

## **Postdoctoral Fellowship in Bioinformatics and Statistics**

U.S. Food and Drug Administration (FDA)  
National Center for Toxicological Research (NCTR)  
Division of Systems Toxicology  
Jefferson, Arkansas

The Center for Toxicoinformatics (<http://www.fda.gov/nctr/science/centers/toxicoinformatics/>) of the FDA's National Center for Toxicological Research (NCTR) seeks qualified postdoctoral candidates in the field of bioinformatics and statistics. Three positions need to be filled immediately and other two might follow in the late year. The positions require a broad range of expertise in data mining, machine learning and biology. The candidates must have the experience to analyze gene expression microarray data using Matlab and R-programming. The knowledge in liver toxicity as well as experience in toxicology as general will be primarily considered. The following experience and knowledge will be weighted into the decision making: Java and C programming, computational biology, communication skills (i.e., both written and oral presentations), and next generation sequencing. The starting salary is ~50K. The higher salary could be considered depending on the experience. U.S. citizenship or permanent resident alien status is preferred. Other applicants will be considered on a case-by-case basis.

The Center for Toxicoinformatics has a broad range of projects applied in toxicology and supporting the FDA review process. The group has deeply involved in the FDA Voluntary Genomics Data Submission program and development of the best practice document for pharmacogenomics data submission. Two of the most visible projects are (1) development of the FDA genomic tool, ArrayTrack; and (2) leading the effort on the Microarray Quality Control (MAQC) consortium. In addition, this group also specializes in developing knowledge based for hepatotoxicity and endocrine disrupting compounds using text mining, computational modeling, chemoinformatics and QSARs. Thus, the selected candidates will join this dynamic group to learn the current practices and thinking on application of bioinformatics on gene expression technology and other molecular biomarker technologies in FDA. Specifically, he or she, depending on the experience, will

- Participate in the FDA Voluntary Genomics Data Submission program to learn how toxicogenomics being applied in drug development and how the toxicogenomics data being reviewed in FDA
- Gain the hands-on experience on the FDA genomic tool, ArrayTrack and other FDA bioinformatics tools for supporting the review and research in FDA
- Take a role in the FDA-led community-wide MicroArray Quality Control project
- Contribute to the FDA Liver Toxicity Knowledge Base development
- Involve development and implementation of electronic data submission pilot study in FDA

NCTR, located 35 miles south of Little Rock, Arkansas, is a research center of the FDA, U.S. Dept. of Health and Human Services. The mission of NCTR is to conduct peer reviewed scientific research that supports and anticipates FDA's current and future regulatory needs. This involves fundamental and applied research specifically designed to define biological mechanisms of action underlying the toxicity of products regulated by the FDA. Research is aimed at understanding critical biological events in the expression of toxicity and developing methods to improve assessment of human exposure, susceptibility, and risk.

To express your interest in this position, email or mail your curriculum vitae, the names and contact information of 2 references, and a statement of research interests (maximum 2 pages) to:

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This is an equal opportunity solicitation open to all qualified persons without regard to race, sex, religion, color, age, physical or mental disability, national origin, or status as a disabled veteran or veteran of the Vietnam era.