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Department of Marine Sciences
Presents a Seminar by

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Modeling biogeographical boundary shifts of copepod species in a rapidly changing Arctic

Climate change is warming Arctic air and water and reducing sea ice in both extent and thickness. The changing physical conditions are dramatically affecting the marine ecosystem both directly and indirectly, since many organisms are well-adapted to the unique high-latitude conditions and extreme seasonality, and are therefore highly sensitive to climate change. Here, I use an endemic copepod *Calanus glacialis* as a model species to explore how interacting biotic and abiotic drivers may have impacted Pan-Arctic distributions and shifted biogeographical boundaries since 1980s. These changes can be linked to large-scale oceanic processes, particularly declining sea ice cover, upper ocean warming, and increased and prolonged food availability. The mechanistic understanding gained from this study may be applicable to other marine organisms exposed to strong seasonality and drastic environment changes in the Arctic Ocean, and thus allow better prediction of future status of these fragile ecosystems.

Host: Ann Bucklin

Time & Date: 11:00 am, Friday, October 26, 2018

Place: Marine Sciences Building, Seminar Room 103

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