



## VACANCY ANNOUNCEMENT

### DEPARTMENT OF HEALTH & HUMAN SERVICES, FOOD AND DRUG ADMINISTRATION, NATIONAL CENTER FOR TOXICOLOGICAL RESEARCH

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**Position Title:** Staff Fellow / Visiting Scientist

**Series:** This position will be filled in an appropriate occupational series (computer science, software engineering, information technologies, data science, or related fields) under Title 42 U.S.C. 209(g). An official transcript or a foreign education credential will be required upon selection for the position. A course-by-course foreign education credential may be required depending on the occupational series selected.

**Location:** Jefferson, AR. Position is Telework Eligible, as determined by agency policy.

**Opening Date:** August 18, 2023

**Closing Date:** September 1, 2023

**Salary Range:** Salary is commensurate with education and experience.

**Area of Consideration:** All U.S. Citizens or all eligible foreign nationals.

**Special Notes:** This position will be filled as a Title 42 209 (g) appointment. This is an Excepted Service position under Title 42. This appointment does not confer any entitlement to a position in the competitive service and no entitlement to Merit Systems Protection Board (MSPB) appeal rights. This position is covered by the HHS and NTEU Consolidated Collective Bargaining Agreement (CBA). We may make additional selections for similar positions from this vacancy announcement.

**Introduction:**

This position is located in the [Division of Bioinformatics & Biostatistics](#), Office of Research, National Center for Toxicological Research (NCTR), U.S. Food and Drug Administration (FDA). The FDA is responsible for protecting the public health by assuring the safety, efficacy and security of human and veterinary drugs, biological products, medical devices, our nation's food supply, cosmetics, and products that emit radiation.

NCTR is a multi-disciplinary research center. NCTR's primary mission is to conduct peer-reviewed research and develop new scientific tools for the FDA to improve public health. This research produces new data and innovative tools to solve complex health issues and anticipated toxicological problems, thus enhancing FDA regulatory decision making. NCTR provides

multidisciplinary training and fosters national and international collaborations with scientists from government, academia, and industry.

The Division of Bioinformatics and Biostatistics is responsible for research conducted in the broad multidisciplinary field of bioinformatics, which bears strong dependency on chemistry. Bioinformatics and biostatistics research encompasses analyzing complex data, discovering biomarkers and developing predictive models. The research program has ongoing projects in such areas as developing models to predict biological activity and toxicity based on chemical structures, omics data, pathology images, and adverse event reports.

**Duties/Responsibilities:**

NCTR is seeking a highly qualified scientist, who will provide technical implementation of regulatory informatics projects that translate division research to regulatory applications.

Specific duties include, but are not limited to, the following:

- Write code and/or support code writing for software modules and computational platforms
- Assist with and/or create of software-as-a-service (SaaS) computational platforms that transfer the technologies for general utility by the agency, scientific colleagues, and/or industry
- Create, deploy, and troubleshoot container-based solutions in cloud environments such as Kubernetes and Amazon Web Services.
- Create, customize and automate Continuous Integration and Continuous Delivery (CI/CD) pipelines in Jenkins.
- Create scripts in Bash or Python to automate common tasks related to the software deployment process.
- Assist with designing, building, testing, and maintaining the software developed for use in a regulatory environment
- Write algorithms to extract various types of data from scientific information
- Develop relational databases to efficiently and effectively access key data and scientific findings
- Work effectively in a multi-disciplinary team of regulatory scientists and research scientists to enhance FDA's regulation capabilities and create a range of products

- Ability to design for a range of end users, whose expertise can range from expert to computationally unsophisticated clients
- Ensure quality control during code writing, specifically unit testing of each step in an algorithm so that calculations are mathematically appropriate and predictions are accurate
- Ability to work on multiple projects with multiple partners / stakeholders simultaneously
- Ability to communicate well with team members and end users

**Educational Requirements:**

- Candidates must possess a doctoral degree from an accredited institution of higher learning or equivalent degree in computer science, software engineering, information technologies, data science, or related fields. Some exceptions may be made depending on the candidate's qualifications.

**Desired Qualifications:**

- Our ideal candidate will possess experience in web application development using Python, JavaScript, HTML, Oracle, MySQL, PL/SQL, React and/or other programming languages. Candidates with experience in Kubernetes and application deployment to AWS Cloud platform and knowledge of regulatory science and artificial intelligence are preferred.

**Conditions of Employment:**

**Ethics Requirements:** This position is subject to strict prohibited financial interest regulations which could restrict the type of financial interest (stock holdings) for the employee, the spouse, and minor children of the employee. Selectee for this position will be required to file a Confidential Disclosure Report (OGE 450) and may require the selectee to obtain clearance from the FDA Division of Ethics and Integrity before a final offer can be made. For additional information on the prohibited financial interests, please visit the FDA Ethics and Integrity Office website at <https://www.fda.gov/about-fda/jobs-and-training-fda/ethics>.

**Security and Background Requirements:** If not previously completed a background security investigation will be required for all appointees. Appointment will be subject to the applicant's successful completion of a background security investigation and favorable adjudication. Failure to successfully meet these requirements may be grounds for appropriate personnel action. In addition, if hired, a background security investigation or supplemental investigation may be required at a later time. Applicants are also advised that all information concerning qualification is subject to investigation. False representation may be grounds for non-selection and/or appropriate disciplinary action.

**Application Procedures:**

Candidates must submit a CV and brief statement of interest to:

Joshua Xu, Branch Chief  
Research to Review (R2R) Branch  
Division of Bioinformatics & Biostatistics  
NCTR-5C RM101-F MC-910  
National Center for Toxicological Research  
3900 NCTR Rd., Jefferson, AR 72079

Email: [Joshua.Xu@fda.hhs.gov](mailto:Joshua.Xu@fda.hhs.gov)

**Additional Announcement Information:**

The FDA will provide [reasonable accommodation](#) to applicants with disabilities who are not able to apply by sending a letter or email to the hiring manager, upon request.

**Benefits:** The Federal Government offers a comprehensive benefits package. Explore the major benefits offered to most Federal employees at <https://www.usajobs.gov/Help/working-in-government/benefits/>.

**Incentives may be authorized; however, this is contingent upon funds availability.** If authorized, certain incentives will require you to sign a service agreement to remain in the Federal government for a period of up to 3 years. **Note: This statement does not imply nor guarantee an incentive will be offered and paid.** Incentives include the following: moving expenses, recruitment or relocation incentive; student loan repayment, superior qualifications appointment, creditable service for annual leave for prior non-federal work experience or prior uniformed military service, etc.