

Job Title	Postdoctoral Research Fellow - Assessing the Causal Effects
PVN ID	PH-2310-005919
Category	Research
Location	CUNY SCHOOL OF PUBLIC HEALTH & HEALTH POLICY
Department	CUNY ISPH
Status	Full Time
Annual Salary	\$65,000.00 - \$85,000.00
Hour(s) a Week	35
Closing Date	Dec 16, 2023 (Or Until Filled)

General Description

The CUNY Institute for Implementation Science in Population Health (CUNY ISPH) has a rapidly growing climate change and health portfolio, and UC CCHE is growing as an important leader in climate, health and equity. We are seeking a highly motivated and qualified Postdoctoral Research Fellow to join our dynamic research team. This position will center on a that focuses on advancing our understanding of the causal impact of climate change and extreme weather on HIV care and treatment outcomes, as well as other health outcomes.

The fellow will use: 1. data from the <u>global leDEA collaboration</u>, which includes longitudinal data on >2 million people enrolling in HIV care since 2003 at 500 clinics in 44 countries; and 2. Daily to monthly high spatial resolution gridded data products on temperature, rainfall, and other environmental variables linked to leDEA clinic locations. Methodological approaches will include an emphasis on applying advanced longitudinal and quasi-experimental designs, as well as spatial analysis. The successful candidate will collaborate with leading researchers, contribute to cutting-edge projects, and have opportunities for publication, mentorship, grant writing, and contributions to the design and development of future studies.

Other Duties

- 1. Oversee systematic literature reviews of epidemiologic studies on extreme weather exposures and health outcomes. Stay Current: Stay abreast of the latest developments in epidemiology, climate change, and public health research and integrate new knowledge into ongoing projects.
- 2. Conduct in-depth research on the effects of climate change on HIV and other health outcomes using advanced longitudinal and quasi-experimental epidemiology methods. Prepare and analyze large longitudinal datasets for analyses aimed at identifying trends, associations, and potential causal relationships between extreme weather and HIV care outcomes.
- 3. Organize and manage complex datasets, ensuring data quality and integrity. Merge spatial-temporal raster datasets on temperature, rainfall, and other environmental variables with health outcome data.

Implement data cleaning and preprocessing techniques as needed.

- 4. Apply advanced statistical techniques to analyze longitudinal data, including quasiexperimental methods (e.g., interrupted time series), structural nested mean models, mixed-effects models, survival analysis, geospatial analysis, and causal inference methods (e.g., mediation). Interpret and communicate results effectively.
- 5. Prepare manuscripts (both first author and second/middle author) for publication in peer-reviewed journals and present research findings at conferences and seminars.
- 6. Collaborate with multidisciplinary teams of researchers, epidemiologists, environmental scientists, health geographers, biostatisticians, and public health experts. Foster a collaborative and inclusive research environment.
- 7. Provide mentorship and guidance to junior researchers, masters students, and doctoral students working on the projects.

Qualifications

- Ph.D. in Epidemiology, Public Health, Health Geography, Environmental Health, or a related field with experience working in research examining intersections of climate change, extreme weather, and public health.

- A strong background in longitudinal data analysis and experience working with climate-related spatial temporal data products and file formats (geotiffs, ncdf, shapefiles), are essential. Experience with or interest in geospatial analysis is a plus.

- Demonstrated expertise in advanced epidemiological methods, including but not limited to survival analysis, mixed-effects modeling, and causal inference methods.

- Advanced skills in R statistical software and/or SAS
- Strong analytical and problem-solving skills, with the ability to work with large and complex datasets.
- Excellent communication skills, both written and oral, for presenting research findings and collaborating effectively with team members and stakeholders.
- A track record of scholarly publications in peer-reviewed journals is a plus.
- Ability to work both independently and as part of a collaborative team.
- Attention to detail and a commitment to rigorous research methodologies.