Postdoctoral Research Fellow in Climate Epidemiology

Description:
The Department of Biostatistics at Harvard TH Chan School of Public Health invites applications for a postdoctoral fellow position focused on the development of statistical methods for climate epidemiology. Working with an interdisciplinary team of statisticians, epidemiologists, environmental scientists, and clinicians, the fellow will develop practical statistical methods and apply them to real data with the goals of (1) quantifying the health impacts of historic extreme climate events such as tropical cyclones, flooding, and heat waves; (2) identifying key social, economic, environmental, and health modifiers of these effects; and (3) predicting the health burden of future extreme climate events. This research will improve our understanding of climate epidemiology, inform strategic preparedness efforts to minimize the adverse health impacts of future extreme climate events, and will generate novel and broadly applicable statistical and computational tools.

This position will involve the development and implementation of methods at the intersection of causal inference, spatio-temporal modeling, and machine learning in response to challenges presented by our rich integrated health and climate exposure datasets. These data include health outcomes from Medicare and Medicaid claims and birth cohorts and high-resolution multi-decade climate exposure metrics. In addition to methods development and data analysis, the fellow will be expected to write and publish peer-reviewed scientific papers, participate in group meetings and collaborative projects, and mentor more junior team members. The ideal candidate will have a strong statistical and computational background, experience processing and analyzing large datasets, and outstanding communication skills. The postdoctoral fellow will be supervised by Dr. Rachel Nethery at Harvard and will work closely with collaborators across multiple institutions.

Basic Qualifications:
- Doctoral degree in Biostatistics, Applied Statistics, Computer Science, or related field
- Experience developing and implementing statistical methods
- Experience analyzing real data
- Strong programming skills
- Excellent communication and writing skills
- Demonstrated ability to publish peer-reviewed scientific papers
- Commitment to collaborative work

Additional Qualifications:
- Experience implementing Bayesian models
- Experience working with spatial data
- Experience processing and analyzing large datasets
- Experience creating R packages and utilizing version control systems, e.g., Git/Github
- Special Instructions:
- Cover letter
• Curriculum vitae
• One-page research statement and/or one representative first author publication
• Three references

Application Procedures:
To apply for this position, submit your application through the Harvard ARiESe: Academic Recruiting Information eSystem at the following link:
https://academicpositions.harvard.edu/postings/9845

Additional Information:
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.