Post-Doctoral Position University of Pennsylvania – Perelman School of Medicine

The Voight lab invites applications for a <u>computational</u> Post-Doctoral position at the University of Pennsylvania School of Medicine, within the Department of Systems Pharmacology and Translational Therapeutics and the Department of Genetics. The lab focuses on translating discoveries from human genetics data into insights about the biological basis and genetic architecture of human disease (ultimately toward developing new therapeutics targets for human disease), and understanding selection during recent human evolution.

Objectives:

The candidate will have the opportunity to work with large collections of human genetic data sets. In particular, projects will be built around:

- (i) Genetic variation data collect from the Million Veteran's Project (~1 million genotyped by 2020), which is attached to clinical health records
- (ii) Ongoing functional genomics data collections through collaborations including (not limited to): DNA, RNA-Seq, ChIP-Seq, ATAC-Seq (single cell and bulk), or Chromatin Capture in primary, metabolically-relevant tissues (adipose, pancreas, liver, etc.) (iii) Existing publicly available data.

The applicant will focus their efforts on the <u>analysis and methodological development</u> driven by these data. This includes implementation of pipeline for analysis of novel data sets, but also methods that utilize these data in aggregate to make novel biological and complex disease-related inference. The applicant also will work to develop approaches that translate these insights into actionable information in clinical and bench-lab experimental settings.

Qualifications:

- 1. The candidate will have a MD, PhD, or equivalent doctorate, with a strong background in one or more of the following areas: statistics, biostatistics, population genetics, human genetics, genetic epidemiology, computational biology and/or genomics, bioinformatics.
- 2. The ideal candidate will have a track record of scientific productivity and leadership.
- 3. The ideal candidate will demonstrate a working proficiency in programming, scripting, and statistical computing (i.e., C/C++, Python, PERL, R, etc.), will have experience handling large data sets in the UNIX/LINUX operating environment, experience in high-performance cluster computing.

Application Instructions:

To apply, please send (i) a cover letter that includes the names and contacts for three references and a short statement of research interests, and (ii) a current CV to: Benjamin Voight, PhD (bvoight@upenn.edu). Further information about the lab can be found at: https://voightlab.com