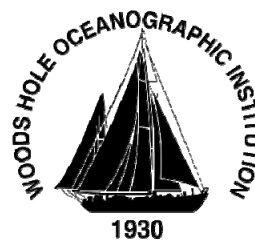

Woods Hole Oceanographic Institution
Biology Department Seminar



Thursday, April 17, 2014
Redfield Auditorium – 12:00 Noon

**Choosing Lunch: The Impact of the Prey Selectivity
of Heterotrophic Protists on Phytoplankton
Dynamics and Biogeochemistry Cycling**

Dr. Elizabeth Harvey
**Postdoctoral Investigator, Biology
Department, WHOI**

Phytoplankton population dynamics are driven by the relative rates of cell growth and loss. Heterotrophic protists are the main consumers of marine phytoplankton biomass, thus shifts in protist grazing pressure will directly impact the abundance and distribution of phytoplankton and, ultimately, biogeochemical cycles. This talk will explore the mechanisms that drive average grazing rates, including investigations into the impact of prey morphology, chemistry, and behavior in driving the selectivity of the grazer. This presentation will highlight recent findings investigating grazing on the coccolithophore, *Emiliania huxleyi* by the dinoflagellate predator, *Oxyrrhis marina* including the importance of prey morphology and chemical cues in mediating this interaction. Elucidating the mechanisms involved in heterotrophic protist-phytoplankton interactions will enhance our understanding and predictive capacity of phytoplankton population dynamics and the role of grazing in altering global biogeochemical cycles.