



## VACANCY ANNOUNCEMENT

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

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

**Series:** This position will be filled in an appropriate occupational series (such as biology, microbiology, chemistry, physical sciences, health sciences, 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:** Wednesday, April 10, 2024

**Closing Date:** Wednesday, April 24, 2024

**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. 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 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, and developing models to predict biological activity and toxicity based on genomics, proteomics and metabolomics expression data.

**Duties/Responsibilities:**

NCTR is seeking a highly qualified scientist, who will provide technical and scientific implementation of the research projects.

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

- Conducts research to address key aspects aligned with the Division's overall mission. Primarily, this involves conducting cheminformatics research to find solutions for computational toxicology, including developing predictive models for various toxicological problems.
- Deliver recommendations to enable the development of reliable cheminformatics tools that help commit FDA missions.
- Hypothesize and test mechanisms to determine the root-cause of observed activity of biological systems.
- Proactively validate/correlate results with real-world data to improve biological and toxicological knowledge generated.
- Demonstrate analytical judgement to scope and assess the appropriate level of computational chemistry models required.
- Advocate for the power of cheminformatics modeling while transparently communicating its limitations.
- Identify, test, benchmark, and recommend new cheminformatics software solutions.
- Establishes collaborative research projects with scientists both within and outside NCTR community and communicates with interdisciplinary professionals as needed to complete and further the research assignment.
- Work effectively in a multi-disciplinary team of experimentalists and cheminformaticians and interacts with colleagues throughout the Agency as a subject matter expert in support of the FDA research and missions.

- Write research protocols and manuscripts for peer-reviewed publication, as well as maintain current awareness of new and emerging technologies / scientific breakthroughs.
- Write, edit, and present research in scientific journals and professional conferences.
- Present complex in-depth technical material in a concise manner.

### **Educational Requirements:**

- Candidates must have a doctoral-level degree from an accredited institution of higher learning, including: Ph.D. or equivalent degree in the biological, chemical, physical, or health sciences. Some exceptions may be made depending on the candidate's qualifications.
- Candidates must meet the minimum qualification requirements and have one year experience equivalent to at least the GS-9 in the civil service General Schedule.

### **Desired Qualifications:**

Our ideal candidate will possess experience Python and /or other programming languages, computational tools such as CHARMM, GAMESS, and Gaussian, molecular dynamics (MD) and quantum mechanism (QM) calculations, machine learning packages such as scikit-learn and TensorFlow, statistical and numerical calculation software such as Matlab, and operation systems such as Windows and Linux.

### **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.

**Direct Deposit:** You will be required to have all federal salary payments electronically deposited into a bank account with a financial institution of your choice.

**FDA participates in e-Verify:** All new hires must complete the I-9 form; this information will be processed through e-Verify to determine your employment eligibility. If a discrepancy arises, you must take affirmative steps to resolve the matter.

**Certification of Accuracy:** All information concerning eligibility and qualification is subject to investigation and verification. False representation may be grounds for non-consideration, non-selection, or appropriate legal action.

**Selective Service Registration:** All applicants born male, on (or after) 12/31/1959, must be registered with the Selective Service System OR have an approved exemption. Visit [www.SSS.gov](http://www.SSS.gov) for more info.

**Application Procedures:**

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

Huixiao Hong, Ph.D.  
Chief, Bioinformatics Branch  
FDA/NCTR/DBB, Building 5C, Room 109A  
3900 NCTR Rd., Jefferson, AR 72079  
Email: [Huixiao.Hong@fda.hhs.gov](mailto:Huixiao.Hong@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://help.usajobs.gov/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.