Computational Biologist Post Doctoral Fellow or Research Scientist

Situated in the highly collaborative and innovative biomedical research enterprise at the Stanford University School of Medicine, the Quertermous laboratory is seeking a PhD level or experienced MS level computational scientist to support ongoing efforts in the Falk Cardiovascular Research Center. The overall goal of the laboratory is to use modern genetic and genomic tools to better assess disease risk and inform the development of new therapeutic approaches to cardiovascular diseases, which are the leading global cause of human mortality. The lab is administratively positioned within the Department of Medicine, with close ties to the Departments of Genetics, Pathology, and Biomedical Data Sciences. Extensive next-gen sequencing projects to annotate the human genome are underway in the lab, using genome-wide tools including bulk ATACseq, single cell RNA sequencing and ATACseq, mapping of regulatory QTLs for molecular phenotypes such as chromatin accessibility and chromatin looping. We are looking for highly motivated individuals to join our laboratory to perform technology-driven research in a highly dynamic and exciting environment. A successful candidate will work independently and also collaborate with other members, applying and learning the analysis of a diverse set of molecular biology and genomics techniques, developing novel human genetic and genomics sequence-based technologies, and applying them to the study of human disease. There will be opportunities for development of computational skills, such as advanced high performance computation as a part of the role. This position offers a rich opportunity to engage in and publish research at the frontier of biotech fields related to health and medicine, and will prepare the candidate for the next stage of their career, either in academia or industry.

Desired qualifications:
- Expertise in bioinformatics, computational genomics, accompanied by a relevant publication record.
- Proficiency with high performance computing and multiple programming languages (C, Python, R).
- Experience with high-throughput genome sequence data (RNA-seq, ATAC-seq, single cell sequencing methodologies)
- Experience with handling high order datasets, database management.

What you will do:
- Receive, curate and organize high order genetic and genomic datasets, along with associated functional information and medical related metadata.
- Work directly with the experimental lab members to analyze biomedical data and address scientific problems with bioinformatics techniques and tools and train researchers in the use of computational and bioinformatics tools.
- Design, develop, and operate computational pipelines for the analysis of next-generation genetic and genomic sequencing data.
- Manage and archive large data sets from next-generation sequencing experiments.
- Install and maintain software and data.
- Maintain detailed records of all analyses.
- Present results and progress updates at lab meetings and make presentations to experimental and scientific collaborators.
- Attend seminars, lectures, and training courses to learn new computational biology skills to remain up to date with the genomics field and learn new programming languages or techniques as necessary.
- Participate and/or lead the development of manuscripts for publication.
- Participate in the presentation of scientific papers emanating from laboratory studies and computational data analysis.
- Evaluate performance of novel technology platforms and assays.
- Expand the toolkit of sequence-to-function approaches to annotate the human genome.
Required Application Materials:

- CV
- Personal statement

Stanford is an equal opportunity employer and all qualified applicants will receive consideration without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, veteran status, or any other characteristic protected by law.

Group or Departmental Website:
http://med.stanford.edu/quertermous.html

How to Submit Application Materials:
To apply, please forward the required application materials to Trieu Nguyen (trieu@stanford.edu)