



PhD Student Wanted in Microbial Genomics at Université Laval, Quebec, Canada

We are looking for a highly motivated bilingual PhD student to work on a project funded by McCormick Global Ingredients Limited (MGIL) on "**Metagenomics of black pepper (*Piper nigrum* Linn.) rhizomicrobiome for the development of beneficial and safe bioinoculants**". Foot rot disease caused by *Phytophthora capsici* and parasitic nematodes are the two major causes of low productivity in black pepper. The aim of this project is to identify and test microbial inoculants that could increase the yields of black pepper while reducing the requirement for inorganic fertilizers and improving the plant health. This research work will be conducted at different scales: laboratory and greenhouse at Université Laval and field trials in Vietnam, with the final goal to develop a synthetic microbial consortium that will be used as a biofertilizer and biocontrol product in black pepper growing areas in Vietnam. The candidate will develop a PhD proposal eligible for Mitacs Accelerate programme (<http://www.mitacs.ca/en/programs/accelerate/fellowship>) to expand his (her) knowledge in microbial genomics aimed at engineering root microbiomes by using beneficial, environmentally safe bioinoculants for healthier crops and soils.

Qualifications and skills: Candidates must be highly motivated, hold an M.Sc degree, and have some skills in one or more of the following fields: bioinformatics; microbiology; plant and microbial molecular biology; molecular ecology; quantitative or population genetics. The successful candidate should also have good interpersonal skills and an ability to work well in cross-cultural environment. He (she) will have access to one of the most positive and productive learning and research environments in Canada as a student member of the following: Centre Sève for Plant Research (<http://centreseve.recherche.usherbrooke.ca>), Centre for Forest Research (<http://www.cef-cfr.ca>), Institute for Integrative Biology and Systems (<http://www.ibis.ulaval.ca>) and Canada Research Chair in Forest and Environmental Genomics (<http://www.genomiqueforestiere.chaire.ulaval.ca>)

Applications: To apply you must send your CV following Mitacs-Accelerate *Intern CV Template* (<https://www.mitacs.ca/en/programs/accelerate/proposal>) and 2-3 reference letters by email to Damase.Khasa@sbf.ulaval.ca. **Deadline: October 15, 2019.**

Funding: Mitacs-McGIL total research award: \$ 106 667.67 for 4 years (Intern stipend: \$ 96 000 for 4 years and \$ 10 667.67 for research costs)