

Postdoctoral Research Associate: Agricultural Water Quality and Environmental Professional Development

Overview: We seek a postdoctoral research associate for a two-year appointment beginning early 2023. This position will encompass both agricultural water quality research, as well as mentorship and support for undergraduate scholars.

Agricultural phosphorus (P) contributions to water quality degradation are a significant concern within the Lake Champlain Basin of Vermont and elsewhere. This position will advance our knowledge on P loss from agricultural landscapes through 1) leading an investigation of Legacy P dynamics in claytextured soils in Vermont, including a mesocosm study on dispersion of sediment bound P in tile drainage, and 2) undertaking a short-term performance evaluation of a novel manure P removal technology. Research activities will involve both field and laboratory work.

The position will also facilitate the Lake Champlain Sea Grant Scholars program, a multifaceted academic scholarship, professional development, and internship experience for a small cohort of undergraduates each year. This will include coordinating a one-week professional development program in late August and two professional development opportunities each semester of each academic year, advertising and reviewing applications to select future Scholar cohorts, engaging in ongoing communications with current and past Scholars, and coordinating internships for Scholars with host organizations.

Responsibilities: Research duties will include field and laboratory work, data analyses, and preparation of peer-reviewed manuscripts highlighting findings. Mentorship responsibilities will include communications, facilitation, and coordination skills.

Minimum Qualifications:

- A PhD in environmental science, agricultural engineering, hydrology, soil science or a closely related field
- Ability to interact with and mentor undergraduate students
- Ability to play coordination role for professional development (e.g., logistics planning and communications with internship hosts)
- Excellent written and oral communication skills

Desirable Qualifications:

- Analytical laboratory experience
- Experience and knowledge related to phosphorus fate and transport in agricultural systems
- Black, indigenous, and people of color and those who identify as female are encouraged to apply.

To apply: Interested individuals may apply by sending their resume and a cover letter stating their interest and any previous experience to both Dr. Joshua Faulkner (<u>Joshua.faulkner@uvm.edu</u>) and Dr. Kris Stepenuck (<u>kris.stepenuck@uvm.edu</u>)

More information:

 $Dr.\ Joshua\ Faulkner's\ profile\ page:\ \underline{https://www.uvm.edu/cals/pss/profiles/research-assistant-professor-joshua-faulkner}$

Dr. Kris Stepenuck via the Lake Champlain Sea Grant program: https://www.uvm.edu/seagrant/ and https://www.uvm.edu/seagrant/opportunities/scholarships