



Seeking PhD student or postdoc for NSF-Funded Project on Arctic Ecology, Biogeochemistry, and Catchment Hydrology

Brigham Young University

Funded Position Available: We are seeking diverse and creative candidates for a PhD or postdoc position at Brigham Young University starting in spring or summer of 2021. You would work with Ben Abbott (BYU), Jay Zarnetske (MSU), Ariel Shogren (MSU), Breck Bowden (UVM), and Jon O'Donnell (Alaska NPS).

Project Background: This collaborative NSF-funded project explores what happens to the vast stores of nutrients that are being released from thawing permafrost across the Arctic. Permafrost nutrients (e.g. nitrogen and phosphorus) support plant growth but can also accelerate the production of greenhouse gases, affecting local habitat and strengthening the permafrost climate feedback. To investigate the fate of permafrost nutrients, we will use Arctic stream networks as multi-scale sensors of nutrient dynamics in rapidly changing permafrost ecosystems. **Field work** will take place across Arctic Alaska and will include synoptic sampling of remote river networks, hydrological measurements, and nutrient limitation experiments. **Lab work** will take place at BYU, MSU, and UVM, and will involve advanced biogeochemistry (optical, isotopic, and chemical analyses), spatial analysis, and ecohydrological modeling. There are abundant **outreach and activism opportunities** with a network of researchers, writers, performers, and outreach organizations. Students, PIs, and partners will work together to communicate the beauty of Arctic science and galvanize societal change.

To Apply: email CV and letter of interest to benabbott@byu.edu. Full application: <https://gradstudies.byu.edu/>.



Additional info: on project and research group: <https://benabbott.byu.edu/> (@thermocarst), www.zarnetskelab.com (@jzarnetskelab @DrArielShogren), <https://www.uvm.edu/~wbowden/>