Geography Department | University of Victoria
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Postdoctoral Fellow in Forest Soils and Science-Policy Integration at the University of Victoria (UVic)

UVic's Environmental Governance Group (envirogov.org) at the University of Victoria (UVic) in British Columbia, Canada and the Department of Renewable Resources at the University of Alberta (UofA) are seeking applications for a postdoctoral fellow focused on integrating the latest science on forest soils into Canadian policy. The postdoc will join a collaborative project team funded through the five-year Canadian Natural Sciences and Engineering Research Council (NSERC) Alliance Society grant **Carbon under Canadian forests – Why soils matter.** This NSERC Alliance project develops a pan-Canadian perspective on forest soils by bringing together researchers and practitioners working at 17 forest sites across Canada to understand variation in forest soil properties, carbon dynamics, biodiversity, and resilience to disturbance. The postdoc will be working closely with Dr. Sophia Carodenuto (UVic), Dr. Sylvie Quideau (University of Alberta), and Dr. Charlotte Norris (Canadian Forest Service) to synthesize the scientific outputs of this project and explore options for integrating these findings into Canadian policy.

Project Overview

Healthy forests start with healthy soils. Soils host the greatest biodiversity on Earth and provide many other benefits to forest ecosystems, including water purification, nutrient cycling and the support of productive forests. Soils also contain by far the largest carbon stocks in terrestrial ecosystems. About 28,800 million tonnes of carbon are sequestered in mineral soils of Canadian forests alone, corresponding to 10% of stocks found in forest soils globally. Even small variations in these extremely large stocks can have a profound impact not only on the carbon balance of Canadian forests, but also on the global carbon cycle. Yet, despite their importance, there is still great uncertainty about the mechanisms controlling soil carbon persistence.

This NSERC Alliance project addresses this major knowledge gap by quantifying soil carbon formation and persistence across Canada's major forested ecozones. The project partners have established a nationwide network of experimental sites to compare key soil types under different tree species representative of Canadian managed forests. This will establish the foundational scientific knowledge required to improve current predictions of soil carbon response to environmental shifts (e.g. fires, harvesting) in Canadian forests, and clarify linkages between carbon persistence and soil biodiversity. This will inform policy on management adaptation strategies to sustain Canadian forests and their soils.

Job Description and Key Responsibilities

The overarching objective of the postdoc's position is to generate policy-relevant knowledge to effectively integrate forest-soil carbon in Canadian policies. The postdoctoral fellow will play a central role in integrating and synthesizing research across the NSERC Alliance project's network of 17 forest sites. This will involve working across multiple MSc and PhD projects to develop a

coherent, pan-Canadian understanding of forest soil systems, including patterns in soil carbon stocks and fluxes, biodiversity, and ecosystem resilience to disturbance. The fellow will lead and contribute to multi-author synthesis outputs, including academic publications, reports, and conceptual frameworks that bridge sites, disciplines, and methodological approaches. The successful applicant will divide their time between the UofA and UVic, while working with a larger interdisciplinary team of researchers based across the country in order to achieve the project objectives.

In addition, the fellow will work at the science–policy interface by analyzing the policy and governance landscape relevant to forest soils and forest management in Canada. This includes examining how project findings relate to climate mitigation and adaptation strategies, forest management guidelines, and carbon accounting approaches, including the treatment of soil carbon in national and international reporting frameworks. The fellow will conduct policy analysis and contribute to the development of policy-relevant insights and options, while working in close collaboration with partners such as the Canadian Forest Service.

The postdoctoral fellow will also contribute to the project's broader societal impact in collaboration with project partners. This may include supporting the development of educational materials, contributing to public-facing outputs such as web content or explainer materials, and helping to identify key messages emerging from the scientific synthesis. These activities will ensure that outreach and engagement efforts are grounded in robust scientific evidence. While contributing to these efforts, the position remains primarily research-focused, with evaluation centered on scholarly outputs, synthesis, and contributions to science–policy integration.

Qualifications

In order to apply, applicants must have obtained a PhD in a natural science discipline related to forest soils and climate, such as forest ecology, soil science, biogeochemistry, environmental science, or a closely related field. The applicant should possess a demonstrated interest, or experience with, social science, policy, and governance such as environmental policy, science–policy studies, sustainability transitions, or knowledge mobilization.

We are seeking individuals with experience working with large datasets and large multidisciplinary teams, and a peer-reviewed publication record is an asset. Strong written and oral skills in English are a requirement for a successful applicant, and applicants will be expected to demonstrate excellent communication, writing, and organizational skills. The French language is an asset, but not a requirement. Those with work experience will be preferred, with particular preference for those with policy analysis in the Canadian context. We also value candidates with experience in temperate or northern forests, including possibly European forests and European Forest Soil Governance.

Working Environment

The University of Albert and the University of Victoria are proud to be spaces for high quality and

conscientious research and teaching. We are an interdisciplinary unit, and much of our work is possible thanks to close partnerships with community members and groups, both locally and around the world. Specific to this NSERC Alliance project, the postdoc will have the opportunity to help shape a first-of-its-kind, pan-Canadian synthesis on forest soils and their role in climate mitigation, adaptation, and biodiversity. Further, we have an established national network of researchers and practitioners, including the Canadian Forest Service and other Alliance partners. This opportunity provides mentorship and support for developing an independent research profile at the science–policy interface, impactful scholarly and policy-relevant outputs, and experience in interdisciplinary and cross-sector collaboration.

UVic and the U of A are committed to upholding the values of equity, diversity, inclusion and rights in our living, learning and work environments. In pursuit of our values, we seek members who are eager to actively participate in that shared responsibility. We actively encourage applications from members of historically and systemically marginalized groups.

Expected Start Date, Salary and Benefits

Start date: September 2027. One-year position renewable for another year based on performance.
Salary: $65,000 CAD per year with access to extended health and dental benefits (Postdoc Guide to Benefits).
Please consult the postdoctoral guides for UVic and the U of A for additional information on available resources.

Application

As soon as possible, interested applicants should send to Drs. Sophia Carodenuto (carodenuto@uvic.ca) and Sylvie Quideau (squideau@ualberta.ca), subject line "Canadian forest carbon soils postdoc position"):

1. a cover letter detailing how you meet the above-listed qualifications for this position. Cover letters should explicitly identify how previous academic and/or work experience are related to the skills required for the advertised position.
2. a CV detailing academic achievements, conferences and publications (including links where possible), and
3. Contact information for three references.

Only those candidates of interest will be contacted for an interview, so we ask that you do not send follow-up emails regarding the status of your application. We will review applications until the position is filled. Deadline is January 15, 2027, but early applications are highly encouraged. PhD must be completed by the start of the Postdoc.