Opportunity Title: FDA Computational Biology and Pharmacology Fellowship
Opportunity Reference Code: FDA-CDER-2026-0129

Organization U.S. Food and Drug Administration (FDA)

Reference Code FDA-CDER-2026-0129

How to Apply ***To submit your application, scroll to the bottom of this opportunity and click APPLY.***

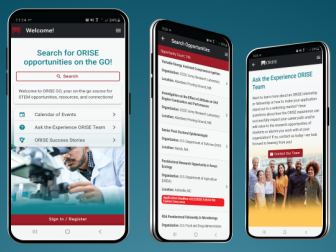
A complete application consists of:

- An application
- Transcripts – Click here for detailed information about acceptable transcripts
- A current resume/CV, including academic history, employment history, relevant experiences, and publication list
- One educational or professional recommendation

All documents must be in English or include an official English translation.

If you have questions, send an email to ORISE.FDA.CDER@orau.org. Please include the reference code for this opportunity in your email.

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Application Deadline 10/30/2026 3:00:00 PM Eastern Time Zone

Description ***Applications will be reviewed on a rolling-basis.**

FDA Office and Location: A research opportunity is available within the Food and Drug Administration (FDA) in The Center for Drug Evaluation and Research (CDER), Office of Clinical Pharmacology (OCP), Office of Translational Sciences (OTS), located at White Oak, Maryland.

The Center for Drug Evaluation and Research (CDER) performs an essential public health task by making sure that safe and effective drugs are available to improve the health of people in the United States. As part of the U.S. Food and Drug Administration (FDA), CDER regulates over-the-counter and prescription drugs, including biological therapeutics and generic drugs. These efforts cover more than just medicines.

Research Project: Under the guidance of a mentor, you will help in developing comprehensive toxicology databases and computational models by analyzing proprietary data from drug applications, as well as public literature data, focusing on endpoints where New Approach Methodologies (NAMs) can provide significant regulatory value. Research activities will include collaborating with multidisciplinary teams to curate large-scale datasets, investigating patterns in toxicological data using statistical methods, contributing to the development of reference compound libraries for predictive model validation, and developing AI, statistical, or mechanistic models to translate nonclinical data (such as chemical structures, sequences, and in vitro functional assays for specific drugs) into safety endpoints (such as cardiotoxicity, immunogenicity, etc.)

Learning Objectives: As a participant, you will have structured learning opportunities in

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regulatory science, computational toxicology, and artificial intelligence applications in drug development. You will gain experience researching advanced in silico prediction algorithms, analyzing machine learning approaches for toxicity pattern recognition, and participating in developing standardized computational frameworks for regulatory assessment. You will also gain experience in regulatory toxicology assessment, computational modeling methodologies, and FDA's drug evaluation processes. Additionally, you will develop competencies in data curation and analysis, understand validation criteria for alternative testing methods, and acquire knowledge of regulatory frameworks for NAM acceptance. Training components include mentorship with senior CDER scientists, participation in stakeholder engagement activities with industry and academic partners, and hands-on experience with data management systems and quality control procedures.

Mentor: The mentor for this opportunity is Zhihua Li (Zhihua.Li@fda.hhs.gov). If you have questions about the nature of the research, please contact the mentor.

Anticipated Appointment Start Date: July 1, 2026. Start date is flexible and will depend on a variety of factors.

Appointment Length: The appointment will initially be for one year, but may be renewed upon recommendation of FDA and is contingent on the availability of funds.

Level of Participation: The appointment is full time.

Participant Stipend: The participant will receive a monthly stipend commensurate with educational level and experience.

Citizenship Requirements: This opportunity is available to U.S. citizens, Lawful Permanent Residents (LPR), and foreign nationals. Non-U.S. citizen applicants should refer to the Guidelines for Non-U.S. Citizens Details page of the program website for information about the valid immigration statuses that are acceptable for program participation.

This program, administered by ORAU through its contract with the U.S. Department of Energy to manage the Oak Ridge Institute for Science and Education, was established through an interagency agreement between DOE and FDA. The participant will receive a monthly stipend commensurate with educational level and experience. Proof of health insurance is required for participation in this program. Participants do not become employees of FDA, DOE or the program administrator, and there are no employment-related benefits.

Completion of a successful background investigation by the Office of Personnel Management is required for an applicant to be on-boarded at FDA. OPM can complete a background investigation only for individuals, including non-US Citizens, who have resided in the US for a total of three of the past five years.

FDA Ethics Requirements

If an ORISE Fellow, to include their spouse and minor children, reports

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what is identified as a Significantly Regulated Organization (SRO) or prohibited investment fund financial interest in any amount, or a relationship with an SRO, except for spousal employment with an SRO, and the individual will not voluntarily divest the financial interest or terminate the relationship, then the individual is not placed at FDA. For additional requirements, see FDA Ethics for Nonemployee Scientists.

FDA requires ORISE participants to read and sign their FDA Education and Training Agreement within 30 days of his/her start date, setting forth the conditions and expectations for his/her educational appointment at the agency. This agreement covers such topics as the following:

- Non-employee nature of the ORISE appointment;
- Prohibition on ORISE Fellows performing inherently governmental functions;
- Obligation of ORISE Fellows to convey all necessary rights to the FDA regarding intellectual property conceived or first reduced to practice during their fellowship;
- The fact that research materials and laboratory notebooks are the property of the FDA;
- ORISE fellow's obligation to protect and not to further disclose or use non-public information.

Qualifications The qualified candidate should be currently pursuing or have received a master's or doctoral degree in the one of the relevant fields. Degree must have been received within the past five years, or anticipated to be received by 10/31/2026.

Point of Contact Ashley

Eligibility Requirements

- **Degree:** Master's Degree or Doctoral Degree received within the last 60 months or anticipated to be received by 10/31/2026 12:00:00 AM.
- **Discipline(s):**
  - **Computer, Information, and Data Sciences** (17 👁)
  - **Engineering** (29 👁)
  - **Life Health and Medical Sciences** (51 👁)
  - **Mathematics and Statistics** (11 👁)
  - **Physics** (3 👁)

Affirmation I am a U.S. citizen, or I have lived in the United States for at least 36 out of the past 60 months. (36 months do not have to be consecutive.)
and
I have read the FDA Ethics Requirements.