

SEMESTER IN ENVIRONMENTAL SCIENCE
INDEPENDENT RESEARCH SYMPOSIUM
MARINE BIOLOGICAL LABORATORY, WOODS HOLE, MA 02543
FRIDAY, DECEMBER 16, 2016 – LILLIE AUDITORIUM

TIME	SPEAKER	PROJECT TITLE
8:15 - 8:30	DR. RAE NISHI DIRECTOR OF EDUCATION, MBL	Welcome and introductory remarks
8:30 - 8:45	Andie Nugent COLGATE UNIVERSITY	<i>Ectomycorrhizal fungi and tree symbiosis: recovery from two decades of nitrogen-loading to a Cape Cod oak-pine forest</i>
8:45 - 9:00	Erin Gleeson RHODES COLLEGE	<i>The effects of winter moth defoliation and drought on forest growth and production inferred from satellite imagery and dendrochronology.</i>
9:00 - 9:15	Nicholas Patel SWARTHMORE COLLEGE	<i>The characteristics of tree mortality due to drought in Falmouth forests and its ramifications for forest species composition and ecosystem services</i>
9:15 - 9:30	Hannah Garcia TRINITY UNIVERSITY	<i>Combined stressors: examining impacts of winter moth infestation and drought on trees on Cape Cod</i>
9:30 - 9:45	Zoe Crawford DICKINSON COLLEGE	<i>A comparison of decay rates and leaf chemistry in native and non-native plants on Cape Cod</i>
9:45 - 10:00	Hannah Gershone MOUNT HOLYOKE COLLEGE	<i>From river to desert: using chlorophyll fluorescence to test for desiccation tolerance among green algae</i>
10:00 - 10:15	Kristy Sullivan WHEATON COLLEGE	<i>Phytoplankton nutrient response in Oyster Pond: identification of Cyanobacteria and potential for future blooms.</i>
10:15 - 10:35	Coffee Break	
10:35 - 10:50	Olivia Bispott EARLHAM COLLEGE	<i>Ocean acidification and its effect on phytoplankton growth</i>
10:50 - 11:05	Yingqi Zhang COLGATE UNIVERSITY	<i>Understanding the ecological impacts of invasive tunicates and their response to climate change</i>
11:05 - 11:20	Michelle Woods ALLEGHENY COLLEGE	<i>The role of seals in the food webs of Cape Cod beaches</i>
11:20 - 11:35	Hannah Ryon NORTHWESTERN UNIVERSITY	<i>Stress response of bivalves: impact of copper on filtration rate and microbial communities of oysters (<i>Crassostrea virginica</i>)</i>
11:35 - 11:50	Michael Daugherty NORTHWESTERN UNIVERSITY	<i>Adsorption of organic pollutants to microplastics: the effects of dissolved organic matter</i>
11:50 - 12:05	Taline Doursounian WHEATON COLLEGE	<i>The effects of fifty years of treated wastewater on metal, carbon and nutrient stores in Greenwood Creek sediments</i>
12:05 - 13:30	Luncheon – Dining Hall, Swope Center*	
13:30 - 13:45	Misty Earisman LAFAYETTE COLLEGE	<i>A pre-sewering baseline study of nutrient inputs and export from the Little Pond estuary</i>
13:45 - 14:00	Rita Clark GRINNELL COLLEGE	<i>Nitrogen inventories and regeneration of sediments of Little Pond: will sediment nutrient regeneration impede recovery after sewer installation?</i>
14:00 - 14:15	John Hayes NORTHWESTERN UNIVERSITY	<i>Greenhouse gas fluxes from the Falmouth Wastewater Treatment Facility and implications for groundwater entering West Falmouth Harbor</i>
14:15 - 14:30	Sarah Messenger TRINITY COLLEGE	<i>Efficacy of a permeable reactive barrier at nitrate removal 10-Years down the road: have the Nitrex barriers in Waquoit Bay reached the end of their lifespan?</i>
14:30 - 14:45	Jonathan Pekarek UNIVERSITY OF CHICAGO	<i>Feasibility of wood chip permeable reactive barriers for large scale in-stream nitrate removal.</i>
14:45 - 15:00	Catherine Ballali EARLHAM COLLEGE	<i>Interspecies electron exchange: coupling of microbial fuel cell to an anaerobic digestion to improve power output</i>
15:00 - 15:15	Rachel Clifford FRANKLIN & MARSHALL COLLEGE	<i>The importance of structure to the function and productivity of pink berry bacterial consortia</i>

Semester Retrospective (Ken Foreman, SES Program Director)

*There will be refreshments and a celebratory awards ceremony in the Lillie Lobby after the symposium.**

*Students, parents and guests, faculty and instructors welcome