

**Company Information:** The Department of Biostatistics at Columbia University is one of the premier biostatistics departments in United States. The Department has strong collaborative connections within the Mailman School of Public Health (MSPH), the Columbia University Medical Center and the Department of Statistics at Columbia University.

**Position Title:** Postdoctoral Research Fellow

**Duties and Responsibilities:** Dr. Linda Valeri in the Department of Biostatistics at Columbia University Mailman School of Public Health is seeking a Postdoctoral Research Fellow. The position is available starting February 1, 2020. Earlier starting date can also be considered. The one-year position could be extended to one additional year on the basis of performance, evaluated at the end of the first year. This position will provide the opportunity to carry out causal inference research in either or both of two collaborative avenues:

- 1) The analysis of mobile passive (GPS, call/text logs, sleep data) and active (surveys) data streams in collaboration with the New York Psychiatric Institute, NY, the Departments of Psychiatry at Columbia University and Harvard University, and McLean Hospital.
- 2) The investigation of environmental mixtures health effects in the context of Bangladeshi and American perinatal and adult intergenerational cohorts in collaboration with the Department of Environmental Health Sciences at Columbia University and Harvard University.

The broad goal of the successful candidate will be the development and application of blended causal inference and machine learning approaches and automated software tools. The approaches will be applied to harness exposomic data and mobile health data to investigate the joint causal effects of environmental and behavioral factors over time to inform policy on environmental mixtures and to discover behavioral targets of treatment in psychosis.

The postdoctoral fellow will have the opportunity to collaborate with scientists across fields and across domestic and international research institutions.

**Basic Qualifications:** Doctoral degree in Biostatistics, Computer Science, or Statistics; experience and proficiency in Linux/Unix command line and research environments; working knowledge of R, in addition to other scripting environments appropriate for scientific data management (Python, shell, etc.); excellence in research, communication, and collaboration skills, as evidenced by publication record. Experience in causal inference, machine learning (both Bayesian and frequentist paradigms), and software development is highly considered.

**Salary Range:** Competitive

**Benefits:** <https://research.columbia.edu/content/office-postdoctoral-affairs>

**Application Procedures:** To apply for this position, please send application materials (CV and cover letter) and names of two references to Dr. Linda Valeri [lv2424@cumc.columbia.edu](mailto:lv2424@cumc.columbia.edu).