



## **Tyler Carrier**

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# **The symbiotic life of larval sea urchins**

Larval sea urchins have served as a fundamental system for understanding development, phenotypic plasticity, and life-history evolution over much of the last century. In the recent decade, this understanding has extended to the microbiota that larval urchins associate with, showing that larval biology and ecology is inseparable from their symbionts. This talk will highlight these symbionts and the communities that they form in relation to the larval host. In particular, it will discuss the nature of environmentally elicited and coordinated shifts between host phenotype and the associated microbiota, the timing of these responses, and how it varies across ocean gyres. To conclude, I will discuss the consequences to the microbiota and host-coordinated shifts when larval sea urchins lose the ability and requirement to feed, and how these life-history switches may be mediated by symbionts known to be reproductive manipulators.

Date: Tuesday, 22 October 2019, 2:15 pm  
Venue: GEOMAR, Düsternbrooker Weg 20, Lecture Hall  
Host: Prof. Dr. Hentschel Humeida, Ute