

Job Posting Title: Postdoctoral Research Associate in Computational Biology and Bioinformatics and the Harold Hamm Diabetes Center

Position Description:

The Harold Hamm Diabetes Center (HHDC) at the University of Oklahoma (OU) invites applications for a postdoctoral research associate position in computational biology and bioinformatics. HHDC has an exceptional and expanding research program focusing on the early origins of diabetes and obesity in children. The candidate will be co-mentored by HHDC Member, Dr. Chongle Pan, and HHDC Director, Dr. Jacob E. Friedman. Dr. Pan is an Associate Professor in the School of Computer Science and the Department of Microbiology and Plant Biology in OU Norman. Dr. Friedman is a Professor of Physiology, Biochemistry & Molecular Biology, and Pediatrics & Medicine at OU Health Sciences Center. They have formed an active ongoing collaboration and partnership for tools ranging from transcriptomics, metabolomics, epigenetics, to metagenomics of the microbiome.

<https://medicine.ouhsc.edu/Academic-Departments/Physiology/Faculty/jacob-e-jed-friedman-phd>

<http://www.ou.edu/coe/cs/people/pan>

<http://www.ou.edu/cas/mpbio/people/faculty/pan>

The research will focus on the characterization of risk factors for diabetes in early childhood. The risk factors will include childhood microbiota dysbiosis, genetic predisposition, and maternal metabolism disorders. Key molecular determinants for these risk factors will be identified from multi-omics data, which will be used to develop testable hypotheses for follow-on molecular biology experiments and build computational models for predicting and understanding diabetes.

Job Responsibilities:

The candidate is responsible for analyzing and mining multi-omics data using computational techniques, such as machine learning, generalized linear mixed models, and biological network analysis. This may require development of new computer algorithms and/or construction of computational workflows on computer clusters. The types of multi-omics data will include longitudinal metagenomics sequencing data, genome-wide association (GWAS) data, proteomics data, and metabolomics data. The candidate is expected to publish their findings in peer-reviewed journals.

Qualifications:

- Ph.D. in bioinformatics, computer science, or a related field.
- Strong publication track record
- Relevant prior research experience

Application Instructions:

Applicants should submit CV and cover letter in electronic format (only) to Patricia-Parker@ouhsc.edu

Questions about the position may be directed to Dr. Chongle Pan at cpan@ou.edu or Dr. Jacob Friedman at jed-friedman@ouhsc.edu

The University of Oklahoma is an Affirmative Action/Equal Opportunity Employer

<http://www.ou.edu/eoo/> . Protected veterans and individuals with disabilities are encouraged to apply.