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Department of Marine Sciences
Presents a Seminar by

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What's in the water? Integrative approaches to understanding and predicting phytoplankton assemblage dynamics

Phytoplankton, microscopic organisms that form the base of aquatic food webs, generate approximately half of the world's oxygen through photosynthesis and thus exert considerable influence over nutrient and carbon cycling. In my laboratory, we study the complex environmental feedbacks between global change stressors (such as urbanization, nutrients, and climate) and coastal phytoplankton ecology and biogeochemistry. We are particularly interested in understanding the linkages phytoplankton have with overall coastal and estuarine trophic structure. This includes but is not limited to understanding the causes and consequences of 'harmful algal blooms' (HABs), events produced by a subset of phytoplankton species that result in negative ecological and/or health impacts when populations become numerically or physiologically dominant. To achieve this goal, we develop and apply novel molecular tools to better study plankton populations in situ and combine these advances with traditional field and laboratory approaches. In this seminar, I provide an overview of research themes, with particular emphasis on work in temperate East Coast estuaries.

Host: Penny Vlahos
Time & Date: 11:00 am, Friday, November 16, 2018
Place: Marine Sciences Building, Seminar Room 103