



HARVARD SCHOOL OF PUBLIC HEALTH

Department of Biostatistics
655 Huntington Avenue
Boston, Massachusetts 02115

(617) 432-1056

FAX: (617) 432-5619

dept@biostat.harvard.edu

Microbiome Core Director (Research Associate/Research Scientist)

Apply online:

<https://academicpositions.harvard.edu/postings/8010>

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 senior scientist at the Research Associate or Research Scientist level to direct the HSPH Microbiome Analysis Core (HMAC, <http://www.hsph.harvard.edu/hmac/>). HMAC provides collaborative analysis activities for the human microbiome in public health population studies, currently comprising over 20 funded projects at the Harvard Chan School, throughout the Boston life sciences community, and nationally.

The Director's responsibility will be to manage these microbiome research collaborations with the HMAC team, which comprises a group of full- and part-time bioinformatics analysts and software developers working in association with the Huttenhower lab. This includes grant and project preparation with current and potential collaborators, experimental design and analysis consulting, management of HMAC personnel, and hands-on computational microbiome analysis when appropriate. HMAC projects typically consist of population-scale microbiome studies including metagenomic and 16S rRNA gene sequencing, gut microbiome metabolomics, human genetic associations, and environmental, exposure, demographic, and other medical covariates. Examples of current projects include:

- Data portal for the BIOM-Mass BioBank for Microbiome Research in Massachusetts, a Harvard Chan initiative including, initially, stool microbiome sampling for 25,000 women from the Nurses' Health Study II.
- The Microbiome Quality Control Project (MBQC) baseline study, a 20-lab collaboration to assess sources of technical and biological variability in human microbiome population studies.
- Services through the Massachusetts General Hospital (MGH) Center for the Study of Inflammatory Bowel Disease, including the Human Microbiome Project Inflammatory Bowel Disease Multi'omics Database (<http://ibdmdb.org>).
- Prospective assessment of the gut microbiome in colorectal cancer in a Lynch syndrome cohort with MGH and the Memorial Sloan Kettering Cancer Center.

This advanced position will have leeway to direct and carry out research projects within HMAC, taking advantage of (and extending) its existing bioinformatics infrastructure for automated microbiome sequence quality control, amplicon processing, taxonomic profiling, functional profiling, strain profiling, metatranscriptomics, and downstream univariate and multivariate statistics. Strong interpersonal skills as well as some computational experience are required, as is the ability and willingness to collaborate with and coordinate among diverse groups throughout Boston and within the Harvard Chan School.



HARVARD SCHOOL OF PUBLIC HEALTH

Department of Biostatistics
655 Huntington Avenue
Boston, Massachusetts 02115

(617) 432-1056

FAX: (617) 432-5619

dept@biostat.harvard.edu

Qualifications:

Doctoral degree in Biology, Bioinformatics, Computer Science, Biostatistics, or related field; experience with quantitative biological project management; strong, detail-oriented writing and communication skills; working knowledge of Linux/Unix software environments for scientific computing; familiarity with Python and/or R; excellence in research, communication, and collaboration skills, as evidenced by publication record.

Additional information:

Harvard offers an outstanding benefits package. Please visit <https://hlc.harvard.edu/benefits/> for details.