Postdoctoral Fellow

Description: The Huttenhower lab in the Department of Biostatistics at the Harvard T.H. Chan School of Public Health (http://huttenhower.sph.harvard.edu) is seeking a Postdoctoral Fellow. This grant-funded position will provide the opportunity to carry out microbiome research in either or both of two collaborative networks: analyses of type 1 diabetes with the Juvenile Diabetes Research Foundation (JDRF), and/or analyses of arthritis and rheumatic disease with the Inflammatory Arthritis Microbiome Consortium (IAMC). The Huttenhower lab leads bioinformatics centers for both of these groups, for which the broad goal of the successful candidate will be identifying features of the microbiome (16S amplicon, metagenomic, and metatranscriptomic sequencing, yielding taxa, strains, gene families, pathways, or small molecule products) associated with type 1 diabetes and arthritis outcomes.

Specifically, the JDRF microbiome consortium is an approximately 10-laboratory group, including the Huttenhower laboratory, Broad Institute, and national and international research teams. The lab provides bioinformatics methods, support, and analysis infrastructure to host, analyze, and share microbial community data, particularly metagenomics for the gut in human and animal models. Research with the JDRF includes consulting and management regarding consortium data, collaboration in experimental design and microbiome studies, and facilitation of communication among bioinformaticians across the consortium, in addition to longitudinal metagenome profiling of the infant gut.

The IAMC is a collaboration between the Harvard Chan School, New York University, Oxford University, and clinical teams from across the United Kingdom. It includes shotgun metagenomics for three primary populations: children with juvenile arthritis variants, cross-sectional rheumatoid arthritis and related phenotypes in adults, and longitudinal microbiome samples from newly diagnosed patients undergoing treatment. In addition to carrying out primary analyses on associated gut metagenome profiles, the Fellow will have the opportunity to collaborate with IAMC members investigating parallel gnotobiotic animal models, IgA-seq, and immune cell profiling.

This advanced postdoctoral position will have leeway to direct and carry out research projects within the purview of the JDRF and/or IAMC microbiome consortia. The successful candidate will also work with the group’s current software developers and systems administrators, who provide computational support for the consortia’s bioinformatics infrastructures. Strong computational skills are required, as is the ability and willingness to collaborate with and coordinate among translational, immunology, and other bioinformatics research groups.

Please send application materials (CV and cover letter) to chuttenh@hsph.harvard.edu AND levesque@hsph.harvard.edu.

Basic Qualifications: Doctoral degree in Bioinformatics, Computer Science, Biostatistics, Quantitative Biology, or related field; experience and proficiency in Linux/Unix command line and research environments; working knowledge of Python, in addition to other scripting environments appropriate for scientific data management (shell, R, etc.); basic familiarity with scientific software management (particularly Galaxy and related web
content management applications); excellence in research, communication, and collaboration skills, as evidenced by publication record.

**Application Procedures:**
To apply for this position, submit your application through the Harvard ARiES: Academic Recruiting Information eSystem at the following link:

https://academicpositions.harvard.edu/postings/8503

**Additional Information:**
Administrative questions regarding this position can be sent to Nicole Levesque at levesque@hsph.harvard.edu.

Harvard University seeks to find, develop, promote, and retain the world’s best scholars. Harvard is an Affirmative Action/Equal Opportunity Employer. Applications from women and minority candidates are strongly encouraged.

Information on resources for career development and work/life balance at SPH can be found at: Career development and work/life balance.