THE UNIVERSITY OF CHICAGO

Postdoctoral Scholar in Statistical and Computational Genomics, University of Chicago

Applications are invited for postdoctoral researchers to join Dr. Xin He's group at Department of Human Genetics of University of Chicago. The research in our lab focuses on developing and employing computational/statistical tools to identify genes and regulatory elements involved in complex diseases and to understand the mechanisms of their functions. The lab's research includes both computational method development and close collaborations with experimental groups. The lab has been successful in placing postdocs to tenure-track faculty positions (Univ. Michigan and Dartmouth recently). For more information of our research, please visit: xinhelab.org.

Potential projects for the postdoc joining the lab (and representative publications in these directions) include: (1) Integration of epigenomic and transcriptomic data with genetic data to discover causal variants and genes in common disease such as neuropsychiatric diseases and asthma (see Zhang et al, Science, 2020). (2) Studying the role of mRNA modification in human diseases (see Zhang et al, Nature Genetics, 2020). (3) Developing novel methods in statistical genetics (see Morrison et al, Nature Genetics, 2020). (4) Identification of germline and somatic variants important for cancer (see Zhao et al, Nature Communications, 2019). The lab also has ongoing research in other areas, including single-cell genomics, application of deep learning to study genetic variants, and sequencing/rare variant data analysis.

The applicant(s) is expected to hold a doctoral degree in a related field, such as computational biology/bioinformatics, population and statistical genetics, (bio)statistics or computer science. Candidates with a degree in biological sciences are also encouraged to apply if they have demonstrated experience in computational or statistical work.

Please send your CV and a list of three references to xinhe@uchicago.edu.