

Opportunity Title: EPA Fellowship in Conducting Several HTS Assays for Cell Proliferation Endpoints

Opportunity Reference Code: EPA-OCSP-2022-04



Organization U.S. Environmental Protection Agency (EPA)

Reference Code EPA-OCSP-2022-04

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 9/30/2022 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 (OCSP) and Office of Research and Development (ORD). The selected participant will be required to conduct research in the laboratory located in Research Triangle Park, NC and travel to Washington, D.C. once a year for a debriefing.

Research Project: This research project will adapt and validate the use of several high-throughput screening (HTS) assays to measure endocrine receptor function and cell proliferation endpoints. The goal is to identify a combination of HTS assays that reliably predicts estrogen and androgen bio-activity and then deploy this assay battery to test hundreds of chemicals identified by EPA's Office of Pesticide Programs.

The selected participant will have a significant role in developing/optimizing methods, maintaining human cell cultures, and generating/analyzing HTT data.

Learning Objectives: Under the guidance of a mentor, the research participant will learn how to:

- Maintain and expose human cell cultures to control, reference and test chemicals
- Utilize state-of-the-art automated liquid handling systems
- Conduct several HTS assays for estrogen/androgen receptor function and cell proliferation endpoints
- Analyze HTS data using nonlinear regression and synthesize results for publication and presentation

Other research activities may include:

- Hands-on participation in experimental research and data interpretation
- Reading and interpreting relevant scientific literature
- Active participation in meetings of the project team
- Preparing reports, presentations, and summaries of the data
- Presenting at professional meetings
- Authoring manuscripts for publication in peer-reviewed journals.

Mentor(s): The mentor for this opportunity is Scott Lynn (lynn.scott@epa.gov). If you have questions about the nature of the research please contact the mentor(s).

Opportunity Title: EPA Fellowship in Conducting Several HTS Assays for Cell Proliferation Endpoints

Opportunity Reference Code: EPA-OCSP-2022-04

Anticipated Appointment Start Date: **September/October, 2022.** 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. Click [here](#) for detailed information about full-time stipends.

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.

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 EPArpp@ou.edu and include the reference code for this opportunity.

Qualifications

The qualified candidate should have received a bachelor's or master's degree in one of the relevant fields (Toxicology, Environmental Science, Cellular and Molecular Biology, Biochemistry). Degree must have been received within five years of the appointment start date.

Preferred skills:

- Lab course or work experience with general laboratory techniques associated with aseptic technique (cell culture)
- Experience with experimental planning and record keeping
- Experience with basic statistical methods and software (e.g. GraphPad) or object-oriented programming (R, Python)
- Proficiency with Microsoft Office applications (i.e., Excel, PowerPoint, Word, Outlook).
- Strong written, oral, and electronic communication skills

Eligibility Requirements

- **Citizenship:** U.S. Citizen Only
- **Degree:** Bachelor's Degree or Master's Degree received within the last 60 months or anticipated to be received by 9/30/2022 11:59:00 PM.
- **Discipline(s):**
 - **Environmental and Marine Sciences** (14 [👁](#))
 - **Life Health and Medical Sciences** (48 [👁](#))
 - **Mathematics and Statistics** (11 [👁](#))