Postdoctoral Associate in Winter Watershed Nutrient Fluxes

We are recruiting a postdoctoral associate to join our cutting-edge NSF and Lake Champlain Basin Program (LCBP) funded research on wintertime watershed nutrient fluxes. The LCBP project continues a a five-year NSF research project, which studies Lake Champlain Basin landscape, watershed and lake responses to extreme weather events.

This research position will focus on identifying ***how changing winters, with increasingly common snowmelt and rain-on-snow events, impact the timing and magnitude of watershed nutrient export and alter critical source areas and flowpaths for water, nitrogen, and phosphorous***. As a collaborator on our NSF project, the successful candidate may also participate in unique learning and professional development experiences including science communication, grant writing, and undergraduate mentorship through our summer internship program.

Qualifications

We seek a field-oriented postdoctoral researcher with expertise in nutrient biogeochemistry and catchment hydrology that is interested in studying how hydrological events cascade through soil-stream continua. Research will leverage a heavily instrumented suite of watersheds in Vermont of different landcover and focus on geochemical pathways and processes that drive nutrient export, with particular emphasis on how export pathways and processes vary between winter events (thaws and rain on snow) and growing season events. The candidate should possess expertise and/or interests related to the processing and transport of nutrients or pollutants across riparian soil corridor through river networks. Elements of particular interest include phosphorus, nitrogen and iron in both particulate and dissolved forms.

Experience working with in-situ sensors as well as advanced statistical analyses requisite for interpreting large environmental datasets are desirable. The successful candidate will be responsible for mentoring undergraduate and graduate students associated with this large cross disciplinary project. With a somewhat flexible Spring 2021 start date, this will be a 2-year position with strong performance.

Please contact Andrew Schroth (Andrew.Schroth@uvm.edu) or Carol Adair (Carol.Adair@uvm.edu), or visit http://www.uvm.edu/EPSCoR for more information.

To apply: please send CV, names and contact information for three references, and a cover letter outlining research interests, expertise and availability to epscor@uvm.edu and reference Position ID PDA#001. Applications will be considered until the position is filled.

Please note: For foreign nationals holding F-1 status, the University of Vermont (UVM) is not currently a STEM-OPT authorized employer. For details, see https://www.uvm.edu/oie/practicaltraining or contact InternationalScholars@uvm.edu.