

PhD student in soil biology focusing on long-term effects of forestry on soil fungi

The Department of Soil & Environment is a leading center for soil science, nationally and internationally. We conduct research, environmental monitoring & assessment and higher education for sustainable soil management in agricultural, forest and urban environments. Outcomes are aligned to and contribute towards national and international strategies on food security, national environmental objectives and climate reporting as well as the 2030 Agenda for Sustainable Development. The majority of the department's activities are located in the Soil-Water-Environment center at the SLU Ultuna campus in Uppsala with one research group situated in Skara.

PhD student in soil biology focusing on forestry and the molecular ecology of soil fungi

Duties:

We look for a PhD student for a research project that focuses on long-term effects of clear-cutting forestry on forest soils and their capacity to support forest production, carbon sequestration and biodiversity. The PhD project is part of a larger collaborative project and will specifically study how soil fungi and their functional properties are affected by forestry in a long time perspective. The latest molecular techniques will be used to compare fungal traits and roles in soil carbon and nutrient cycling between intensely managed and less impacted forests. By analysing fungal gene expression directly in natural forest ecosystems (metatranscriptomics) we will obtain information about how forestry affects fungal traits related to decomposition, nutrient cycling and mycorrhizal symbiosis. The project is broad and contains field sampling and molecular laboratory work as well as extensive bioinformatics data analysis and development of ecological theory. The PhD student will be part of an internationally recognized research team, striving to conduct frontline research. Scientific publishing is an important part of the work, and we look for a person who would like to participate in, and contribute to, leading research at the intersection between microbiology/mycology and ecosystem ecology.

Qualifications:

A master's degree in biology or equivalent is required. Knowledge in ecology, molecular genetics, microbiology/mycology, bioinformatics, biochemistry and statistics is requested. Practical experience of ecological field work as well as molecular laboratory work is a merit. The work requires engagement in questions concerning nature conservation and sustainable use of natural resources.

Proficiency in English (both spoken and written) is required.

Driving license is desirable but not a requirement.

Place of work:

Uppsala.

Forms for funding or employment:

Employment 4 years.

Starting date:

1 April 2022 or according to agreement.

Application:

Click the "Apply" button to submit your application. The deadline is 2022-02-28.

To qualify for third-cycle (Doctoral) courses and study programmes, you must have a second-cycle (Master's) qualification. Alternatively, you must have conducted a minimum of four years of full-time study, of which a minimum of one year at second-cycle level.

Applicants will be selected based on their written application and CV, degree project, copies of their degree certificate and transcript of records from previous first and second-cycle studies at a university or higher education institution, two personal references, and knowledge of English. More information about the English language requirements can be found here: www.slu.se/en/education/programmes-courses/doctoral-studies/new-doctoral-students/english-language-requirements/

Please note that applicants invited to interview must submit attested copies of their degree certificate, a transcript of records

from previous first and second-cycle studies at a university or higher education institution. Applicants who are not Swedish citizens need to submit an attested copy of their passport's information page containing their photograph and personal details.

Read about the PhD education at SLU at www.slu.se/en/education/programmes-courses/doctoral-studies/

Academic union representatives:

<https://internt.slu.se/en/my-employment/employee-associations/kontaktpersoner-vid-rekrytering/>

The Swedish University of Agricultural Sciences (SLU) is a world-class international university with research, education and environmental assessment within the sciences for sustainable life. Its principal sites are in Alnarp, Umeå and Uppsala, but activities are also conducted at research stations, experimental parks and educational establishments throughout Sweden. We bring together people who have different perspectives, but they all have one and the same goal: to create the best conditions for a sustainable, thriving and better world. SLU has just over 3,000 employees, 5,000 students and a turnover of SEK 3 billion. The university has invested heavily in a modern, attractive environment on its campuses.
www.slu.se

Kontaktperson:

Björn Lindahl

Professor

bjorn.lindahl@slu.se

018-672720