

EDUCATION

University of New Hampshire (Durham, NH)

- Ph.D., Natural Resources & Earth System Science: Oceanography; 2006 – 2011
- Dissertation: Satellite-derived fluorescence quantum yields as indicators of phytoplankton photophysiology
- Cognate in College Teaching Graduate Credential; 2008 – 2010

University of Washington (Seattle, WA)

- M.Sc., Biology; 2002 – 2004
- Thesis: Remote sensing in the near shore: Quickbird imagery in south Hood Canal, WA
- Certificate in Environmental Education (24 credit graduate program); 2002 – 2003

Carleton College (Northfield, MN)

- B.A., Earth System Science; 1996 – 2000; *magna cum laude*
- Marine Biology Field Research Semester in New Zealand & Australia

**PROFESSIONAL
EXPERIENCE**

Lindblad Expeditions/National Geographic (Seattle, WA; www.expeditions.com)

Naturalist; 2015 – present

- Natural history instruction & guided field excursions for passengers aboard small expedition ships in remote areas around the world. Logistical support, research & ship-to-shore social media.

Sea Education Association (Woods Hole, MA; www.sea.edu)

Assistant Professor of Oceanography & Chief Scientist; 2012 – present

Oceanography Faculty & Chief Scientist; 2010 – 2012

- Field- & place-based interdisciplinary international undergraduate research semesters. Shipboard marine research activities, data analyses & ship-to-shore social media.
- Courses Developed/Taught: Oceanography; Oceans in the Global Carbon Cycle; The Ocean & Global Change; Directed & Practical Oceanographic Research; Advanced & Introductory Oceanographic Field Methods; Data Communication & Visualization (GIS portions)
- Safe deployment, repair, programming & processing of data/samples using biological, chemical, geological and physical oceanographic equipment & software
- Small boat operations; GPS, paper & electronic navigation experience; Radio & satellite phone communications; Collaborator & international research clearance management.

Assistant Scientist; 2009 – 2010

- Shipboard scientific activities & maintenance (ex., net tows, phyto/zooplankton identification, chemical analyses, seafloor sampling, current & depth acoustic analyses). Student project mentoring & class instruction.

University of New Hampshire (Durham, NH)

Research Fellow, Coastal Ocean Observing Center; 2006 – 2011

- Spatial & temporal variability in western Gulf of Maine & Great Bay Estuary biological, physical & chemical environments. Field validation of satellite-derived ocean color parameters. Deployment & maintenance of autonomous water quality buoys.

Course Developer & Instructor, Earth Science & Education Departments; 2008 – 2010

- Exploring Science Education Through Ocean Inquiry (2009 – 2010)
- Introduction to Oceanography (*Instructor* 2008; *Guest Lecturer* 2008 – 2010)

Hurricane Island & Voyageur Outward Bound Schools (Rockland, ME & Ely, MN)

Lead Instructor; summers 2003, 2005 & 2006

- Multi-week canoeing, backpacking, rock climbing & sailing expeditions for youth.

Scattergood Friends High School (West Branch, IA)

Chemistry, Earth Science, GIS & Math Teacher; Health Coordinator; 2004 – 2005

**PROFESSIONAL
EXPERIENCE**
(CONTINUED)

University of Washington (Seattle, WA)
Research Fellow, Spatial Analysis Lab; 2003 – 2004

IslandWood (Bainbridge Island, WA)
Naturalist & Graduate Teaching Assistant; 2002 – 2003

- Week-long multidisciplinary field studies for ages 6 - 14. Curriculum development, ecological research, species distribution mapping & program coordination.

United States Geological Survey Coastal & Marine Science Center (Woods Hole, MA)
GIS Specialist; 1998 – 1999, 2001

Northern Lakes Canoe Base (Boundary Waters & Quetico Wilderness Areas, MN–Ontario)
Lead Instructor, Equipment & Food Manager, Staff Trainer; summers 1996 – 2000

- Multi-week canoe expeditions for youth. All gear/food organization, maintenance, pack-out.

**SELECTED
RESEARCH &
OTHER
CRUISES**

MV National Geographic Explorer (Lindblad Expeditions)
Naturalist; 2015 – present

- Canadian Maritimes; Southeast Alaska; Argentina, Brazil, Fernando de Noronha, Cape Verde Islands, Madeira, western Europe

SSV Robert C. Seamans & SSV Corwith Cramer (Sea Education Association)
Chief Scientist; 2009 – present

- 13 semester voyages (4-6 weeks each) + 4 short trips; ~20 months offshore sea time
- Recent cruise areas: New England & Canadian Maritimes; Bermuda, Sargasso Sea & Western Atlantic; Caribbean Sea & Islands; Coastal California; Hawaii; Tahiti, Tuamotu, Marquesas & Austral Islands of French Polynesia; New Zealand & Chatham Islands; North, Central & South Pacific

MV Sea Wolf (Sea Wolf Adventures)
Naturalist-in-Training & Deck Crew; 2014

- Glacier Bay, Alaska & surrounding areas

RV Gulf Challenger (University of New Hampshire) & **RV Tioga** (Woods Hole Oceanographic Institute)
Research Technician; 2006 – 2010

- Monthly multi-day scientific cruises in the Gulf of Maine & Cape Cod regions; ~2.5 months sea time

30-ft open pulling boats (Hurricane Island Outward Bound)
Mate/Instructor; summers 2005 – 2006

- Youth leadership & seamanship cruises, near-coastal Maine; ~2 months sea time

SSV Westward (Ocean Classroom Foundation & Hurricane Island Outward Bound)
Program Director/Lead Instructor/Medical Officer; 2004 – 2006

- Youth leadership & seamanship cruises, near-coastal & offshore Newfoundland to Bermuda; ~7 months sea time

Marine Scientist/Math & Science Teacher/Medical Officer; 2005

- High school semester, near-coastal Maine to the Caribbean; ~4 months sea time

RV Thomas G. Thompson (University of Washington)
Research Technician; 2003

- Puget Sound; ~ 1 week sea time

Other sail training vessels (including SV Lady Maryland, SV Adventuress, SV Lady Washington)
Marine Scientist/Deckhand/Program Director/Medical Officer; 2000 – 2004

- Near-coastal Maryland to Maine & near-coastal California, Oregon, Washington & British Columbia; ~10 months sea time

**OCEAN
SCIENCE
OUTREACH**

Sargassum Observing Network (Sea Education Association)

Co-founder; 2013 – present

- Citizen science project utilizing visual surveys to investigate distribution & abundance of pelagic *Sargassum* macroalgae in the North Atlantic, Caribbean Sea & Gulf of Mexico. Develop methods, manage database, & coordinate collaborator training/communications.

Shoals Marine Lab (University of New Hampshire & Cornell Univ.)

Curriculum Consultant for “Science Education Through Ocean Inquiry” course; 2010 – 2011

University of New Hampshire Marine Docents

Teaching Mentor & Consultant; 2010

COSEE – Ocean Systems (University of Maine)

Participating Workshop Scientist; 2009

- “Ocean-Climate Connections” Informal Educator – Scientist Collaborative Workshop
- “Ocean-Climate Connections” Classroom Educator – Scientist Concept Mapping Workshop

Univ. of New Hampshire Coastal Ocean Observing Center Educator Workshops

Assistant Workshop Coordinator & Contributing Scientist; 2007 – 2008

- “Understanding Seasonal Change in the Ocean”
- “Climate & Oceans: Using Ocean Based Data”

Seacoast Science Center (Rye, NH)

Contributing Scientist; 2006

- “Seasons in the Sea” Exhibit (graphics, interactive data display & text)

**SELECTED
PUBLICATIONS**

*denotes
corresponding
author

- Schell, J., D. Goodwin & A. Siuda. 2015. Recent *Sargassum* inundation events in the Caribbean – Shipboard observations establish baseline and reveal dominance of a previously rare form. *Oceanography*. 28(3): 8-10.
- Law, K.L., S. Morét-Ferguson, D. Goodwin*, E. Zettler, E. DeForce, T. Kukulka & G. Proskurowski. 2014. Distribution of surface plastic debris in the eastern Pacific Ocean from an 11-year dataset. *Environmental Science & Technology*. 48(9): 4732-4738, DOI: 10.1021/es4053076. *ACS Editor’s Choice Selection*.
- Goldstein, M. & D. Goodwin. 2013. Gooseneck barnacles (*Lepas* spp.) ingest microplastic debris in the North Pacific Subtropical Gyre. *PeerJ*. 1:e184, DOI:10.7717/peerj.184. *PeerJ Top Marine Biology Papers Selection, September 2015*
- Morrison, J.R. & D. Goodwin. 2010. Phytoplankton photocompensation from space-based fluorescence measurements. *Geophysical Research Letters*. 37: L06603, DOI:10.1029/2009GL041799.

Non peer-reviewed:

- Goodwin, D. & E. Zettler. 2014. Navigating the global ocean: Creating tomorrow’s environmental scholars, stewards & leaders. *Origin Magazine: The Ocean Issue*. January/February: 73.

**SELECTED
PRESENTATIONS**

*denotes student
author

- Ocean Sciences Meeting, New Orleans, LA. 2016. *Co-author on two talks (one talk*)*
- 68th Gulf and Caribbean Fisheries Institute, Panama City, Panama. 2015. *Co-author on talk*
- American Society of Limnology & Oceanography Meeting, Granada, Spain. 2015. *Co-author on poster**
- Second International Ocean Research Conference, Barcelona, Spain. 2014. *Co-author on talk*
- Society of Women in Marine Science Workshop, Woods Hole, MA. 2014. *Invited panelist*
- Sixth International Conference on Climate Change: Impacts & Responses, Reykjavik, Iceland. 2014. *Co-author on talk**
- Ocean Sciences Meeting, Honolulu, HI. 2014. *Co-author on three talks*
- New England Science Public – Biology New England South Meeting, Bristol, RI. 2013. *Co-author on two talks*

SELECTED PRESENTATIONS

(CONTINUED)

*denotes student author

- Society of Environmental Toxicology & Chemistry, North America Meeting, Nashville, TN. 2013. *Co-author on invited talk*
- Geological Society of America Meeting, Denver, CO. 2013. *Co-author on talk**
- International Whaling Commission: Scientific Committee Preparatory Workshop on Assessing the Impacts of Marine Debris, Woods Hole, MA. 2013. *Co-author on invited talk*
- Tall Ships America 40th Annual Conference on Sail Training, Erie, PA. 2013. *Co-author on invited talk*
- American Geophysical Union Meeting, San Francisco, CA. 2012. *Poster*
- American Society of Limnology & Oceanography Meeting, San Juan, Puerto Rico. 2011. *Poster*
- NASA Ocean Color Research Team Meeting, New Orleans, LA. 2010. *Poster*
- University of New Hampshire Marine Docents Monthly Meeting, Durham, NH. 2010. *Invited talk*
- Oyster River Middle School, Durham, NH. 2010. *Invited speaker to 7th grade science classes*
- Ocean Sciences Meeting, Portland, OR. 2010. *Two posters, co-author on talk*
- NASA Ocean Color Research Team Meeting, New York, NY. 2009. *Poster*
- American Society of Limnology & Oceanography Meeting, Santa Fe, NM. 2007. *Two posters*
- Environmental Education Association of Washington Meeting, Winthrop, WA. 2002. *Talk*

SELECTED FELLOWSHIPS, GRANTS & RECOGNITIONS

Carleton College Alumni Spotlight Profile, Voice Magazine; summer issue 2014
 Jim Millinger Award for Excellence in Teaching, Sea Education Association; 2012
 Davis Educational Foundation Grant for Interdisciplinary Curricula, co-PI; 2012 – 2014
 NASA Earth & Space Science Research Fellowship, Earth Science Division; 2009 – 2011
 NSF Grant to COSEE – Ocean Systems for Inquiry Education, primary author; 2009 – 2010
 New Hampshire Space Grant Consortium Research Fellowship (*declined*); 2009 – 2010
 NSF Transforming Earth Systems Science Education Fellowship (*declined*); 2009 – 2010
 Student Poster Award, ASLO Aquatic Sciences Meeting; 2007
 Marine Program Graduate Research Fellowship, Univ. of New Hampshire; 2006 – 2009
 Research in Biology & Education Graduate Fellowship, Univ. of Washington; 2004
 University Summer Research Fellowship, Univ. of California at Los Angeles; 1999
 Class of 1963 Summer Research Fellowship, Carleton College; 1999
 Independent Summer Research Fellowship, Carleton College (*declined*); 1999
 William Carleton Scholar, Carleton College; 1996 – 2000

CREDENTIALS & TRAINING

Wilderness Emergency Medical Technician (exp. 2015)
 National Registry Emergency Medical Technician – Basic (exp. 2016)
 American Safety & Health Institute CPR & First Aid Instructor (exp. 2015)
 SOLO Wilderness Medicine Instructor (2007 – present)
 US Coast Guard Basic Safety Training
 US Coast Guard Basic Fire Fighting
 Research Chemical & Radiation Safety Training