Bioinformatics Research Associate

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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 Research Associate to lead the group's bioinformatics center for microbiome analyses of type 1 diabetes in the Juvenile Diabetes Research Foundation (JDRF). The successful candidate will be responsible for coordinating computational analyses among members of the JDRF microbiome consortium, an approximately 10-laboratory group, including the Huttenhower laboratory, Broad Institute, and national and international research teams. This will include maintenance and development of computational infrastructure created to host, analyze, and share microbial community analysis data, as well as management of consortium data, collaboration in experimental design and microbiome studies, and facilitation of communication among bioinformaticians across the consortium.

The successful candidate will be responsible for working the lab's research group, the Harvard University Information Technology team (http://rc.fas.harvard.edu), and JDRF consortium members to maintain and expand our bioinformatics platform, which provides services including:

- Secure storage for and access to raw experimental data for group and consortium members.
- Basic automated analysis workflows using Galaxy for 16S marker gene, metagenomic, and metatranscriptomic data leveraging existing software.
- Basic automated access to these analysis results through a web content management system, with links to external resources for further information and consortium clinical data not stored by these services.
- Development using the in-house AnADAMA (Another Automated Data Analysis Manager) scientific workflow execution system built on Python DoIt.
- Hands-on bioinformatic analysis services on an as-needed, first-come-first-served basis using standard request ticketing systems.

This advanced postdoctoral position will have leeway to direct and carry out research projects within the purview of the JDRF microbiome consortium and understanding the role of the microbiome in type 1 diabetes. He or she may also supervise a junior mentee or software developer to assist with the computational infrastructure and systems administration of the microbiome bioinformatics center. Strong computational skills are required, as is the ability and willingness to collaborate with and coordinate among multiple groups as part of the JDRF microbiome consortium.

Qualifications:

Doctoral degree in Bioinformatics, Computer Science, Biostatistics, Quantitative Biology, or related field; 2 years of postdoctoral work, 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.

**Additional information:**

Harvard offers an outstanding benefits package including:

**Time Off:** 3-4 weeks paid vacation, paid holiday break, 12 paid sick days, 11.5 paid holidays, and 3 paid personal days per year.

**Medical/Dental/Vision:** We offer a variety of excellent medical, dental, and vision plans; all coverage begins as of start date.

**Retirement:** University-funded retirement plan with full vesting after 3 years of service.

**Tuition Assistant Program:** Competitive tuition assistance program, $40 per class at the Harvard Extension School and discounted options through participating Harvard grad schools.

**Transportation:** Harvard offers a 50% discounted MBTA pass as well as additional options to assist employees in their daily commute.

**Wellness:** Harvard provides access to athletic facilities, libraries, campus events and many discounts throughout metro Boston. Additional programs and classes are offered at little or no cost, including stress management, massages, nutrition, meditation, and complimentary health services.