Opportunity Title: EPA Endocrine Disruptor Screening Program Fellowship
Opportunity Reference Code: EPA-OCSPP-2024-01

Organization U.S. Environmental Protection Agency (EPA)

Reference Code EPA-OCSPP-2024-01

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
- Transcript(s) – For this opportunity, an unofficial transcript or copy of the student academic records printed by the applicant or by academic advisors from internal institution systems may be submitted. All transcripts must be in English or include an official English translation. 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 recommendations. Click here for detailed information about recommendations.

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

Application Deadline 3/29/2024 3:00:00 PM Eastern Time Zone

Description ***Applications may be reviewed on a rolling-basis and this posting could close before the deadline.** Click **here** for information about the selection process.

EPA Office/Lab and Location: A research opportunity is currently available with two EPA programs in both the Office of Chemical Safety and Pollution Prevention (OCSPP) and Office of Research and Development (ORD). The selected participant will receive training in a laboratory located in Research Triangle Park, NC office and travel to Washington, DC once a year for a debriefing.

Research Project: The Center for Computational Toxicology and Exposure (CCTE) within the United States Environmental Protection Agency (US EPA) Office of Research and Development (ORD) conducts solutions-driven research to rapidly evaluate the potential health hazards of environmental chemicals and accelerate the pace of chemical risk assessment. CCTE develops and implements in vitro and in silico new approach methods (NAMs) to avoid the use of animal testing and support regulatory decision making. There is significant regulatory need in the US EPA Endocrine Disruptor Screening Program (EDSP) to identify and evaluate chemicals that may disrupt the thyroid endocrine system. Thyroid NAMs are being developed and applied to increase data coverage across data poor chemicals using a tiered testing strategy, but validation of these methods is necessary to establish confidence for regulatory adoption. The objective of this project is to increase the confidence in applying and using data derived from human-based thyroid organotypic culture models (OCMs) to enable more robust assessments of thyroid disrupting chemicals.

The participant will collaborate with a multidisciplinary team to:

- Evaluate the inter-individual variability in a human organotypic thyroid assay to establish benchmarks and acceptance criteria.
- Define chemical training sets for the technical validation of human organotypic thyroid assays.
- Conduct an intra-laboratory validation study to support the standardization and performance assessment of a human organotypic thyroid assay.

Learning Objectives: Participatory learning objectives include:

- Engagement and leadership in the design and execution of experimental research in a toxicology laboratory setting.
- Develop technical proficiency in the use and implementation of laboratory automation technologies for high-throughput drug and chemical screening.
- Build expertise in computational toxicology approaches by leading data analysis efforts.
- Active participation in project team, branch and division meetings.
- Preparing presentations, internal reports and data summaries.
- Presenting at scientific conferences.
- Authoring manuscripts for publication in peer-reviewed journals.

Mentor(s): The mentor(s) for this opportunity are Chad Deisenroth, Science Lead (deisenroth.chad@epa.gov) and Scott Lynn (lynn.scott@epa.gov). If you have questions about the nature of the research please contact the mentor(s).

Anticipated Appointment Start Date**: February 2024.** All start dates are flexible and vary depending on numerous factors. Click **here** for detailed information about start dates.

Appointment Length: The appointment initially may be for one year and may be renewed upon EPA recommendation and subject to availability of funding.

Level of Participation: The appointment is full-time.

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

EPA Security Clearance: Completion of a successful background investigation by the Office of Personnel Management (OPM) is required for an applicant to be on-boarded at EPA.

ORISE Information: This program, administered by ORAU through its contract with the U.S. Department of Energy (DOE) to manage the Oak Ridge Institute for Science and Education (ORISE), was established through an interagency agreement between DOE and EPA. Participants do not become employees of EPA, DOE or the program administrator, and there are no employment-related benefits. Proof of health insurance is required for participation in this program. Health insurance can be obtained through ORISE.

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ORISE offers all ORISE EPA graduate students and Postdocs a free 5 year membership to the National Postdoctoral Association (NPA).

The successful applicant(s) will be required to comply with Environmental, Safety and Health (ES&H) requirements of the hosting facility, including but not limited to, COVID-19 requirements (e.g. facial covering, physical distancing, testing, vaccination).

Questions: Please see the FAQ section of our website. After reading, if you have additional questions about the application process please email ORISE.EPA.REG@orau.org and include the reference code for this opportunity.

Qualifications

The qualified candidate should have Doctoral Degree received within the last 60 months or anticipated to be received by 6/30/2024.

Preferred skills:

- Knowledge and experience with the application of primary mammalian cells for the development, optimization, and implementation of simple and complex organotypic models and assays.
- Proficiency with the operation of laboratory automation and analytical technologies.
- Experience with basic statistical methods and software (e.g. GraphPad Prism) or object-oriented programming (R, Python).
- Demonstrated ability to communicate scientific findings through peer-reviewed publications and oral presentations.

Eligibility Requirements

- **Degree:** Doctoral Degree received within the last 60 months or anticipated to be received by 6/30/2024 11:59:00 PM.
- **Discipline(s):**
  - **Engineering** (14 👁)
  - **Environmental and Marine Sciences** (14 👁)
  - **Life Health and Medical Sciences** (48 👁)
  - **Mathematics and Statistics** (11 👁)