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UNIVERSITY OF CONNECTICUT

Department of Marine Sciences
Presents a Seminar By

Spencer Nyholm

UConn Molecular and Cell Biology

The Hawaiian bobtail squid as a model for studying beneficial host-microbe interactions

We use the symbiosis between the benthic Hawaiian bobtail squid, *Euprymna scolopes*, and the bioluminescent bacterium, *Vibrio fischeri*, as a model to study the effects of beneficial bacteria on animal host tissues. Our immediate goals are centered on understanding the molecular mechanisms by which specificity is ensured during initiation and maintenance of the symbiosis and defining interactions between components of the host's innate immune system and symbiotic and non-symbiotic bacteria. Cellular, transcriptomic and proteomic approaches have revealed that blood cells (hemocytes) from the squid are involved with the regulation of the symbiosis. Our laboratory is also developing the bobtail squid as a model host for the investigation of a second bacterial association found in females. The accessory nidamental gland (ANG) is a reproductive organ that contains a bacterial consortium hypothesized to be involved with protection of the developing embryos in externally laid eggs. We have characterized the bacterial diversity of the ANG and have experimental evidence to suggest that these bacteria help protect developing eggs from fouling by microorganisms. Results from both of these projects will be discussed.

Host: Evan Ward

Time & Date: 11:00 am, Friday, September 23, 2016

Place: Marine Sciences Building, Seminar Room 103

Please see this [page](#) for cancelations and additional seminar information, email marinescienceseminars@uconn.edu, or call 860-405-9152 or 860-405-9151