

Education

PhD Student, Department of Biological Sciences, August 2018—present
Virginia Polytechnic Institute and State University
Advisor: Dr. Erin Hotchkiss

Master of Science, Environmental Sciences and Engineering, August 2012
University of North Carolina at Chapel Hill, Gillings School of Global Public Health
Thesis: Methane Production and Consumption in Alaskan Arctic Lake Sediments
Advisor: Dr. Steve Whalen

Bachelor of Arts, Biology and Philosophy (double major), May 2009
Wake Forest University, Winston-Salem, NC
Research thesis: Effects of silt run-off on the foraging behavior of the Queen Snake
(*Regina septemvittata*)
Advisor: Dr. Dave Anderson
Armfield Scholarship
Sullivan Scholarship for Undergraduate Research

Publications

Bretz, KA and Whalen, SC. 2014. Methane cycling dynamics in sediments of Alaskan Arctic Foothill lakes. *Inland Waters* 4(1): 65-78. <http://dx.doi.org/10.5268/IW-4.1.637>

National Animal Health Emergency Management Guidelines: Biosecurity, Quarantine and Movement Control (available at www.aphis.usda.gov/fadprep)

Professional Experience

USDA Veterinary Services, National Preparedness and Incident Coordination
2015—2018: **Program Coordinator**, Iowa State University Center for Food Security and Public Health; Raleigh, NC, USDA cooperative agreement

2013—2014: **Research Associate**, LMI; Riverdale, MD, USDA contract

- Wrote reports and policy materials for the Foreign Animal Disease Preparedness and Response Plan for USDA. Assisted the Program Manager and National Incident Coordinator with analysis and tasks as needed.

Bioresources Journal, Department of Forest Biomaterials, NC State University
2014—2015: **Process Editor**, Raleigh, NC

- Edited research papers for grammar and style. Advised authors on clear, concise scientific writing in English to help them understand the changes made to their submissions; tracked author accounts. Provided feedback to student employees; trained new staff and delegated workflow.

American Journal Experts
2013: **Contract Editor**

US Fish and Wildlife Service/Kenai Watershed Forum

2012: **Intern**, Soldotna, AK

- Developed outreach materials and delivered educational programming on water quality and stream science.

UNC Chapel Hill Institute for the Environment

2012: **Intern**, Chapel Hill, NC

- Managed an undergraduate study on renewable energy within the lab of Dr. Jose Rial

UNC Chapel Hill/Toolik Field Station

2010—2012: **Research Assistant**

- Conducted field and laboratory experiments on arctic lake biogeochemistry.
- Organized laboratory operations in and between Chapel Hill and a remote Alaskan field station.

Timbercreek Veterinary Hospital

2009: **Veterinary Assistant**, Jonesville, NC

Wake Forest University, Department of Biology Vertebrate Collection

2008—2009: **Laboratory Assistant**, Winston-Salem, NC

NC Aquarium on Roanoke Island

2007: **Summer Intern**, Manteo, NC

YMCA of Northwest NC/Communities in Schools

2005—2007: **Afterschool Counselor**, Winston-Salem, NC

Volunteer and Field Experience:

- NC Museum of Natural Sciences MicroWorld Discovery Lab, Raleigh, NC, 2016—2018
- Deer mouse activity and population study, Highlands Biological Station (NC, 2016) and Hastings Natural History Reservation (CA, 2018)
- Lake trout population survey, Sterling, AK, Fall 2012
- Environmental outreach, Kenai National Wildlife Refuge, Soldotna, AK, Fall 2012
- Toolik Field Station, University of Alaska Fairbanks, North Slope County, AK, Summers 2010—2011
- Queen snake surveys, Surry County, NC, Summer 2008
- Pelican banding, US Fish and Wildlife Service, Oregon Inlet, July 2007