

## KAITLIN PERKINS

### SKILLS & ABILITIES

Graduate student in ecology with excellent communication skills, contributing energy, ideas, and enthusiasm. Creative, flexible, and determined. Strong leadership and entrepreneurial view. Programming languages include R statistical software, LaTeX, and SigmaPlot. Experience in statistical analysis, technical writing, and field and lab work.

### GOALS

Pursue practice and research in aquatic sciences and natural resource management. Objectives are to apply knowledge to tackle complex watershed issues post-MS. Passions include clean water and community engagement.

### EDUCATION

#### **MASTER OF SCIENCE IN SYSTEMS ECOLOGY, UM BRIDGES TRAINEESHIP**

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

#### **BACHELOR OF SCIENCE IN BIOLOGY WITH HONORS, MINORS IN ENVIRONMENTAL SCIENCE AND MATHEMATICS, CERTIFICATE IN QUANTITATIVE BIOLOGY, UNIVERSITY SCHOLARS HONORS PROGRAM**

Fall 2013 – May 2017  
Washington State University Vancouver, Vancouver, Washington  
GPA: 3.74, with honors

#### **SEA SEMESTER – WOODS HOLE, MA & NEW ZEALAND**

September 2014 – December 2014  
Global Oceans Program – Oceanography, Conservation, Leadership, and Cultural Studies  
Studied in Woods Hole, MA for 6 weeks and on a 135' sailing school research vessel in the waters of New Zealand for 6 weeks. Developed leadership, maintenance, sailing, and navigation skills on the ship through participation as a crew member. Gained research experience through equipment deployment and work in the onboard lab. Rotated as Junior Watch Officer and Junior Lab Officer modeling appropriate safety procedures and maintaining proper ship operations.

#### **ASSOCIATE IN SCIENCE**

Clark College, Vancouver, Washington  
GPA: 3.0, Graduated Spring 2013

### RESEARCH EXPERIENCE

#### **ECOSYSTEMS LAB, UNIVERSITY OF MONTANA**

Graduate Research Assistant, August 2017 - present  
Pursuing Master's in Systems Ecology under the mentorship of Dr. Ben Colman focused on investigating the role of size and particle interactions in metal transport in the Upper Clark Fork River, Montana. Responsibilities include regular sample collection and analysis using size fractionation and dynamic light scattering. Training in field flow fractionation, acid digestion,

inductively coupled plasma optical emission spectrometry (ICP-OES), tangential flow fractionation, spectrofluorometric analysis, and

**AQUATIC ECOLOGY LAB, WASHINGTON STATE UNIVERSITY VANCOUVER**

Undergraduate Researcher, August 2015 – August 2017

Investigating the vertical distribution of phytoplankton in relation to hypoxia in Lacamas Lake under the mentorship of Dr. Gretchen Rollwagen-Bollens. Conducted study on the vertical distribution of phytoplankton in a heavily managed reservoir. Sampled phytoplankton with a Van Dorn trap and size fractionated with vacuum filtration. Field efforts included launching a boat and sampling late into the night. Chlorophyll extractions were completed, and samples were analyzed on a spectrofluorometer. The project began as an NSF Research Experience for Undergraduates (REU) Fellowship position and was later continued with the University Scholars Honors Program. The study has been published by *Lake and Reservoir Management*.

**DIRECTED OCEANOGRAPHIC RESEARCH, SEA SEMESTER, WOODS HOLE & NEW ZEALAND**

Student Researcher, September 2014 – December 2014

Conducted study of micro and macroplastics density in the ocean waters of New Zealand while learning sail training and leadership. Designed and carried out the project with two other students under the guidance of mentor Deb Goodwin. Used bucket sampler to collect microplastics and tow nets to collect macroplastics. Described plastics using microscopy and material keys while at sea, in addition analyzing and reporting these data. Also conducted bird and marine mammal surveys, tow net surveys with organism identification and counts, and regular data logging of outputs from on-board instruments. Sail training included navigation, ship maintenance, and line management. Given that the vessel was always under sail, all activities occurred at any time of the day or night.

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**WORK EXPERIENCE**

**NATURALIST AND DECKHAND, THE SCHOONER ZODIAC, BELLINGHAM, WA**

May 2017 – August 2017

Provide educational materials and assistance for species identification and give presentations about marine ecology and stewardship. Teach passengers sail technique, theory, and navigation. Assist with sailing operations, including ship maintenance, sail handling, navigation, passenger support, and safety.

**NATURAL RESOURCE SPECIALIST ASSISTANT, CLARK COUNTY ENVIRONMENTAL SERVICES**

January 2016 – February 2017

Work in Clean Water Division addressing stream and stormwater contamination and pollutants. Conduct stream monitoring including water and macroinvertebrate sampling. Stormwater work including monitoring using autosamplers, infrastructure inspections including bioswales and belowground systems, data analysis, and report generation. Clean water outreach and education including a local Earth Day event. Project lead in oil/water separator inventory and GIS mapping project as part of Local Source Control.

**SALES AGENT, GREEN MOUNTAIN ENERGY, PORTLAND, OR**

February 2013 – January, 2015

Communicated the operation and benefit of Portland General Electric's renewable energy certificate program to a diverse customer base.

**GRASSROOTS EDUCATOR, BARK, PORTLAND, OR**

September 2012 – March 2013

Educated citizens about socio-environmental issues in Mt. Hood National Forest.

**UNDERGRADUATE PHYSICS 201 TEACHING ASSISTANT, CLARK COLLEGE, VANCOUVER, WA**

January 2013 – March 2013

Graded physics assignments for Physics 101 and 102 under the guidance of Dr. Gothard Grey.

**ASSISTANT, INSTAFAB CO, INC., VANCOUVER, WA**

August 2007 – May 2011

Assisted with the family business in project management and shop work. The former included material quotes, compiling LEED certification reports, steel deliveries to job sites, janitorial work, tool room management, supply ordering, print room management, and building maintenance.

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

University of Montana, 2017 – present

NSF-funded graduate training program that focuses on applied science at the nexus of food, energy, and water. Training complements thesis research through applied and interdisciplinary skills development. Engaged in classes and workshops focused on science communication, policy, bridging science and practice, and complex issues at the food-energy-water nexus.

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**CONFERENCE****PRESENTATIONS &  
PUBLICATIONS****PUBLICATIONS**

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).

**PRESENTATIONS**

Perkins, K, Montaño, M, Colman, B. Oral Presentation Characterizing sub-micron metal particles in a mine waste contaminated river to better understand potential exposure. GradCon, Missoula, MT, January 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. EPSCoR National Conference, Columbia, SC, October 2019.

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, Montaño, M, Colman, B. Poster Presentation, Size, associations, and distribution of mining contaminants in the Upper Clark Fork River, Montana. Montana Aquatic Research Consortium conference, April 2019.

Perkins, K, Montaño, M, Colman, B. Poster Presentation, Size, associations, and distribution of mining contaminants in the Upper Clark Fork River, Montana. GradCon, University of Montana, February 2019.

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

Perkins K, Rollwagen-Bollens G, Bollens S, Zimmerman, J. Influence of environmental factors on vertical distribution of phytoplankton in Lacamas Lake, WA. Washington State University Vancouver Research Showcase. April 2016.

Perkins K, Rollwagen-Bollens G, Bollens S, Zimmerman J. Influence of environmental factors on vertical distribution of phytoplankton in Lacamas Lake, WA. Murdock Charitable Trust College Science Research Program, Vancouver, WA. November 2015.

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## AWARDS

CUAHSI Let's Talk About Water Challenge Grant as part of a graduate student working group, January 2019

NSF Graduate Research Fellowship Program Fellow, March 2018

Montana Water Center Student Fellow, March 2018

Banner carrier for the Washington State University College of Arts and Sciences, May 2017

1<sup>st</sup> Place Research Presentation, Air & Waste Management Association Oregon Chapter Student Environmental Challenge, April 2017

NSF Graduate Research Fellowship Program Honorable Mention, March 2017

Clark County Public Works Innovation Award for work with the Local Source Control group, February 2017

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

President's Honor Roll at WSUV in 2013 - 2016

University Scholars Honors Program \$1,000 grant at Washington State University Vancouver, October 2015

NSF Research Experience for Undergraduates Fellowship working with Dr. Gretchen Rollwagen Bollens at WSUV, June 2015

John Robert Brown Scholarship at WSUV of \$1,000, November 2015

Student Leadership Recognition Award at WSUV, November 2015

Vancouver Watershed Alliance as part of the Environmental Club at Clark Community College, \$1,500 grant for compost system, October 2012

## LEADERSHIP & CIVIC ENGAGEMENT

Lead organization 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  
Co-organized two Science, Policy, and Practice panel discussions: a discussion panel on women in government science roles (February 2019) and a discussion panel on women in non-academic science roles (November 2019), collaboration between Graduate Women in Science and Women in Science in Division of Biological Sciences

Founded the Missoula Chapter of the Graduate Women in Science, December 2018

Montana Natural History Center Naturalist in the Classroom volunteer, October 2017 - present

We Are Montana in the Classroom volunteer, October 2017 - present

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

Spoke in a video produced for the Clark Community College STEM Department regarding my experiences as a woman in science and mathematics, June 2017

Volunteer tree planter with Friends of Trees, Vancouver, WA, 2017

Volunteered as a Science Fair Judge for the Southwest Washington Science and Engineering Fair.

Invited by Pleasant Mountain Elementary School to participate in a career fair as the resident scientist for elementary and middle school students, November 2016

Invited by nPower Girls program to lecture Kalama High School ninth grade students regarding a career in applied ecology, and what occurs in the typical day of a scientist, November 2016.

Volunteer plankton expert at the Vancouver Lake Ecoblitz, October 2016.

Volunteer facilitator at the Watershed Congress, providing feedback and leadership for elementary and middle school students working on watershed monitoring in Clark County, May 2016

Invited to participate in a panel to speak to high school students at the Clark College iTech program about the process of acquiring a college degree, February 2016

Student Representative on Tree Committee at Washington State University, 2014 – 2016

President and Founder of the Environmental Science and Sustainability Club at WSU, helping to organize meetings, events, and logistics to connect students to the campus and improve campus sustainability, 2013 - 2016

Nominated to participate in town hall meetings with Governor Inslee in to discuss proposed legislation that will address climate change in Washington State, April & December 2015

Invited to participate in a meeting with Washington State University Board of Regents to discuss my experience at WSU as a woman in STEM, November 2016

Invited to host the Student Leadership Recognition Award Ceremony to announce student accomplishments and facilitate, November 2015

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

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

Member of Environmental Club at Clark College in 2011 – 2012, assisted in the acquisition of a grant to install a compost system in the cafeteria.

Volunteered with NERD Girls at Clark College in 2011, engaging in community STEM outreach for middle and high school aged students.

Volunteered in 2004 for State Senator Brian Baird, engaging the community through door knocking and phone campaigns.

## WORKSHOPS & CERTIFICATIONS

NSF Cross-INFEWS NRT meeting, July 31 – August 1, 2018. “Building a collaborative vision and diverse community to support the emerging FEWS workforce”, Missoula, Montana.

Participated in the National Education for Women (NEW) Leadership Summer Institute in June 2016, gaining experience in public speaking, organizing, and message management, drawing on the expertise of women in various fields, and learning skills in preparation for positions of leadership, July 2016

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.

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## SCIENTIFIC SOCIETY MEMBERSHIPS

Society for Freshwater Science, 2019 – present

Graduate Women in Science, 2017 – present

American Water Resources Association Montana, 2017 – present

American Geophysical Union, 2018 – 2019

Sigma Xi, 2018 - 2019

Associate Women in Science, 2017 – 2019

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## INTERESTS AND HOBBIES

Hiking, rock climbing, surfing, camping, travel, sewing, cooking, sailing, gardening, mushroom harvesting, music, and science fiction books.