

Post-doctoral offer in eco-informatics and biodiversity science

March 2024

Biodiversité Québec (BD-QC) is a scientific partnership aiming to communicate information on the state of biodiversity and its changes. Its mission is to collect observation data, to improve the monitoring of biodiversity in Québec and to make syntheses available to the public.

BD-QC has established data standards and storage infrastructures for monitoring biodiversity in Québec. The current ATLAS database is however limited by spatial, temporal and taxonomic biases. We are currently developing tools to fill these biases and improve knowledge of Québec's biodiversity with a dynamic sampling design. We are initiating a massive sampling campaign to collect soils environmental DNA, from temperate to arctic biomes and from heavily transformed soils to undisturbed forest ecosystems. Our focus will be on bacteria, fungi and arthropods.

We are seeking a post-doctoral researcher to develop a new data infrastructure that will link the original eDNA information to traditional biodiversity observations. We will develop a full data pipeline to automate sequence annotation, mapping and reconstruction of essential biodiversity variables. The specific objectives of the project include (1) conceptualization of the data processing chain; (2) collaborating with the BD-QC team of developers to set-up the data infrastructure and (3) mapping biodiversity distribution out of it.

We offer a \$55,000/yr salary for two years with potential extension. The researcher will join the training program in computational biodiversity science BIOS², get access to a rich network of collaborators, opportunities for internships and travels, training activities and working groups. The researcher will be co-supervised by professors Dominique Gravel, Isabelle Laforest-Lapointe and Guillaume Blanchet at Université de Sherbrooke. The researcher will also be involved in the activities of Biodiversité Québec, including biodiversity assessments.

We are looking for candidates with a PhD from ecology, microbial ecology or geography with a strong background in data science. Knowledge in the fields of bioinformatics, statistics, genomics, environmental DNA and microbial ecology is an asset.

To apply send us a letter of motivation, a detailed CV and the name of 3 references. The candidate should be able to start at the summer or the fall 2024 session. The position is open until the end of March 2024 or until a candidate has been selected. The position will be based at Université de Sherbrooke, a francophone university in a bilingual region of Québec, and as such knowledge of French is not mandatory. Selection will be conducted following a strict procedure to respect equity, diversity and inclusion and we encourage minorities to apply.

Send your application to:

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