DEPARTMENT OF BIOSTATISTICS AND BIOINFORMATICS

Assistant Professor – Cancer Genetics and Genomics

The Department of Biostatistics and Bioinformatics (B&B) at Duke University invites applications for an Assistant Professor position, affiliated with the Duke Cancer Institute (DCI) Bioinformatics Group. With more than 50 faculty members, B&B is an integral component of one of the nation’s foremost academic medical centers. The department offers both PhD and Masters degrees in Biostatistics, and emphasizes excellence in both research and teaching. The DCI Bioinformatics Group is comprised of B&B faculty members, professional bioinformatics staff, postdoctoral associates and graduate students engaged in quantitative cancer genetics and genomics research. The DCI Bioinformatics Group is extensively engaged in the research initiatives of the Duke Center of Statistical Genetics and Genomics (http://statgen.duke.edu), and the successful candidate will have the opportunity for membership in the center.

The successful candidate will collaborate with cancer scientists from the DCI in cutting edge cancer genetics and genomics research using sequencing assays (e.g., DNA-Seq from germline, tumor or cell-free DNA, single-cell and bulk RNA-Seq, TCR-Seq, CRISPR) as well as mRNA and genotyping arrays. He or she will develop requisite statistical designs and analysis plans, and supervise bioinformatics staff or graduate students in the reproducible deployment of the proposed plans. He or she will also take the lead in communicating the findings with our DCI collaborators, in preparing presentations for national and international meetings, and in writing reports for publications. The successful candidate will write collaborative grants with DCI investigators, as well as develop a grant portfolio to partially fund his or her own self-directed methods development program. Areas of methodological expertise may include statistical genetics, constrained optimization and inference for high-dimensional data, higher-order asymptotics, large-scale multiple testing, nonparametric inference, survival analysis or machine learning.

The successful candidate will contribute to the supervision and mentoring of staff and students, and participate in the research initiatives of the DCI Bioinformatics Group. He or she is also expected to participate in the departmental graduate programs, including course development and delivery, participating in graduate thesis committees, and graduate student supervision. The teaching load may involve one semester course per academic year starting in the second year of the appointment, depending on departmental needs.

Requirements:
- A PhD degree in Statistics, Biostatistics, Bioinformatics, or a related field.
- Demonstrable ability to develop statistical methods for high-dimensional data.
- Experience with bioinformatics programming tools and frameworks (e.g., htsjdk, biopython) for processing of sequencing data
- Demonstrable experience in developing open source software
- Excellent communication skills (verbal, written and presentation).
Interested applicants should submit application materials (cover letter, CV, statement of research accomplishments/interests, teaching statement) and ask three references to submit letters of recommendation for this job posting on AcademicJobsOnline at https://academicjobsonline.org/ajo/jobs/10167. Completed applications will be reviewed on an ongoing basis until position is filled.

For more information about the Department of Biostatistics and Bioinformatics, please visit our website: http://www.biostat.duke.edu.

Duke University is an Affirmative Action/Equal Opportunity Employer committed to providing employment opportunity without regard to an individual’s age, color, disability, genetic information, gender, gender identity, national origin, race, religion, sexual orientation, or veteran status. Location: Durham, North Carolina