



Post-doctoral fellowship on Cyanobacterial research in Polar biotopes (University of Liège)

The Laboratory of Molecular Diversity and Ecology of Cyanobacteria, Department of Life Sciences, InBios Research Unit (ULiège, Belgium) is recruiting a post-doctoral fellow for 18 months. The candidate will be engaged in two projects, HabitAnt: 'Past and future habitability in Antarctic lakes: succession, colonization, extinction, and survival in glacial refugia', funded by [BeISPO BRAIN-BE](#) and Exosoils 'Climate change experiments in Arctic and Antarctic polar desert soils' funded by [BeISPO IMPULS](#).

For HabitAnt, the fellow will use fossil DNA in selected lake sediments and develop molecular phylogenies of focal cyanobacterial taxa to study the processes that contributed to the present-day diversity of microorganisms and invertebrates in Antarctic lakes. The processes studied include the long-term persistence of biota in glacial refugia, and extinction, colonization, diversification and biological succession in response to past climate and environmental changes. A strong collaboration with 2 PhD students already working on the project in the partner institutions is foreseen.

For Exosoils, the fellow will perform amplicon sequencing of the microbial diversity in experimental plots and controls, to reveal the effects of the interplay between climate change and topography on microbial communities, identify key microbial species and functional genes, and contribute to international programmes through long-term monitoring of ASPA 179. There will be a strong collaboration with the partners at the University of Ghent.

Job description

The job duties include:

- Extraction of fossil and modern DNA, and the development of DNA libraries for high-throughput sequencing.
- Isolation of new strains and development of multi-gene molecular phylogenies of focal cyanobacterial taxa.
- Bioinformatics and statistical analysis of metagenomics datasets.
- Write scientific publications and present the results at international conferences.

Profile of the candidate

- You hold a Master's degree in Sciences: Biology, Biochemistry, Bioengineering, or Bioinformatics.
- Practical experience in the application of DNA markers in environmental samples and bioinformatic analyses of high-throughput sequencing datasets is an asset.

- You preferably have practical experience in the isolation, cultivation, characterization and/or preservation of microbial strains.
- You have programming skills in bash or another scripting language, and R.
- You have good communication and writing skills and have an excellent knowledge of written and spoken English. You like to carry out outreach activities.
- You are self-critical, you work with rigor and attention for detail in the wet lab and during analyses.
- You combine being a team player with a strong sense of autonomy and responsibility. You are capable of developing, planning and organizing your own research work and meeting deadlines imposed by the project
- You are willing to participate in sampling campaigns and apply for additional funding when eligible.

How to apply

All applications must be made to Annick Wilmotte (awilmotte@uliege.be) as soon as possible, but before 9 September 2024 with the following documents attached as one file:

- application letter
- curriculum vitae
- a transcript of the required degree
- names and contact details of at least two reference persons (including the MSc thesis supervisor)

As University of Liège maintains an equal opportunities and diversity policy, everyone is encouraged to apply for this position.

More information: Dr Annick Wilmotte (awilmotte@uliege.be, +32 (0) 4 366 33 87). A meeting during the SCAR2024 OSC is possible. Contact me by email or SMS to +32 471613999, please.

About University of Liège

The University of Liege (ULiege) is fully part of the European and International higher education and research area. Offering a diversified educational offer in the French speaking part of Belgium, ULiege has links with over 1.000 institutions worldwide and is integrated in international academic and scientific networks. The city is dynamic and has a rich social and cultural life.

All employees enjoy a number of benefits, such as 35 days of paid leave, a wide range of training and education opportunities, etc. A complete overview of all our fringe benefits can be found on our website.