

Postdoctoral Research Position University of Rochester

Postdoc Position: Department of Biostatistics and Computational Biology, University of Rochester.

The Department of Biostatistics and Computational Biology at University of Rochester Medical Center invites applications for a Postdoctoral Fellow position for data science and/or statistical methods development to study the impact of air pollution on the recurrence of cardiovascular events. Expertise in causal inference and machine learning is desirable but not necessary. The Postdoctoral Fellow will work with a multi-disciplinary team with expertise in statistical methods, epidemiology, climate science, and biomedical science as part of the NSAPH group, <https://www.hsph.harvard.edu/nsaph/>. The position will be under the supervision of Ashkan Ertefaie, PhD (Associate Professor of Biostatistics, University of Rochester), Robert Strawderman (Professor of Biostatistics, University of Rochester) and Francesca Dominici, PhD (Professor of Biostatistics, Harvard University and co-Director of the Harvard Data Science Initiative). This position, to be based at the University of Rochester, is supported by an NIH-funded grant focused on developing causal inference methods for counting processes (e.g., recurrent events). The Fellow will also have access to an unprecedented data collection consisting of an already harmonized and linked Part A+B Medicare data. The Fellow will receive dedicated mentorship, with the expectation that their time as a Fellow will advance their career development. The expectation is that the duration of this position will be two years, and is intended to prepare the Fellow for successful placement in an academic tenure-track appointment at a major research university. Alternatively, it can provide a candidate who has deferred an appointment with an opportunity to engage and collaborate with faculty on high-quality research projects prior to starting their permanent position.

Duties and Responsibilities:

The Post-doctoral Fellow will contribute to the effort of:

- Developing the required statistical methodologies
- Analyzing environmental health effects in big data
- Collaborate with our biostatistics and data science group
- Writing scientific articles and research proposals

Position Qualifications:

- Doctoral degree in Computer Science, Statistics, Biostatistics, or related field.
- Research experience in some of the following areas: (1) survival and/or recurrent event analysis; (2) causal inference; (3) longitudinal data; and, (4) machine learning.
- Experience in analyzing real data, and strong programming skills.
- Excellent communication and writing skills desired.
- The ideal candidate is an independent, solution-oriented thinker with a strong background processing very large data sets, applying analytical rigor and statistical methods, and driving toward actionable insights and novel solutions.
- Experience in handling very large spatial datasets.
- Experience in applied statistics and computational methods.
- Knowledge of R, and Python.
- Interest in open-source software, reproducibility and data management.
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The University of Rochester is an Affirmative Action, Equal Opportunity Institution. Women and minority candidates are strongly encouraged to apply.

Length of position: The position is available for 12 months initially with possibility of renewal for a second year by mutual agreement.

Salary and Benefits: Salary is subject to the pay range \$55,341 - \$69,000 and considerations noted below. Benefits will be in accordance with the University of Rochester's standard postdoctoral benefits.

The pay range of \$55,341 - \$69,000 represents the minimum and maximum compensation for this job. Individual annual salaries/hourly rates will be set within the job's compensation range, and will be determined by considering factors including, but not limited to, market data, education, experience, qualifications, expertise of the individual, and internal equity considerations.

Application Information:

Please email the following materials to ashkan_ertefaie@urmc.rochester.edu : (1) A Cover Letter; (2) Curriculum Vitae; and (3) Contact information of 3 References.