Postdoctoral Associate – Statistical Genetics

The Department of Biostatistics and Bioinformatics at Duke University School of Medicine is seeking a Postdoctoral Associate to work with Prof. Alejandro Ochoa (https://ochoalab.github.io/) on developing new statistical genetics methods that account for population structure. Problems of interest include genome-wide association studies, heritability estimation, inference of genetic admixture, and detection of loci under selection. Many popular approaches are simplistic and are known to perform poorly under population structure. Our goal is to analyze existing approaches – calculating bias and sampling distributions under arbitrary population structures – and ultimately derive novel approaches based on our findings. The successful candidate will also test our approaches on simulated and real human genetic data, including public and Duke patient data when applicable. We will release public code, preferably R packages. There will be opportunities for mentoring students. This appointment is expected to last three years, renewed each year contingent on performance, with the possibility of extensions.

Candidates must have a PhD in Biostatistics, Statistics, Computational Biology, Genetics, or related field. Required experience: R, Linux, and strong statistical or mathematical skills. Additional desired skills include knowledge of other programming languages, the Git versioning system, LaTeX typesetting language for articles and presentations, and an interest in genetics, disease, and history.


If interested in this position, please apply online on the Duke HR website using the following link: https://jobs.brassring.com/1033/ASP/TG/cim_jobdetail.asp?partnerid=25017&siteid=5407&Areq=108314BR. During the application process, please include your CV, contact information for 2-3 references, and a cover letter addressing your research interests. An optional Research Statement (one page or longer) is encouraged.

Location: Durham, North Carolina

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