



## Postdoctoral Position in Biostatistics and Computational Biology

Applications are invited for a postdoctoral position in the Department of Biostatistics and Computational Biology at the University of Rochester Medical Center under the supervision of Dr. Matthew N McCall. The McCall lab seeks to develop and apply the statistical methods required to tackle challenging problems in biomedical genomic research. A systems approach, which combines multiple types of genomic data and models the interactions within and between cells, is necessary to further our understanding of the cellular aspects of disease. However, rigorous statistical methodology is severely lacking in systems biology with the majority of current methods failing to account for both biological and technical sources of variation and reporting estimates without corresponding measures of uncertainty.

The postdoctoral associate will work as part of a collaborative team of Biostatisticians, Computational Biologists, and Biomedical Geneticists to advance our understanding of complex biological systems by developing and applying statistical methods that quantify both biological and technical sources of variation. Ongoing research projects include developing methods to: (1) estimate cellular regulatory networks from perturbations, (2) model the effect of variable composition on genomic measurements, (3) jointly analyze transcriptomic and imaging data from single cells, and (4) integrate cell type specific measurements of the transcriptome with measurements of the microbiome to further our understanding of infectious disease processes. The specific methodological focus may be primarily driven by the trainee's interests and career goals. This includes the possibility of co-mentorship with one of several collaborators in the Departments of Biomedical Genetics, Neuroscience, Pediatrics, or the Wilmot Cancer Center.

The applicant should have a PhD in biostatistics, bioinformatics, computational biology, or a related field. Candidates with a background in the biological sciences and strong quantitative skills are also encouraged to apply. Experience with statistical programming in R is desirable. Preference will be given to candidates that demonstrate a desire to work in a collaborative multi-disciplinary environment.

The start date for this position is flexible. Applicants should email a single PDF containing a statement of research interests, contact information for three references, and a current CV to:

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*The University of Rochester is an Affirmative Action, Equal Opportunity institution.  
Applications from women and under-represented minorities are particularly encouraged.*