Kelly A. Loria

University of Nevada, Reno
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Education

University of Nevada, Reno (present)

Ph D Student in the Ecology, Evolution and Conservation Biology Program
Department of Natural Resources and Environmental Science
GPA: 3.933

University of Colorado, Boulder

B.A. Ecology and Evolutionary Biology, College of Arts and Sciences (2017), *Magna cum laude*
GPA 3.56
Dean's List (2015-2017)

Diablo Valley Community College

Associate in science degree Environmental science (2013-2014)

Research

2020- present Reno, NV

PhD student
Joanna R. Blaszczak Laboratory, University of Nevada, Reno
Thesis: The impact of mountain streams on watershed processes like stream and lake metabolism through time.

2015 – 2020 Boulder, CO

Program and field manager for Niwot Ridge Long Term Ecological Research (LTER) limnology program
Aquatic ecosystem research and surveying and sample processing. Notably water sample filtration, zooplankton analysis, phytoplankton analysis (microscope and FlowCAM®), chlorophyll-a analysis (extraction, fluorescence, as well as Cyclops C7), probe measurements and calibration (YSI 556 MSP and Li-Cor), PME, RBR usage for in situ buoy configurations, mesocosm experimentation, and data management via Environmental Data Initiative (EDI).

2015 – 2017 Boulder, CO

Undergraduate researcher
Pieter T.J. Johnson Laboratory, University of Colorado, Boulder
Lake and pond surveys in Colorado and California, as well as zooplankton microscopy.
Thesis: Freshwater zooplankton communities as indicators of habitat quality: Testing Responses to multiple disturbances.

Publications and Presentations

(* indicates oral presentation)

***Loria K** (2015) Biotic Implications of Climate Change on Alpine Lakes. *Research experience for undergraduate oral presentation at the University of Colorado Boulder Mountain Research Station*

***Loria K** (2017) The effects of elevation on the plankton communities of alpine lakes. *Tenth Annual Guild of Rocky Mountain Ecologists and Evolutionary Biologists (GREEBS). Poster Presentation.*

***Loria K**, McKnight D, Ragar D, Johnson P (2018) Comparative survey of the abiotic and biotic characteristics of lakes across an elevation gradient in the Rocky Mountains, USA. *Association for the Sciences of Limnology and Oceanography(ASLO)- 2018 Summer Meeting. Oral Presentation.*

Loria K (2017) Freshwater zooplankton communities as indicators of habitat quality: Testing Responses to multiple disturbances. Undergraduate Honors Theses.

Loria K, McKnight D, Ragar D, Johnson P (2020a) The life aquatic in high relief: shifts in the physical and biological characteristics of alpine lakes along an elevation gradient in the Rocky Mountains, USA. Aquatic Sciences, 82(1), 11.

Loria K, Christianson K, & Johnson P (2020b). Phenology of alpine zooplankton populations and the importance of lake ice-out. Journal of Plankton Research, 42(6), 727-741.

Christianson K, **Loria K**, Blanken, D, Caine N, & Johnson P (2021). On thin ice: Linking elevation and long‐term losses of lake ice cover. Limnology and Oceanography Letters.

***Loria, K.,** and Blaszczak, J. (2021, May). Modeling mountain stream metabolism: methods for linking upland rates of biotic nutrient processing with nearshore productivity in the Tahoe Basin. Freshwater Science 2021 Virtual meeting. *Poser presentation.*

***Loria, K**., & Blaszczak, J. (2021, December). Linkages Between Ecosystem Productivity and Nitrogen Uptake in Mountain Streams with Contrasting Flow Regimes in the Lake Tahoe Basin. In AGU Fall Meeting Abstracts (Vol. 2021, pp. H15I-1144). *Poster Presentation.*

***Loria, K.,** Sudeep C., and Blaszczak, J. (May, 2022) Seasonal variation in nitrate uptake and ecosystem productivity rates in mountain streams with contrasting flow regimes in the Lake Tahoe Basin. In Joint Aquatic Sciences Meeting (JASM*). Poster presentation.*

***Loria, K.,** H. Lowman, Sudeep C., and Blaszczak, J. (June, 2023) Mountain streams' role in governing physical drivers of nearshore metabolism: a case study of contrasting flow regimes in the Lake Tahoe Basin. In ASLO Aquatic Sciences Meeting. *Oral presentation.*

Teaching

Teaching Assistantship: NRES 295 Wildlands Hydrology
University of Nevada, Reno; January-May 2021

- Coordinated lecture, taught guest lectures, hosted labs, held weekly office hours to helps with scientific writing and graded assignments.

Teaching Assistantship: ENV 101 Introduction to Environmental Science
University of Nevada, Reno; January-May 2021

- Coordinated lecture, class resources, and graded assignments, held weekly office hours to help with material.

Teaching Assistantship: NRES 422/622 Soil Physics
University of Nevada, Reno; August-December 2020

- Prepared laboratory kits and exercises for students, coordinate lecture, class resources, and graded assignments.

Teaching Assistantship: NRES 322 Soil science
University of Nevada, Reno; August-December 2020

- Coordinated lecture, class resources, and graded assignments, held weekly office hours to help with material.

Science mentor:
University of Nevada, Reno: 2021-present

- REU student Rija Masroor on project looking at surface water patterns in DOM.
- McNair scholar and NURA recipient Paola Miramontes-Gonzalez investigate longitudinal patterns in urban stream chemistry and stable water isotopes
- NV EPSCoR summer research fellow Rob Miller works measuring nearshore N-fixation rates in Lake Tahoe

Science mentor:
University of Colorado, Boulder: 2017-2020

- Field and lab experience to two NSF funded Research Experiences for Undergraduates at the University of Colorado Mountain Research Station
- Field and lab experience to five Undergraduate Research Opportunities Program students (three of whom used their projects to complete undergraduate honors thesis)

Grants and Awards

- **2023** Graduate Student Association Travel Grant to Palma Spain for ASLO Meeting ($750)
- **2021** Graduate Student Association Travel Grant to New Orleans for American Geophysical Union Fall Meeting ($500)
- **2021** AGU Student Travel grant for Fall Meeting ($1000)
- **2021** Graduate Student Association Spring award to for Survey of Caldor Fire on stream water quality ($1,500).
- **2021** National Science Foundation Graduate Research Fellow
- **2021** The Southwest Climate Adaptation Science Center Natural Resources Workforce Development Fellowship ($5,000).
- **2020** Honorable Mention in the National Science Foundation Graduate Research Fellowship Program competition.
- **2020** University of Nevada Reno Graduate Dean's Merit Scholar for students who show the potential to make substantive contributions to their discipline ($10,000).
- **2020** Whittell Forest Graduate Research Fellowship for University of Nevada Reno graduate research ($1,500).
- **2016** Undergraduate Research Opportunities Program (UROP) to fund a research project in which we sampled lakes North and South of the Green Lakes Valley ($3,000).
- **2016** Marian and Gordon Alexander Memorial Fellowship Award for 2016 to support research related to the living study of mountains ($5,000).
- **2015** National Science Foundation for Research Experience for Undergraduates (REU) in Ecology and Evolutionary Biology to participate on a project that sampled alpine lakes in Rocky Mountain National Park ($5,000).
- University of Colorado, Boulder: Dean's List (2015-2017).

Service

Outreach/Volunteer:

- **2023:** Invited talk at the Taylor Creek Visitor Center on Lake Tahoe Watersheds*" Snow, mountain streams, and water quality in the Tahoe Basin"*
- **2021-Present**: State of the Lake talks at Glenbrook, NV to discuss scientific findings with residents. Typically, three each summer.
- **2022**: Big Brothers Big Sisters Science Day Event running the interactive watershed station.
- 2022: Nevadafit aquatic ecology camp leader teaching incoming UNR students' freshwater ecology courses.
- **2021**: Headwaters Science Institute Lunch with a Scientist Lecture Series: "Mountain Ecosystems and Nitrogen" (headwaterssscienceinstitute.org/lunch-with-a-scientist-kelly-loria/)
- **2020**: Museum of Boulder exhibit "Our Living Landscape: Exploring Boulder's Watershed". Curated information on limnology monitoring efforts within the City of Boulder's Watershed.
- **2017-2020**: Wild Bear Summer limnology science lessons. Teaching base principles of aquatic ecology of mountain systems to K-12 students for three days each summer in a local outdoor setting.
- **2017-2020**: CU Science Discovery Mountain Research Experience. In partnership with Nature Kids/Jóvenes de la Naturaleza, teaching summer courses to high school students on alpine aquatic ecology.
- **2016-2018** Annual Boulder Creek Clean Up through University of Colorado, Boulder Environmental Studies Club
- **2022** Reno Bike Project holiday bike repair giveaway mechanic
- **2016-2018** Boulder Food Rescue Volunteer

Professional:

- University of Nevada, Reno Peer Review Committee (2021-present)
- University of Nevada, Reno Party Planning Committee (2022-present)
- University of Nevada, Reno Written comprehensive exam review committee (2022-present)
- 2021-2022: Tribal Consultation and UA Research/Engagement with Native Communities through the University of Arizona
- NOLS Wilderness first aide certification 2016, 2018, and 2022
- 2021 SCUBA certification, high elevation dive certification
- 2020 NSF Risk Management Workshop for Field Scientists
- Drinkchlet University of Nevada, Reno graduate student quantitative reading group
- QDT-University of Colorado, Boulder EBIO's graduate student "Quantitative data club"

Relevant Course Work

Ecological Forecasting, Limnology, Tropical Marine Ecology, Animal Behavior, Quantitative Thinking, Biometry, Bayesian Hierarchical Modeling, Evolutionary Biology, Fish Biology, Conservation Ecology, Field Methods in Ecosystem Science, Ecogeomorphology in Rivers, Stream Ecology.

Other Skills

- Programming: R, matlab, and python
- Github: *github.com/kellyloria*
- Graphic, web design, and scientific illustration
- Instrumentation: Seal Analytic AQ400 major dissolved nutrients, Shimadzu TOC analyzer, various gas analyzers, Turner Designs Trilogy fluorometer, HOBOware, Pacific Marine Engineering, YSI, Ruskin RBR, and Microplate reader for extra cellular enzyme extraction.

References

Dr. Joanna R. Blaszczak
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Dr. Adrian Harpold
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