

KAITLIN PERKINS

WORK EXPERIENCE

GRADUATE RESEARCH ASSISTANT, ECOSYSTEMS LAB, UNIVERSITY OF MONTANA, MISSOULA, MT

August 2017 – November 2020, Mentor: Dr. Benjamin P. Colman

- Independently coded a user-friendly project pipeline for a large volume of water metal data. Pipeline efficiently processes data into presentation and publication-quality figures and supports creativity in data analysis with accessible and annotated code and metadata.
- Managed and executed two years of metal data collection over thirteen sites in the Upper Clark Fork River, a remediated Superfund site, for the Ecosystems Lab. Responsibilities have included training undergraduate and graduate researchers, conducting independent field collections and lab analysis, and coding a data cleaning pipeline to share work with other researchers on the CREWS project.
- Student collaborator on NSF EPSCoR CREWS project, an interdisciplinary team of water resource scientists across the Montana University System.
- Formalized and implemented a laboratory operation manual and inventory system for the Ecosystems Lab, including an interactive directory linking students to online resources.

TALL SHIP NATURALIST AND DECKHAND, THE SCHOONER ZODIAC

May 2017 – August 2017, Bellingham, WA

- Coordinated to manage passengers and operations aboard a 160' historic wooden sailboat in the Puget Sound. Passenger safety was our priority as we facilitated both single and multi-day excursions.
- Responsible for marine ecology engagement and education for passengers of all ages,
- Upheld stringent safety and operations requirements under the US Coast Guard permitting.

NATURAL RESOURCE SPECIALIST ASSISTANT, CLEAN WATER DEPARTMENT

January 2016 – February 2017, Clark County Public Works, Vancouver, Washington

- Promoted from intern to assistant, executed clean water projects to meet the county's NPDES permit. This included work in water quality, local source control, low-impact development, & outreach.
- Formed relationships with business-owners to prevent industrial chemicals from entering watershed as project lead on oil-water separator inspection and mapping using GIS.
- Monitored rivers and streams across Clark County, including water and macroinvertebrate sampling.
- Captured storm events by tracking weather to collect stormwater pulse samples with an autosampler and manually, analyzed data for quarterly water quality reporting for the Department of Ecology.

UNDERGRADUATE RESEARCHER, AQUATIC ECOLOGY LAB, WASHINGTON STATE UNIVERSITY VANCOUVER

May 2015 – August 2017

- Addressed the impact of an annual drawdown on phytoplankton dynamics in a spill-managed reservoir in SW Washington with Dr. Rollwagen-Bollens, published in *Lake & Reservoir Management*.

PROJECT MANAGEMENT ASSISTANT, INSTAFAB CO INC, VANCOUVER, WA

February, 2008 – March, 2011

- Supported commercial structural steel projects with supply ordering, tool room management, building maintenance, steel delivery, and construction print management.

EDUCATION

MASTER OF SCIENCE IN SYSTEMS ECOLOGY

University of Montana, Missoula, Montana
Expected graduation: December 2020

BACHELOR OF SCIENCE IN BIOLOGY, MINORS IN ENVIRONMENTAL SCIENCE AND MATHEMATICS

Fall 2013 – May 2017
Washington State University Vancouver, Vancouver, Washington

SKILLS

COMPUTING

- R Statistical Software, Excel, GIS, Microsoft Office, Github, HTML, SQL, SigmaPlot, Python (intro)
- Slack, social media for marketing (Facebook, Twitter, Instagram)
- Data management training, workflow development, data sharing and open, reproducible science

FIELD & LABORATORY

- Field efforts: personnel management, supply ordering, water, plastic, gas, and organism sample collection shore, boat, and ship-side, use of Van Dorn trap, tow nets, and water collection methods
- Laboratory skills: centrifugation, aseptic pipetting, clean lab techniques, acid washing, ICP-OES, instruments include field flow fractionation, tangential flow filtration, microscopy for plastic analysis, spectrofluorometric analysis, chlorophyll extraction, vacuum filtration, macroinvertebrate collection, protocol development for instrumentation and methods

COMMUNICATION

- Oral and poster talks for general and specialized audiences, including resource managers, during both undergraduate and graduate research
- Writing experience including a publication, white paper, successful grants, grant reporting, water quality and TMDL reporting, educational material, professional communication through email
- Science communication from a relevant policy and journalistic perspective

TRAINING

UM BRIDGES TRAINEE, FOOD-ENERGY-WATER NEXUS GRADUATE CERTIFICATE

University of Montana, November 2020

NSF-funded graduate training program that focuses on applied science at the nexus of food, energy, and water. Engaged in classes and workshops focused on science communication and the science-policy-practice interface.

CERTIFICATE IN QUANTITATIVE BIOLOGY

Washington State University Vancouver

SELECT CIVIC ENGAGEMENT ACTIVITIES

Lead organizer of Let's Talk About Water Montana film screening and panel discussion, Day of Action, and Science on Tap water talks at Imagine Nation brewing, January 2019 – November 2019

nPower Girls Watershed Quality Camp Co-leader, Castle Rock, July 2017

Worked with women mentors at National Education for Women (NEW) Leadership Summer Institute, developing skills in preparation for positions of leadership, July 2016

President and Founder of the Environmental Science and Sustainability Club at WSUV, organizing meetings and events to connect students to the campus sustainability resources, 2013 - 2016

Volunteer at Sacred Sueños in Vilcabamba, Ecuador, learned permaculture design and assisted in goat care and cheese making, cob construction, and farm maintenance, May 2014

Founded the Portland, Oregon chapter of Citizens Climate Lobby, traveled to Washington DC to meet with members of Congress to discuss a carbon fee and dividend, 2012 – 2013

Certified Watershed Steward in Clark County in 2013, which required an eight-week training and engaging in volunteer events that were beneficial for watershed vitality.

PUBLICATION

Perkins, K. R. et al. Lake and Reservoir Management Variability in the vertical distribution of chlorophyll in a spill-managed temperate reservoir. *Lake and Reservoir Management*. 0, 1–8 (2019). DOI: 10.1080/10402381.2019.1566935

SELECT PRESENTATIONS

Perkins, K, Montaño, M, Colman, B. Oral Presentation. A submicron perspective on mine-waste contamination to inform potential exposure. American Water Resource Association Montana. Digital, October 2020.

Perkins, K, Montaño, M, Colman, B. 5-minute Oral Presentation. Characteristics of submicron particles in a mine-waste contaminated river. CREWS All Hands Meeting, Digital, October 2020.

Perkins, K, Montaño, M, Colman, B. Poster Presentation. Examining the abundance and composition of submicron particles in a mine-waste contaminated intermountain west river. Montana American Water Resources Association, Red Lodge, MT, October 2019.

Perkins, K, Montaño, M, Colman, B. Poster Presentation. Prospecting for submicron metal particles in a mine waste contaminated. Society for Freshwater Sciences conference, Salt Lake City, UT, May 2019.

Perkins, K, Rollwagen-Bollens G, Bollens S, Zimmerman, J. Oral presentation. Influence of environmental factors on vertical distribution of phytoplankton in Lacamas Lake, WA. Air & Waste Management Association Oregon Chapter Student Environmental Challenge.

GRANTS & HONORS

Best Poster award at American Water Resource Association MT conference, October 2019

CUAHSI Let's Talk About Water Challenge Grant, January 2019

NSF Graduate Research Fellowship Program Fellow, March 2018

Montana Water Center Student Fellow, March 2018

1st Place Oral Presentation, Air & Waste Management Association Oregon Chapter Student Environmental Challenge, April 2017

Best Undergraduate Research Poster, Washington State University Research Showcase, November 2016

NSF Research Experience for Undergraduates Fellowship, June 2015

Vancouver Watershed Alliance grant for compost system at Clark College, October 2012