Postdoctoral Research Fellowship in Tree Greenhouse Gas Emissions

Annual salary: $61,947 *plus benefits*

Appointment term: 1 year minimum with potential renewal for a second year

Job Description

We are seeking a Postdoctoral Fellow to join a collaboration between the Smithsonian Environmental Research Center, American University, and Washington State University on an NSF-funded grant to study *Hydraulic and Hydrologic Regulation of Greenhouse Gas Emissions from Forest Soils and Trees and Detection with Radon as a Novel Tracer*. The Fellow will share leadership with the PIs to design a field study that links the physical transport and chemical evolution of water across the soil-plant-atmosphere continuum to sources and sinks of natural methane emissions across wetland, upland, and transitional forest ecosystems.

Our project also includes a substantial Broader Impacts component focused on developing and carrying out an environmental science field trip program for elementary school students in nearby Prince George's County, MD. The postdoc will be welcome, although not required, to assist with this program and other outreach and DEI efforts at SERC and AU.

The Fellow will be based in the Biogeochemistry Lab at the Smithsonian Environmental Research Center (Dr. Patrick Megonigal) with a co-appointment in the Environmental Science Department at nearby American University (Dr. Karen Knee, project PI). The Fellow will further have access to networking and co-mentoring from the Ecohydrology and Landscape Dynamics lab at Washington State University (Dr. Kevan Moffett). Current funding anticipates a two-year position, pending a successful first year, with possibility for extension if further funding is obtained.

We value diversity in promoting innovative science and creative solutions, and strongly encourage candidates from all backgrounds to apply. We recognize that each applicant will bring unique skills, knowledge, experiences and background to the position, and that competitive candidates will not necessarily have all of the qualifications and experiences the project requires. We look forward to training people in new methods and instruments.

Successful candidates will have:

- A PhD in physical or natural sciences awarded by the time the position starts
- Experience in field or lab biogeochemistry, ecophysiology, hydrology, or a related field
- Ability to work effectively both independently and in collaborative, inclusive teams

An ideal candidate may (or may not) have experience in one or more of the following:

- Studying trees, soils, wetland, and/or forested ecosystems
- Measuring and interpreting trace gas fluxes
- Interpreting tree or soil hydrology (sap flux, matric potential, etc.)
- Constructing, monitoring, or maintain field equipment
- R, python, or other coding languages for data analysis
- Communicating through journals and presentations to technical and non-technical audiences

How to Apply

Please email Dr. Karen Knee (knee@american.edu), using the subject heading "**Methane Trees Postdoc**". Include your entire application as a **single** pdf file with your name as the file name (e.g., "Knee_Karen.pdf"). Application review will begin on Dec. 15, and applications will be accepted until Dec. 31, 2022. The pdf file should contain the following:

1. A cover letter describing your relevant experience, qualifications, and motivation (2 page limit)
2. A current CV (no length limit)
3. Contact information for three professional references familiar with your research skills and experience.

About SERC

SERC is a research center of the Smithsonian Institution, located on the western shore of Chesapeake Bay, approximately 10 miles south of Annapolis, 40 miles west of Washington D.C., and 40 miles south of Baltimore. The 2,650-acre SERC campus contains a laboratory and office complex, educational and waterfront facilities, and also serves as a research arboretum and living-laboratory, including for this project. The postdoctoral scientist will be hired as a 'Trust Employee' through Smithsonian's non-profit wing, entitling them to health, vision, dental, and other benefits.

The SERC staff has several self-organized interest groups to engage one another and build a strong sense of community around topics such as Parents, Caregivers & Allies; Women in Science; and Unlearning Racism in Geoscience. The Smithsonian Institution is an equal opportunity employer, committed to a policy of non-discrimination on the basis of race/ethnicity, national origin, sex, gender identity and expression, sexual orientation, age, religion, marital/parental/caregiver status, and disability.