

Byron Evans Pedler

Graduate Student

Marine Biology Research Division
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EDUCATION

- Ph.D.** Anticipated 2013. Marine Biology. Scripps Institution of Oceanography, University of California, San Diego
Advisor: Dr. Farooq Azam
- B.S.** May, 2005. Biology; Marine and Freshwater Biology (Honors). University of New Hampshire
Advisor: Dr. Michael Lesser
Senior Honors Thesis: *The Effects of Ultraviolet Radiation of the Larval Development of the New Zealand Sea Urchin, Pseudechinus huttoni.*

FELLOWSHIPS & AWARDS

- UC Regents Fellowship** (2007-2008) Scripps Institution of Oceanography, University of California, San Diego
- Summer Student Fellowship** (2005), Woods Hole Oceanographic Institution, Woods Hole, MA
“*Investigating the Bioaccumulation of Halogenated Organic Compounds in Marine Mammals Stranding on Cape Cod, MA*”
- Best Poster Award** (2005) American Academy for Underwater Science (AAUS) National Symposium, Hosted by the University of Connecticut, Marine Science and Technology Center, Avery Point, CT
“*The Effects of Ultraviolet Radiation of the Larval Development of the New Zealand Sea Urchin, Pseudechinus huttoni.*”
- Undergraduate Research Award** (2004, Fall) Undergraduate Research Opportunities Program (UROP), University of New Hampshire, Durham, NH and Portobello Marine Laboratory, University of Otago, Dunedin, New Zealand.
“*Construction of a Biological Weighting Function for DNA Damage in Sea Urchin Embryos Exposed to Ultraviolet Radiation*”
- International Research Award** (2004, Summer) International Research Opportunities Program (IROP), University of New Hampshire, Durham, NH and Portobello Marine Laboratory, University of Otago, Dunedin, New Zealand.
“*The Effects of Ultraviolet Radiation on Embryos of the New Zealand Sea Urchin, Pseudechinus huttoni and the Role of Mycosporine-Like Amino Acids*”

TEACHING EXPERIENCE

- Biochemistry Laboratory** (2006) Undergraduate Teaching Assistant, Department of Biochemistry, University of New Hampshire.
- Marine Microbiology Laboratory** (2004) Undergraduate Teaching Assistant, Department of Microbiology, University of New Hampshire.
- Biology Laboratory** (2003) Undergraduate Teaching Assistant, Department of Biology, University of New Hampshire.
- Substitute Teacher**, (2002-2004, Winter Break) Grades K-3, Mashpee Public Schools, Mashpee, MA

PUBLICATIONS & PRESENTATIONS

- Van Mooy, B., Fredricks, H., **Pedler, B.E.**, Dyhrman, S.T., Karl, D.M., Koblizek, M., Lomas, M.W., Mincer, T., Moore, L.R., Moutin, T., Rappé, M.S., Webb, E.A. (2008) Phytoplankton in the oligotrophic ocean substitute phospholipids in response to phosphorus scarcity. *Nature (in press)*.
- Pangallo, K., Nelson, R. K., Teuten, E. L., **Pedler, B. E.**, Reddy, C. M. (2008) Expanding the range of halogenated 1-methyl-1,2-bipyrroles. *Chemosphere*. 71, 1557-1565.
- Teuten, E. L., Saint-Louis, R., **Pedler, B.E.**, Xu, L., Pelletier, E., and Reddy, C. M. (2006) Expanding the range of brominated Q1 analogues. *Marine Pollution Bulletin*. 52, 578-582
- Teuten, E. L., **Pedler, B.E.**, Hangsterfer, A., and Reddy, C. M. (2006) Identification of highly brominated analogues of Q1 in marine mammals. *Environmental Pollution*. 144, 336-344

- Pedler, B. E.**, (2005) *A Biological Weighting Function for the Effects of Ultraviolet Radiation on the New Zealand Sea Urchin P. huttoni*. Undergraduate Research Conference, University of New Hampshire, Durham, NH. Oral presentation: April 30th.
- Pedler, B. E.**, (2005) *The Effects of Ultraviolet Radiation-induced DNA damage on the Larval Development of the New Zealand Sea Urchin Pseudechinus huttoni*. National Conference on Undergraduate Research (NCUR), Hosted by the Virginia Military Institute and Washington and Lee University, Lexington, VA. Oral presentation: April 21st-23rd.
- Pedler, B. E.**, (2005) *The Effects of Ultraviolet Radiation on the Larval Development of the New Zealand Sea Urchin Pseudechinus huttoni*. American Academy for Underwater Science (AAUS) National Symposium, Hosted by University of Connecticut, Marine Science and Technology Center, Avery Point, CT. Poster presentation: March 10th-12th.

PROFESSIONAL EXPERIENCE

- Research Assistant II.** 2005-2007. Dr. Benjamin Van Mooy, Marine Chemistry and Geochemistry Department, Woods Hole Oceanographic Institution, Woods Hole, MA
- Research Assistant II.** 2005-2006. Dr. Chris Reddy, Marine Chemistry and Geochemistry Department, Woods Hole Oceanographic Institution, Woods Hole, MA
- Research Technician.** 2005. Dr. Charles Walker, Department of Zoology, University of New Hampshire, Durham, NH
- Research Technician.** 2003-2005. Dr. Michael Lesser, Department of Zoology and Center for Marine Biology, University of New Hampshire, Durham, NH
- Field Assistant.** 2004. Portobello Marine Laboratory, University of Otago, Dunedin, New Zealand
- Field Technician.** 2002. Marine Research Inc., Falmouth, MA
- Laboratory Assistant.** 2002. Dr. Stacia Sower, Department of Biochemistry and Molecular Biology, University of New Hampshire
- Guest Student.** 2002. Dr. Larry Madin, Woods Hole Oceanographic Institution, Woods Hole, MA

OPEN OCEAN FIELD EXPERIENCE

- R/V Melville, California Current Ecosystem Long-Term Ecological Research (CCE-LTER) (2008)**
San Diego to San Diego. Chief Scientist: Dr. Michael Landry, Scripps Institution of Oceanography, San Diego, CA (30 Sept. – 29 Oct.)
- R/V New Horizon, Bermuda Atlantic Time Series (2007)**
Bermuda to Bermuda. Chief Scientist: Dr. John Dacey, Woods Hole Oceanographic Institution, Woods Hole, MA (23-27 April)
- R/V Laurence M. Gould, Antarctica (2006)**
Punta Arenas, Chile to Palmer Station, Antarctica, to Punta Arenas, Chile. Chief Scientist: Dr. Larry Madin, Woods Hole Oceanographic Institution, Woods Hole, MA (13 Feb – 14 March)
- SSV Corwith Cramer, Sargasso Sea (2003)**
Key West, FL, to Santiago, Cuba, to Rhoatan Honduras, to Key West, FL (10 Feb-20 Mar), SEA Semester, Sea Education Association, Woods Hole, MA
- R/V Oceanus, Mid North Atlantic (2002)**
Woods Hole, MA to Woods Hole, MA (1-14 June). Chief Scientist: Dr. Larry Madin, Woods Hole Oceanographic Institution, Woods Hole, MA
- R/V Oceanus, Mid North Atlantic (2002)**
Woods Hole, MA to Woods Hole, MA (15 -27 Sept). Chief Scientist: Dr. Larry Madin, Woods Hole Oceanographic Institution, Woods Hole, MA
- SSV Westward, Gulf of Maine (2000)**
Appledore Island, ME to Appledore Island, ME (6-25 August). Oceanography of the Gulf of Maine, Summer Course, Shoals Marine Laboratory, University of New Hampshire/Cornell University, Appledore Island, NH

LEADERSHIP, COMMUNITY INVOLVEMENT & VOLUNTEER WORK

- Chair.** 2008-Present. Students at Scripps, Scripps Institution of Oceanography, UCSD
- Vice Chair.** 2007-2008. Students at Scripps, Scripps Institution of Oceanography, UCSD
- Member & Volunteer.** 2007-Present. Committee for Humanity and Public Service (CHiPS)
- Attendee.** 2007-Present. UCSD Graduate Community Diversity workshops
- Member.** 2007- Present. North Pier Surf Club
- Lead Safety Diver & Deck Operations Manager.** 2006. Antarctic Research Cruise.
- Freshmen Camp Counselor.** 2004. University of New Hampshire.
- Jr. Watch Officer.** 2003. Sea Education Association.