

## The Gooseff Hydroecology Lab at the University of Colorado Boulder is recruiting PhD student to study stream nutrient transport, fate and long-term stream fertilization experiment, Antarctica

We are seeking a PhD student to conduct field research in the Dry Valleys of Antarctica, specifically to focus on the influence of nutrient additions to intermittent streams. A new long term experiment, Variable Application of Inorganic Nutrients (VAIN), includes conducting repeat stream injections of nutrients and conservative tracers. Thus, opportunity for analyses of transport and fate of the nutrients under varying conditions and the long-term assessment of stream ecosystem response to nutrient additions are available. While deployed annually during the austral summer (Nov-early Feb), the student will be part of a larger field team conducting state of the art monitoring and experimental activities. Year-round the larger team meets regularly online and in person annually to share new findings and ideas. We seek to broaden representation and participation in polar science and strongly encourage members of underrepresented groups to apply. Learn more about our lab at <http://goosefflab.weebly.com>



Support – Beyond the team dynamics of our research lab and the broader project, support includes both monthly stipend (at rates that are regularly evaluated by units and increased) and tuition coverage. Research costs are also covered within planned expenditures. Travel for field work, project meetings, and scientific conferences is also supported. While deployed, extensive support is provided by the US Antarctic Program (e.g., transport, housing, food, and some clothing).

The Civil, Environmental & Architectural Engineering Department (<https://www.colorado.edu/ceae/>) at CU Boulder is one of the top programs in the US with graduate programs in Civil Engineering ranked 13 and Environmental Engineering ranked 8 (in 2021). Our graduate programs are guided by a balance of excellent classes and extensive hands-on research experiences. Professor Gooseff's lab is housed within the Institute of Arctic and Alpine Research (INSTAAR). Thus, graduate students make use of INSTAAR facilities and become important members of the INSTAAR community of faculty, researchers, and students from several other departments on campus.

Qualifications –

- 1) Must be able to deploy to Antarctica for extended period of time and therefore must be successfully Physically Qualified ("PQ'd") to deploy (see Safety and Occupational Health Policy document at <https://www.nsf.gov/geo/opp/policies.jsp> for information about process and health conditions that might result in non-PQ status).
- 2) Background in quantitative analyses of biogeochemical and/or hydrological processes.
- 3) Ability to work responsibly both as an individual and as a member of a team.

Preferred Qualifications –

- 1) Experience designing, executing, and/or analyzing stream tracer techniques.
- 2) Experience conducting field work (research or not) as a team in remote settings.

Full consideration will be provided to those who apply by December 1, 2022 (graduate program application deadline).

Please feel free to reach out to Professor Michael Gooseff via email for further information – [michael.gooseff@colorado.edu](mailto:michael.gooseff@colorado.edu) – I am currently deployed to Antarctica through the middle of December.