



Postdoctoral Fellow in Regulatory Genomics and Statistical Genetics

Job Summary:

Applications are invited for a Postdoctoral Fellow at the intersection of Regulatory Genomics and Statistical Genetics in the laboratory of Dr. Steve Parker in the Departments of Computational Medicine & Bioinformatics and Human Genetics at the University of Michigan Medical School. The major goal of the lab is to generate mechanistic knowledge about how disease susceptibility is encoded in the non-coding portion of the genome (from GWAS), with a focus on diabetes and related traits. We accomplish this through an interdisciplinary combination of molecular/cellular and computational approaches. We generate multiple high-throughput functional genomics data sets on the genome, epigenome, and transcriptome across species and in disease-relevant tissues/cells at single-cell multi-omic resolution and use computational approaches to integrate and analyze this data. The lab culture is one of openness, scientific rigor, friendliness, and general good humor. For more information, please see the Parker laboratory website: <http://theparkerlab.org>

Researchers from traditionally underrepresented groups are highly encouraged to apply. We value diversity and inclusivity.

The applicant will help organize and lead research projects involving single-cell multi-omics and genetics, which involves critical evaluation and presentation of scientific literature. The position will focus heavily on analysis of high-throughput single-cell multi-omic data (ATAC-seq and RNA-seq on the same nucleus) from pancreatic islet tissue under basal and stimulatory conditions. The candidate will be responsible for analyzing data generated within our group and by collaborators, and will focus on leading cell/context-specific e/caQTL scans and integration with GWAS signals. The candidate will work both independently and in a team environment for the analysis of research results. In addition, the candidate will be open to learning new cutting-edge methods and techniques as research opportunities develop and directions change. The candidate will be expected to assist in training new trainees, including Ph.D. rotation students, master's students, undergraduates, high school students, and/or visiting scholars. Importantly, the applicant should be a good fit for the lab culture described above.

Qualifications:

The applicant should have (or be near completion of) a Ph.D. in a relevant field and a track record of published research commensurate with their field. The applicant should have strong molecular biology skills and proficiency in programming (ideally a combination of Perl/Python and R). The successful candidate will have excellent organization and communication skills, collaborative spirit, and strong personal motivation. Evidence of scholarly productivity in the form of journal articles, conference proceedings, and/or conference presentations is mandatory. English language proficiency is required.

To apply:

Send a CV, cover letter describing your research experiences and ongoing research interests (including specific interest in this opportunity), and contact information for three references to Dr. Steve Parker (scjp@umich.edu). Review of applications will begin immediately.