

Opportunity Title: EPA Fellowship Optimizing New Literature Mining/Curation Strategies

Opportunity Reference Code: EPA-OCSP-2023-07

Organization U.S. Environmental Protection Agency (EPA)

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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 4/5/2024 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 available that is shared between two EPA programs, the Office of Chemical Safety and Pollution Prevention (OCSP) and the Office of Research and Development (ORD). The participant will be required to report to the Scientific Computing and Data Curation Division (SCDCD) located in Duluth, MN.

Research Project: The research project will focus on automating and streamlining the literature search process, as well as updating and refining methods for data assessment, extraction, and management. The overall goal of this research is to identify relevant scientific data for inclusion into multiple applications and tools used to support the Office of Pesticide Program's (OPP) Endocrine Disruptor Screening Program (EDSP).

The participant will have a significant role in developing and optimizing new literature mining/curation strategies and integrating and harmonizing existing methods. The participant will also be involved in updating software programs, web-based interactive tools, or database queries as analysis needs evolve.

Under the guidance of a mentor, research activities may include:

- Hands-on participation in data manipulation and interpretation.
- Reading and interpreting relevant scientific literature.
- Active participation in meetings of the project team.
- Preparing reports, presentations, manuscripts, and data summaries as opportunities arise.



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- Presenting at conferences/professional meetings.
- The design and implementation of reusable, scalable techniques for data management.
- Organizing and transforming data in databases to support scientific analyses.
- Analyzing data quality according to specified criteria.
- Writing scripts to support data/literature mining.
- Working in interdisciplinary teams and collaborating with others to evolve scientific applications.

Learning Objectives: Beyond the research mentioned above, the ORISE participant will be afforded an opportunity to interact with internationally recognized leaders, both within and outside EPA. It is expected that this training opportunity will provide an early career scientist with knowledge, skills, and abilities needed to apply new technologies and associated data to regulatory decision-making at the local, national, and/or international scale and to pursue a professional career in the sciences.

Mentor(s): The mentors for this opportunity are Dr. Scott Lynn (lynn.scott@epa.gov) and Dr. Sara Vliet (vliet.sara@epa.gov). If you have questions about the nature of the research, please contact the mentor(s).

Anticipated Appointment Start Date: **Spring 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.

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).

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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 received a bachelor's or master's degree in one of the relevant fields. Degree must have been received within five years of the appointment start date.

Preferred skills/experience:

- Domain knowledge of biological and toxicological processes.
- Training or coursework in computer programming.
- Experience interpreting pieces of information from a variety of diverse data sources.
- Strong record-keeping skills.
- Experience with basic object-oriented programming (R, Python).
- Proficiency with Microsoft Office applications (i.e., Excel, PowerPoint, Word, Outlook).
- Strong reading comprehension and written, oral, and electronic communication skills.

- Eligibility Requirements**
- **Citizenship:** U.S. Citizen Only
 - **Degree:** Currently pursuing a Bachelor's Degree or Master's Degree to be received by 3/29/2024 11:59:00 PM.
 - **Discipline(s):**
 - **Communications and Graphics Design** ([6](#) 👁)
 - **Computer, Information, and Data Sciences** ([17](#) 👁)
 - **Engineering** ([4](#) 👁)
 - **Environmental and Marine Sciences** ([14](#) 👁)
 - **Life Health and Medical Sciences** ([48](#) 👁)
 - **Mathematics and Statistics** ([11](#) 👁)