Opportunity Title: EPA Non-Targeted Analysis Data Management Fellowship
Opportunity Reference Code: EPA-ORD-CCTE-CCED-2020-14

Organization	U.S. Environmental Protection Agency (EPA)
Reference Code	EPA-ORD-CCTE-CCED-2020-14
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.

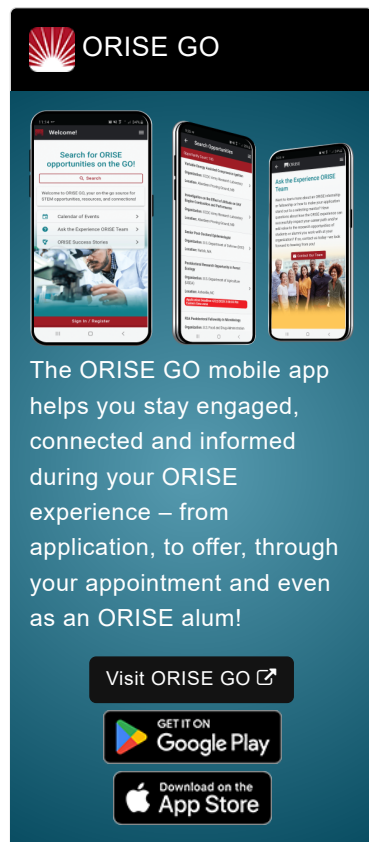|	
Application Deadline	11/25/2020 3:00:00 PM Eastern Time Zone
Description	***Applications may be reviewed on a rolling-basis and this posting could close before the deadline.** Click **here** for information about the selection process.

EPA Office/Lab and Location: A research opportunity is available at the Environmental Protection Agency (EPA), Office of Research and Development (ORD), Center for Computational Toxicology and Exposure (CCTE), Chemical Characterization & Exposure Division (CCED) located in Research Triangle Park, North Carolina.

Research Project: Throughout the course of this research project, the participant will be part of an EPA team of experts (in chemistry, biology, pharmacokinetics, biological modeling, statistics, informatics, toxicology, and risk assessment for supporting regulatory decision-making) who are identifying chemicals to which humans are exposed. High resolution mass spectrometry (HRMS) and Non-targeted analysis (NTA) methods have been increasingly used in recent years to elucidate structures of novel compounds as well as screen for thousands of known compounds. Large amounts of data are produced that require advanced processing and interpretation.

This research may involve processing HRMS data generated in-house or by collaborators as part of NTA studies and writing manuscripts based on the results of these studies. The research participant may use existing python and R scripts and may write new scripts customized for each project. In some cases, researchers apply machine learning to answer research questions.

Learning Objectives: The research participant will learn to apply their creativity and intellect toward solving complex problems and generating

ideas for further investigation. The research participant will also have the opportunity to further develop their technical skills, analytical capability, and communication skills. Under the guidance of a mentor, the research participant will be asked to make decisions regarding the direction of their own research in the aims of developing the skills necessary for a successful career in science.

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

Anticipated Appointment Start Date: Winter 2020/2021. All start dates are flexible and vary depending on numerous factors. Click **here** for detailed information about start dates.

Appointment Length: The appointment will initially be for up to one year and may be renewed up to three to four additional years 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.

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

Qualifications

The qualified candidate should have received a doctoral degree in one of the relevant fields, or be currently pursuing the degree with completion by the anticipated appointment start date. Degree must have been received within five years of the appointment start date.

Preferred skills:

- Working knowledge of mass spectrometry
- Familiarity with machine learning techniques

Eligibility Requirements

- **Citizenship:** U.S. Citizen Only
- **Degree:** Doctoral Degree received within the last 60 months or

anticipated to be received by 12/21/2020 11:59:00 PM.

- **Discipline(s):**
  - **Chemistry and Materials Sciences** (5 👁)
  - **Computer, Information, and Data Sciences** (1 👁)
  - **Earth and Geosciences** (4 👁)
  - **Engineering** (2 👁)
  - **Environmental and Marine Sciences** (4 👁)
  - **Life Health and Medical Sciences** (7 👁)
  - **Mathematics and Statistics** (1 👁)
- **Veteran Status:** Veterans Preference, degree received within the last 120 month(s).