

Faculty Biostatistician Massachusetts General Hospital

GENERAL SUMMARY/OVERVIEW STATEMENT

The Medical Practice Evaluation Center (MPEC) at Massachusetts General Hospital is seeking a Faculty Biostatistician to work as part of an internationally recognized multidisciplinary team of epidemiologists, clinical trialists, and implementation scientists dedicated to improving clinical outcomes and informing global public health policy in resource limited settings through innovative research, collaboration, and education. Academic appointments within the Mongan Institute at MGH will be at the rank of Instructor, Assistant Professor, or Associate Professor at Harvard Medical School, based on candidates' backgrounds. This position will be an integral part of a dynamic, results-oriented, and diverse group of researchers based at Massachusetts General Hospital and Harvard Medical School, working in partnership with multiple international institutions.

The Faculty Biostatistician will work within the Epidemiology and Implementation Science Program at MPEC. The Epidemiology and Implementation Program works to develop, implement, and evaluate interventions to improve care of HIV and other diseases of high public health significance in multiple international settings. Current projects include:

- Using implementation science methods to evaluate the health and quality of life impacts of a policy change in South Africa to allow patients with HIV to pick up medications at community venues
- Developing and implementing causal inference statistical methods to determine the contributions of HIV to cardiovascular disease and developing novel cardiovascular disease risk prediction tools in South Africa with use of use of large (i.e. n=20,000) longitudinal observational cohort studies within a community-based, comprehensively phenotyped population
- Conducting a multicenter implementation science clinical trial to estimate the impact of community health worker-supported hypertension care in South Africa
- Investigating the role of maternal HIV infection, co-infection, antiretroviral therapy use, and placental pathology on early childhood health and development
- Evaluating novel service delivery mechanisms for sexually transmitted infection screening and prevention strategies at the MGH Sexual Health Clinic in partnership with community organizations in the Boston area
- Conducting a multinational randomized controlled trial to determine the optimal strategy of managing persistent HIV treatment failure in Uganda and South Africa

The position offers a stimulating, collaborative, and multidisciplinary environment and the opportunity to contribute to NIH-funded, policy-informing research as a co-investigator. The primary responsibilities of this individual will be to inform and select biostatistical design elements of clinical trials, implementation science projects, and longitudinal cohort and other observational study designs. Interested individuals will also have the option to dedicate effort to development of their own scientific work, whether it be applied or theoretical biostatistical methods in the global health epidemiologic, clinical trial and/or implementation science domain. There are multiple possibilities for collaboration with other investigators and biostatisticians in Boston at MGH and the Harvard School of Public Health, as well as with national and international research partners, including in South Africa and Uganda. The applicant will also be expected to contribute to the teaching of medical students, residents, and research fellows in the MGH and Harvard Medical School systems.

APPLICATION PROCESS

Interested candidates should apply via www.massgeneral.org/careers website.

**When applying, please upload a cover letter and resume.

For more information regarding our group, please visit <https://mpec.massgeneral.org>.

PRINCIPAL DUTIES AND RESPONSIBILITIES

The Faculty Biostatistician may participate in all phases of research projects, from conception and design of studies through analysis and writing manuscripts for submission to academic journals.

- Collaborate with investigators to develop and review biostatistical elements of studies (e.g. study design, causal methods, model selection, power/sample size calculations, sensitivity analyses, etc.), including observational studies, clinical trials, and implementation science projects. This work will include grant writing and protocol writing.
- Lead and oversee team of data analysts to conduct biostatistical analysis for research protocols as described above
- Develop and write formal statistical analysis plans and data safety monitoring plans for research protocols as described above
- Serve as co-author on manuscripts
- Mentor a team of data analysts in statistical analysis, study design, coding
- Foster a culture of community, equity, diversity, inclusion, and belonging among faculty, staff and learners
- Maintain department-wide professional expertise in established and emerging biostatistical methods and study design

Interested candidates may also have the opportunity to lead independent research program on implied and/or theoretic statistical methods related to clinical trials, implementation science, causal methods, and/or related epidemiologic methods.

The above is intended to describe the general contents and requirements of work being performed by people assigned to this classification. It is not intended to be construed as an exhaustive statement of all duties, responsibilities, or skills of personnel so classified.

QUALIFICATIONS

The candidate should have a doctoral degree in biostatistics or a related field and strong statistical computing skills. We are seeking someone with experience with 1) observational methods, such as causal inference, hierarchical modeling, risk prediction modeling and/or missing data methods with electronic health records; and 2) experimental methods, such as traditional clinical trials, implementation science evaluations and/or adaptive designs. We are also seeking individuals with work or research experience in resource-limited settings and/or sustained commitment to work that directly addresses health inequity.

Exceptional quantitative and analytical skills are essential. The candidate must have excellent English language (spoken and written) skills.

WORKING CONDITIONS

Duties will be carried out in a hybrid office environment at Massachusetts General Hospital. The employee should expect to be on-site at least three days per week.

EQUAL OPPORTUNITY EMPLOYER

We are an equal opportunity employer and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability status, protected veteran status, gender identity, sexual orientation, pregnancy and pregnancy-related conditions or any other characteristic protected by law

In keeping with our overarching mission to reduce health and other disparities in vulnerable populations, the Medical Practice Evaluation Center is specifically committed to recruiting a diverse team of individuals across race, ethnicity, sexual orientation, and ability backgrounds to ensure that our science is informed by and responsive to the communities we aim to serve. The Center strives to become a leader in developing and maintaining increased representation, recognition, and support of each of these dimensions of diversity among all of its members.