

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