QUANTITATIVE & SYSTEMS BIOLOGY COLLOQUIUM:
The Hawaiian bobtail squid as a model host for studying defensive symbioses

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Date:
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Time:
2:30 PM - 3:45 PM

Location:
COB2 140

About The Speaker:

Spencer received his B.S. in Biology from UCLA where he became interested in symbiotic relationships while working in the algal-cnidarian lab of Dr. Len Muscatine. He went on to obtain his Ph.D. at the University of Hawaii with Dr. Margaret McFall-Ngai studying the squid-vibrio association. He conducted postdoctoral research on self/non-self recognition in colonial tunicates at Stanford's Hopkins Marine Station with Dr. Irv Weissman followed by studying innate immunity in hydrothermal vent tubeworms at Harvard with Dr. Peter Girguis. He started his own lab at the University of Connecticut in 2007 where his group studies bacterial symbioses in cephalopods.

Abstract:

The Hawaiian bobtail squid, Euprymna scolopes, is well known for its light organ association with the bioluminescent bacterium, Vibrio fischeri. Female squid also house a bacterial consortium as part of their reproductive system in the accessory nidamental gland (ANG). We've shown that these bacteria are deposited into eggs where they help protect developing embryos from pathogens. I'll cover our current research into understanding the function of this defensive symbiosis and how the association is established during development. I will also discuss what we know about the similarities and differences in the regulation of both the light organ and ANG symbioses.

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