Opportunity Title: FDA Postdoctoral Fellowship Patch Clamp Studies of Drug effects on Cardiac Ion Channels
Opportunity Reference Code: FDA-CDER-2023-1264

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

Reference Code FDA-CDER-2023-1264

How to Apply

Connect with ORISE...on the GO! Download the new ORISE GO mobile app in the Apple App Store or Google Play Store to help you stay engaged, connected, and informed during your ORISE experience and beyond!

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.

Application Deadline 6/30/2023 3:00:00 PM Eastern Time Zone

Description

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

A research opportunity is available in the Office of Clinical Pharmacology (OCP), Office of Translational Sciences (OTS), Center for Drug Evaluation and Research (CDER) at the U.S. Food and Drug Administration (FDA) located in Silver Spring, Maryland. 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 FDA, CDER regulates over-the-counter and prescription drugs, including biological therapeutics and generic drugs. This research covers more than just medicines.

This research project will examine effects of drugs with defined clinical risk on several human cardiac ion channels using the whole cell patch clamp method and recombinant cell lines. These electrophysiology data will create a database to further the current understanding of the following: 1) how each drug's multi-cardiac ion channel interaction profiles translate into drug-induced ECG changes and pro-arrhythmia risk; 2) how reproducible are patch clamp data generated using standardized protocols and following best practices, both within- and across laboratories.
Under the guidance of the mentor, the participant will learn about systems approaches taken by the Division of Applied Regulatory Science (DARS) to assess drug safety and efficacy, and how translational research is designed to incorporate state-of-science information to yield solutions that immediately impact human health. The participant will also learn laboratory techniques, including electrophysiology, pharmacology, cell culture, and data analysis with the emphasis on reducing personal factors in experiments and enhancing within-laboratory data reproducibility.

Opportunity Title: FDA Postdoctoral Fellowship Patch Clamp Studies of Drug effects on Cardiac Ion Channels
Opportunity Reference Code: FDA-CDER-2023-1264

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 initial appointment is full-time for a year, but may be renewed upon recommendation of FDA contingent on the availability of funds.** The participant will receive a monthly stipend commensurate with educational level and experience. Proof of health insurance is required for participation in this program. The appointment is on location at FDA in the Silver Spring, Maryland, area. 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 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 have received a Doctoral degree in one of the relevant fields. Degree must have been received within five years of the appointment start date.

Preferred skills/ knowledge:

- Candidates in M.D. programs may also be considered for this opportunity.
- Knowledge in ion channel physiology / pharmacology
- Skills in conducting / interpreting complex voltage clamp and current clamp experiments
- Skills in using Igor Pro and writing macros, ability to prepare acutely isolated cardiomyocytes for patch clamp recordings, and/or knowledge in cell culture research

Eligibility Requirements

- **Degree:** Doctoral Degree received within the last 60 month(s).
- **Academic Level(s):** Postdoctoral.
- **Discipline(s):**
  - **Chemistry and Materials Sciences** (12 👁)
  - **Engineering** (27 👁)
  - **Life Health and Medical Sciences** (48 👁)

Opportunity Title: FDA Postdoctoral Fellowship Patch Clamp Studies of Drug effects on Cardiac Ion Channels
Opportunity Reference Code: FDA-CDER-2023-1264

- **Mathematics and Statistics** (11 👁)
- **Physics** (16 👁)

Affirmation 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.)