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Department of Marine Sciences Presents a Seminar by

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From bivalves to Bugula: understanding climate change, species invasion, and ecosystem function in coastal marine systems

Humans have radically altered the planet by modifying the atmosphere, overfishing marine species, and homogenizing the world's biota through global transport. What are the consequences of such actions and what does the future hold for marine communities?

Here I highlight our research that addresses the intersection of climate change, overfishing, and biological invasions in coastal marine systems.

I will discuss the consequences of climate driven extreme events (atmospheric rivers and extreme rainfall) and their role in driving a mass mortality of wild Olympia oysters in California, a species of restoration and conservation focus. I will also explore the interaction between warming and the organismal physiology of invasive predators and their native prey. Our research has demonstrated that warming will likely enhance consumption rates of predators despite benefits for the prey species. I will then discuss our efforts to measure predation intensity across biogeographic scales using empirical and synthetic approaches. Our models indicate greatly increased predation risk within marine protected areas, which has implications for fisheries management.

This work is also relevant to long standing fundamental questions in ecology, such as the origin and maintenance of the latitudinal diversity gradient.

Host: Hannes Baumann

Time & Date: 11:00 am, Friday, February 2, 2018 **Place**: Marine Sciences Building, Seminar Room 103

For cancelations and additional seminar information, please see https://marinesciences.uconn.edu/seminar/seminar1183/, email marinesciencesseminars@uconn.edu, or call 860-405-9152 or 860-405-9151