Postdoctoral Fellowship in Exposomics/Environmental Epidemiology
Brigham and Women's Hospital

The Channing Division of Network Medicine at Brigham and Women's Hospital (BWH) is seeking an exceptional postdoctoral fellow to advance research in exposomics and environmental epidemiology, with a focus on the spatial and contextual exposome, under the supervision of Dr. Hui Hu.

The fellow will work on several NIH-funded projects involving large-scale integration of multi-level geospatial exposures and analysis of population-based cohorts and electronic health records (EHR). These projects aim to evaluate the influence of environmental and contextual factors on cardiovascular health, Alzheimer's disease and related dementias, post-acute sequelae of COVID-19, and more. The fellow will also have opportunities to contribute to the development of semantic standards and tools for spatial and contextual exposome data, and to initiate new projects and/or develop grant proposals.

The fellow will collaborate within a highly interdisciplinary team of environmental epidemiologists, geospatial scientists, biostatisticians, biomedical informaticians, and clinicians in a highly supportive and collaborative research environment.

Qualified candidates should have:
- Ph.D. in epidemiology, biostatistics, biomedical informatics, or a related quantitative field
- Strong programming skills in R or Python
- Experience in working with spatial data, EHR data, or large-scale population-based cohorts
- Experience with high-dimensional data analysis, including proficiency in data engineering (e.g., SQL, large-scale data processing, spatial data handling) and application of modern machine/deep learning approaches to environmental or health datasets, is strongly preferred
- Excellent oral and written communication skills
- Commitment to reproducible and collaborative research practices
- Ability to work effectively in interdisciplinary research teams

Candidates with a strong interest in applying innovative analytical methods to environmental and spatial health research questions are especially encouraged to apply. The fellow is encouraged to pursue career development activities, present at professional conferences, develop independent research projects, and apply for career development awards or other research grants. Salary is commensurate with experience, and the position is available immediately.

Interested candidates should send a cover letter, curriculum vitae, and the names and contact information of three references to Dr. Hui Hu (hui.hu at channing.harvard.edu). Application review will begin immediately but will continue until the position is filled.

About Us

Brigham and Women's Hospital is a major teaching affiliate of Harvard Medical School and part of Mass General Brigham, the largest recipient of NIH funding among independent hospitals. The Channing Division of Network Medicine is a research division within the Department of Medicine whose goal is to define etiology and reclassify complex disease using network- and systems-based approaches. The division has a long and rich history of achievements and is renowned as the site for the Nurses' Health Study and other ongoing epidemiologic investigations that have influenced health policy and practice nationally and internationally. The division has an exceptional record of mentoring postdoctoral scholars and a rich environment for career development.

Brigham and Women's Hospital strives to keep its workplace safe and secure for the protection of patients, visitors, and staff. Therefore, our offer of employment is contingent upon completion of the following items.

- Satisfactory reference checks
- Satisfactory criminal background checks
- Authorization to work in the United States
- Medical clearance from our Occupational Health department
- Annual compliance with Mass General Brigham's Influenza Vaccination Policy
- Compliance with Mass General Brigham's COVID 19 Vaccination Policy
- Successful review of the Medicare program's Sanctions and Exclusions List
- Verification of education, current licensures and registrations, and credentialing (if applicable)

If you begin work before the results of these checks are determined, it is with full understanding that an unsatisfactory report may lead to termination.