

UNIVERSITY of STIRLING



Postdoctoral Research Assistant to investigate mycorrhizal influences on the formation and decomposition of soil organic matter

Applications are invited for a Postdoctoral Research Associate to develop a mechanistic understanding of the role of plant-soil interactions in the formation and decomposition of soil organic matter (SOM). The successful candidate will work closely with investigator teams in the UK (Universities of Stirling and Manchester, Forest Research and NERC Radiocarbon Laboratory) and the US (Colorado State University), led by Dr Jens-Arne Subke (Stirling). A key objective of the research is to understand whether shifts in temperate vegetation associated with fundamental changes of mycorrhizal association result in contrasting rates of stabilised organic matter formation. Knowledge of the impact of vegetation change on soil carbon storage potential are important, as there are significant shifts in vegetation due to land management as well as driven by climate across temperate and boreal regions, and including the UK. The 3-year position is part of a NERC/NSF funded project, and is based at Stirling.

Key Duties and Responsibilities

- Coordination and execution of experiments in the field and in the lab.
- Close cooperation with project partners at the University of Manchester (Prof. David Johnson), Colorado State University (Profs. Francesca Cotrufo, Bill Parton, Steven Ogle & Jay Breidt), NERC Radiocarbon laboratory, and Forest Research
- Oversight of all work packages and communication between experimental researchers and modellers
- Management of research data base and publication of findings

Qualifications

- PhD in Ecology, biogeochemistry, soil science or other relevant environmental/ecological science.
- A thorough understanding and ideally first hand experience in soil science and use of stable isotopes
- Ability to assess and organise resources as well as plan and execute lab and field work
- Excellent communication and interpersonal skills
- Track record of publications commensurate with career stage
- An aptitude to use initiative and creativity to identify areas for research, develop new research methods and extend the research portfolio
- Ability to identify, analyse and solve complex scientific and logistical problems
- Willingness to travel frequently for fieldwork in the UK, and to the US for training and project meetings

Application deadline: 30th April 2017

Desired start date: 1st July 2017

Further details and instructions for applications: <http://tiny.cc/aw8cky>



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