COLLEGE OF NATURAL RESOURCES AND ENVIRONMENT
VIRGINIA TECH

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2024 Stephen H. Schoenholtz Water Undergraduate Research Fund

Request for Applications

An endowed fund, the Stephen H. Schoenholtz Water Undergraduate Research Fund, was established to provide undergraduate research support for the Bachelor of Science undergraduate degree program in Water: Resources, Policy and Management within the Department of Forest Resources and Environmental Conservation in the College of Natural Resources and Environment at Virginia Tech.

Undergraduate research involves and empowers students in hands-on learning, enhances student learning experience by building relationships with faculty, provides effective career preparation, and stimulates interest in graduate education. In addition to personal benefits such as growth in analytical and critical thinking skills, undergraduate research can be fun, creative, and rewarding and can help students find their passion.

Research funding is available each year for one to two undergraduate students enrolled in the Water: Resources, Policy, and Management degree program. Applications are invited for all areas of water resources-related research including science, policy, and management aspects of water. Interdisciplinary work is highly encouraged. The maximum funding amount is about $5,000. Applicants must be enrolled as a full-time undergraduate student in the Water degree program when applying and participating in the program.

A faculty member acting as the main research supervisor and mentor must sponsor the student. The faculty member does not have to be directly affiliated with the Water degree program and can be from any college at Virginia Tech. By sponsoring a student and serving as a research mentor for the student's project, the faculty member is committing to working with the student. The expected time commitment from the faculty mentor and student is 4 to 10 hours per week for a minimum of 10 to 12 weeks. The research can take place during fall, spring, or summer sessions, or span the entire academic year. The timing and budget are components of the student's application.

Students interested in applying for the Undergraduate Research Fund should engage with a potential faculty research mentor prior to applying and work with that faculty member in developing their application. The decision to work together is a mutual one so students should treat their interactions with a potential faculty research mentor in a professional manner. Students may choose any faculty mentor at Virginia Tech and develop their own research project with that faculty mentor. Or students can apply to work on one of the two general projects described below after meeting with the faculty contacts for those projects if there is an agreement to work together.

Ongoing projects:

1. *Watershed, Groundwater, and Stream Research on Brush Mountain* – Dr. JP Gannon (jpgannon@vt.edu), Department of Forest Resources and Environmental Conservation
2. *Stream and Floodplain Research on Stroubles Creek* – Dr. Cully Hession (chession@vt.edu), Department of Biological Systems Engineering

If a student is interested in working on one of these ongoing projects, the student should contact the listed mentor and discuss potential projects and this application. These mentors might suggest other faculty working on these projects

who might be willing to serve as research mentors as well. In all cases, applicants must demonstrate that a faculty research mentor(s) is committed to working with the student on the proposed project. Students will need to prepare and submit a short project description (see below) in consultation with their research mentor.

All projects should culminate in a final product (e.g., poster, report, contribution to a manuscript) to be determined by the faculty mentor and student. Students who receive research funding are strongly encouraged to present their final project at Virginia Tech's Undergraduate Research Conference. Information about the conference can be found on the University Undergraduate Research website: http://www.research.undergraduate.vt.edu.

Applications will be evaluated based on innovation, intellectual merit, and likelihood of success. Factors such as how well conceived and organized the proposed activity is and clarity of writing will be strongly considered in evaluation of the application. The student will be also evaluated on past academic performance and suitability of the student for the project.

Reporting requirements are to be determined, but are likely to include an abstract for submission to the Virginia Tech Undergraduate Research Conference, a final report, contribution to blogs or newsletters, and an interim progress report if the approved project is more than one semester.

To apply for the Stephen H. Schoenholtz Water Undergraduate Research Fund, a faculty member must sponsor you on an agreed upon project. Once you have faculty member committed to sponsoring you, complete the application, and submit a short research project description following the guidelines below. The deadline for applications is **December 1, 2023, at 5:00 PM** and the anticipated start date is January 5th or at the start of spring semester. Your mentor must submit a letter of support to waterdegree@vt.edu by the application deadline. The letter should address the student's competency, how the experience will benefit the student, and a mentoring plan and time commitment. The application materials (cover page, résumé, project title, project description (~1 page), and budget/timeline) should be compiled into one PDF document and submitted as an attachment to waterdegree@vt.edu. The project description should contain the background and context for the research, an objective(s), methods, and expected results. The budget should be appropriately detailed. The applicant should consult with their faculty research mentor to prepare the project description and budget.

The subject line of the email for application submission must read: Schoenholtz Water Undergraduate Research Fund – 2024.

For questions, please contact Dr. Kevin McGuire (kevin.mcguire@vt.edu).