



Post-Doctoral Position

University of Pennsylvania – Perelman School of Medicine

The Voight lab invites applications for a computational 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, focused around (i) population genetics problems, i.e., inference of mutation rates, demography, and selection in the genome, and (ii) complex trait genetics analysis, where population approaches are brought to make inference. Data sets include Genetic variation data collect from the Million Veteran’s Project (~1 million genotyped by 2020), which is attached to clinical health records, PennBiobank, or non-European ancestry data in collaboration with other investigators at Penn. Work will involve both methodological development and data science analysis for population and quantitative genetics inference. Additional, large-scale analysis and applications to human genomics data numbering in the tens of thousands, sequenced across the entire genome may also be imagined. The applicant also will work to develop approaches that translate any 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 highperformance 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: <http://coruscant.itmat.upenn.edu>