

Elizabeth L. Harvey
Woods Hole Oceanographic Institution
266 Woods Hole Road, MS#52 • Woods Hole, MA 02543
eharvey@whoi.edu • office: 508-289-2592

EDUCATION

2013 Ph.D. Oceanography, University of Rhode Island
2008 M.S. Environmental Science, Western Washington University
2003 B.S. Marine Science, University of Maine

PROFESSIONAL EXPERIENCE

2013 - Postdoctoral Investigator; Woods Hole Oceanographic Institution, MA
2008-13 Graduate Research Assistant; Univ. of Rhode Island, RI
2005-08 Graduate Research Assistant; Western Washington Univ., WA
2004-05 Laboratory Field Technician; Bowdoin College, ME
2004 Visiting Scholar; Flinders University, South Australia
2003 Laboratory Assistant; Darling Marine Center, ME
2003 REU Internship; Mote Marine Laboratory, FL
2002 Summer Internship; Darling Marine Center, ME

PUBLICATIONS

Van Alstyne, K.L., E. L. Harvey, M. Cataldo. *submitted*. Effects of dopamine, a compound released by the green-tide macroalga *Ulvaria obscura* (Chlorophyta), on marine algae and invertebrate larvae and juveniles. *Phycologia*
Harvey, E.L., H. J. Jeong, S. Menden-Deuer. 2013. Avoidance and attraction: Chemical cues influence predator-prey interactions of planktonic protists. *Limnol. & Oceanogr.* 58(4): 1176-1184
Strom, S. L., E. L. Harvey, K. A. Fredrickson, S. Menden-Deuer. 2013. Broad halo-tolerance as a refuge from predation in the harmful raphidophyte alga, *Heterosigma akashiwo*. *J. Phycol.* 49: 20-31
Harvey, E.L. and S. Menden-Deuer. 2012. Phytoplankton fleeing from predators: a new mechanism for harmful algal bloom formation? *PLoS ONE* 7(9): e46438
Harvey, E. L. and S. Menden-Deuer. 2011. Avoidance, movement, and mortality: the interactions between a protistan grazer and *Heterosigma akashiwo*, a harmful algal bloom species. *Limnol. & Oceanogr.* 56(1): 371-378

AWARDS

2012 Outstanding Student Presentation Award; ASLO 2012, Salt Lake City, Utah
2012 Simmons Award, University of Rhode Island
2011 International Travel Experience Award (\$7400); USDA; to spend 7 weeks in the laboratory of Dr. Hae Jin Jeong at Seoul National University, Seoul, Korea
2011 Ann Durbin Award; University of Rhode Island
2010 Travel Funding (\$800); 14th International HAB Meeting, Crete, Greece
2010 Ada L. Sawyer Award for Oceanography; University of Rhode Island
2009 Travel Funding (\$2500); short course: *Scaling the effects of climate change on marine zooplankton*, South American Climate Change Consortium

- 2008 Disease in Marine Organisms, National Needs Fellowship, USDA
(provided full PhD tuition and \$23,000 stipend for three years)
- 2006 Graduate Research Fellowship, NERRS/NOAA; tuition and \$40,000 stipend
for two years
- 2003 Eugene A. Jordan Scholarship; University of Maine
- 2003 Presidential Pin for Academic Achievement; University of Maine

PROFESSIONAL AFFILIATIONS

Association for the Sciences of Limnology and Oceanography
International Society for the Study of Harmful Algae

PROFESSIONAL ACTIVITIES

Reviewer for: Delaware Sea Grant

- 2013 Biology Representative, Postdoc. Committee (WHOI)
- 2008-12 Student Member, Space Committee (URI GSO)
- 2009-11 Treasurer, Chowder and Marching (URI GSO graduate student group)
- 2009-10 Judge, Rhode Island Science and Engineering Fair
- 2006-08 Leader, graduate student group (Shannon Point Marine Center, WWU)

SUPERVISION

- 2013 Summer High School Intern at WHOI: Adriana Noyes
- 2008-13 Many undergraduates at URI: Jessica Gilbert, Kayla Murgo, Erik
Mulbach, Nicole Millette, Rachel Hickcox

TEACHING EXPERIENCE

- 2012 Teaching Assistant OCG 123: Oceans, Atmospheres, and Global Change (URI)
- 2006 Teaching Assistant ESCI497E: Wetlands Wastewater Treatment (WWU)
- 2006 Teaching Assistant ESCI497G: Biogeochemistry of Marine Sediments (WWU)
- 2002 Tutor for The Tutor Program (University of Maine)

RESEARCH CRUISES

- 2011 Georges Bank, Gulf of Maine - Studied the onset of the spring bloom; measured
photosynthetic efficiency of the phytoplankton population using a FiRe
instrument, conducted dilution experiments, measured chlorophyll a
- 2008 Georges Bank; Gulf of Maine - Filtered water for future genetic analysis; helped
measure chlorophyll a

PRESENTATIONS

- Harvey, E. L. and S. Menden-Deuer. 2012. Predator-prey interactions and salinity
tolerance can impact harmful algal bloom formation in *Heterosigma akashiwo*.
*ASLO Ocean Sciences Meeting, Salt Lake, UT – Outstanding Student
Presentation Award*
- Harvey, E.L. and S. Menden-Deuer. 2011. Bloom formation in *Heterosigma akashiwo* –
role of predation and physiology.
6th USA HAB Meeting, Austin, TX

- Harvey, E.L. and S. Menden-Deuer. 2011. Understanding harmful algal blooms in the ocean: the impact of predator/prey interactions.
Environmental Protection Agency - Northeast Division, Narragansett, RI (invited)
- Harvey, E. L. and S. Menden-Deuer. 2011. Understanding harmful algal blooms in the ocean: the impact of predator/prey interactions.
Discovery@URI Graduate Student Conference, Kingston, RI
- Menden-Deuer, S. and Harvey, E. L. 2011. Linking microscopic plankton behaviors to large-scale ecological patterns and processes.
ASLO Aquatic Sciences Meeting, San Juan, PR
- Menden-Deuer, S., Harvey, E. L., Day, W., and J. Graff. 2011. Deciphering predator prey interactions in the plankton.
Bio-Physical Meeting, Aspen, CO
- Harvey, E. L. and S. Menden-Deuer. 2010. Anti-predator defense mechanisms of the toxic raphidophyte alga, *Heterosigma akashiwo* against potential heterotrophic protist predators.
14th International HAB Meeting, Crete, Greece
- Harvey, E. L. and S. Menden-Deuer. 2010. The role of halo-tolerance in providing a refuge for the toxic raphidophyte alga, *Heterosigma akashiwo* from heterotrophic protists and enhancing bloom formation.
Gordon Conference (Marine Microbes), Tilton, NH
- Menden-Deuer, S and E. L. Harvey. 2010. Avoidance, movement, and mortality: the role of predator-prey interactions in harmful algal bloom dynamics.
Eastern Pacific Ocean Conference, Mt. Hood, OR
- Harvey, E.L., S. Strom, S. Menden-Deuer. 2010. Can the halo-tolerance of the toxic raphidophyte alga, *Heterosigma akashiwo* provide a refuge from microzooplankton predation?
ASLO Ocean Sciences Meeting, Portland, OR
- Menden-Deuer, S., E. Harvey, K. Fredrickson, S. Graham, S. Strom. 2009. Predator impacts on the vertical distribution and population dynamics of the toxic raphidophyte, *Heterosigma akashiwo*.
5th USA HAB Meeting, Ocean Shores, WA
- Harvey, E. L. and S. Menden-Deuer. 2009. Distribution and swimming behaviors of heterotrophic protist predators in response to the toxic raphidophyte algal, *Heterosigma akashiwo*.
ASLO Aquatic Sciences Meeting, Nice, France.
- VanAlstyne, K.L., E.L. Harvey, M. Cataldo, A. Salas, S. Gifford, A. Nicely, A. Gehman, L. Chomiczewski. 2009. The release of dopamine by *Ulvaria obscura* and its allelopathic effects on algae and invertebrate larvae.
Plant Biology Meeting, Honolulu, HI
- Harvey, E.L. 2008. Effects of the toxic alga *Heterosigma akashiwo* on the distribution of single-celled planktonic grazers.
New England Estuarine Research Society, Block Island, RI
- Harvey E. L. 2007. The effects of high density ulvoid macroalgae exposure on the settlement of crab megalopae and survival and growth of young juveniles.
Western Society of Naturalists Conference, Ventura, CA

- Harvey E. L. 2004. Toxicity, due to Permanone®31-66, to the inland silverside, *Menidia beryllina* and mysid, *Mysidopsis bahia*.
ASLO Winter Meeting, Honolulu, HI
- Harvey E. L. 2003. Toxicity, due to Permanone®31-66, to the inland silverside, *Menidia beryllina* and mysid, *Mysidopsis bahia*.
Charlotte Harbor Conference, Sarasota, FL