Opportunity Title: CiPA Initiative Patch Clamp Electrophysiologist Fellowship - CDER
Opportunity Reference Code: FDA-CDER-2017-0035

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

Reference Code FDA-CDER-2017-0035

How to 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
- Two educational or professional references

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

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

Description A postgraduate research opportunity is available at the Food and Drug Administration (FDA), Center for Drug Evaluation and Research (CDER), in the Office of Translational Sciences/ Office of Clinical Pharmacology

Using the hERG assay as a gatekeeper to avoid affecting the QT interval may have resulted in a deleterious effect on drug development by inhibiting the development of drugs with clinical benefits that may well exceed the risk of arrhythmia. Thus, a new regulatory paradigm - the Comprehensive In Vitro Proarrhythmia Assay (CiPA) – was proposed. Under the CiPA initiative, drug effects on multiple cardiac ion channels in addition to hERG channels will be evaluated, and the ion channel pharmacology results will be integrated into a predictive model of the human adult ventricular cardiomyocyte. Initiating efforts on important aspects of the CiPA initiative require collecting training and validation electrophysiology data by evaluating drug effects on major human cardiac ion channels expressed in stable cell lines, using manual and automated patch clamp systems.

Participants may be involved in the following tasks: testing the effects of selected drugs on in vitro cell lines expressing individual human cardiac ion channels of interest; using data generated above to develop an in silico cardiac model with the ability to predict proarrhythmia risks of new compounds and; implementing a secure and user-friendly web portal for the community to submit proprietary data to and get results back from the model.

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

Opportunity Title: CiPA Initiative Patch Clamp Electrophysiologist Fellowship - CDER
Opportunity Reference Code: FDA-CDER-2017-0035

interagency agreement between DOE and FDA. The initial appointment is for 12 months, 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 full-time at FDA in the Silver Spring, MD area. Participants do not become employees of FDA or the program administrator, and there are no fringe benefits paid.

Qualifications

Applicants must have received a doctoral degree within five years of the desired starting date. A background in ion channel physiology/pharmacology, technical experience in utilizing manual patch clamp platforms for data acquisition is desired. Familiarity with cardiac myocyte isolation/tissue preparation for electrophysiology experiments is also desired.

Eligibility Requirements

- **Degree:** Doctoral Degree received within the last 60 month(s).
- **Academic Level(s):** Postdoctoral.
- **Discipline(s):**
  - **Engineering** (1 👁)
  - **Environmental and Marine Sciences** (1 👁)
  - **Life Health and Medical Sciences** (45 👁)
  - **Mathematics and Statistics** (1 👁)