Computational Biologist/Bioinformatician

Applications are invited from ambitious, independent and motivated candidates to work in the area of host-microbiome interactions. This position is fully funded by an NIH grant focused on biomarker development for diabetic foot ulcers. The project involves collaboration with the Diabetic Foot Consortium (http://diabeticfootconsortium.org/) and clinical sites across the United States. The candidate will work with a highly interdisciplinary team and with clinical and other computational biology collaborators across institutions. As such, they will be expected to have strong communication skills and experience working on diverse teams under a milestone based framework. Additional information on the project can be found below.

Additional desired qualifications
- Strong bioinformatics analytical skill with experience working with multi-omics data including bulk RNAseq and microbiome data (16S and ITS)
- Experience with metatranscriptomics
- Experience in integration of different data modalities including genomics and metabolomics.
- Basic understanding of microbiology
- Strong communication, collaboration, and mentoring skills

Education: MSc or PhD with relevant experience

Salary: Range: $50,000-$80,000 + benefits. Depends on qualifications and experience.

The Kalan lab welcomes all individuals into our group regardless of race, religion, nationality, socioeconomic background, gender, gender identity, sexual orientation, disability, and physical appearance. We encourage applicants from diverse backgrounds. The candidate will be provided with intellectual freedom to pursue additional or tangential independent research projects. Support for professional & personal development and other career building activities will be provided.

Qualified applicants are invited to submit their CV, a letter of intent, a statement of research qualifications, and a list of 3 references to kalanlr@mcmaster.ca

Abstract of Project: Diabetic foot ulcers (DFU) impact over 2 million Americans annually, result in over 130,000 amputations each year, and are associated with high mortality rates. To date, there has been no single infectious agent of DFU identified as a good marker of healing outcome. We have shown that wounds persisting beyond 12 weeks exhibit distinct microbiome signatures and transcriptional activity, including from species identified as being in low abundance. This suggests microbial transcription is a promising biomarker of wound healing in diabetic patients.

This position will be held at McMaster University, recognized as one of Canada's most research-intensive universities. Hamilton is 45 minutes from Toronto. It is also about an hour from Buffalo, NY, and less than an hour from Niagara Falls, and the nearby Niagara wine country. The Kalan lab will be transitioning to McMaster University in 2022.

McMaster University is located on the traditional territories of the Haudenosaunee and Mississauga Nations and within the lands protected by the "Dish With One Spoon" wampum agreement.

The diversity of our workforce is at the core of our innovation and creativity and strengthens our research and teaching excellence. In keeping with its Statement on Building an Inclusive Community with a Shared Purpose, McMaster University strives to embody the values of respect, collaboration and diversity, and has a strong commitment to employment equity.

The University seeks qualified candidates who share our commitment to equity and inclusion, who will contribute to the diversification of ideas and perspectives, and especially welcomes applications from indigenous (First Nations, Métis or Inuit) peoples, members of racialized communities, persons with disabilities, women, and persons who identify as 2SLGBTQ+.

As of October 18, 2021, McMaster's Vaccination Policy requires all students, faculty and staff to have uploaded proof of full vaccination against COVID-19 or have an approved human rights exemption.