

**Opportunity Title:** EPA Postdoctoral Fellowship in Analytical Chemistry and PFAS

**Opportunity Reference Code:** EPA-ORD-CEMM-WECD-2021-05



**Organization** U.S. Environmental Protection Agency (EPA)

**Reference Code** EPA-ORD-CEMM-WECD-2021-05

**How to Apply** *Connect with ORISE...on the GO!* Download the new ORISE GO mobile app in the Apple 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** 10/12/2021 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 Environmental Measurement and Modeling (CEMM), Watershed and Ecosystem Characterization Division (WECD), Multimedia Methods Branch (MMB) located in Research Triangle Park, North Carolina.

**Research Project:** Prior in vitro research to investigate the post-ingestion fate of PFAS sorbed to soils and house dusts has shown that many species are mobilized as PFAS transits the gastrointestinal tract. However, additional data on transport of PFAS to target organs are needed. Throughout the course of this research project, the selected participant may collaborate with EPA Scientists to develop and apply methods that will generate in vivo data to model the mobilization, and delivery to target organs, of PFAS from an ingested substrate. The participant's research project may focus on in vivo studies and incorporate the use of analytical chemistry techniques such as: solid phase extraction (SPE), gel permeation chromatography (GPC), high resolution mass spectrometry (UHPLC-QTOF), and gas chromatography-mass spectrometry.

Under the guidance of the mentor, the research participant may be involved in the following activities:

- Literature reviews of the post ingestion bioavailability of sorbed organics
- Design and execution in vivo rodent feeding studies
- Measurement of PFAS tissue concentrations
- Construction of empirical PFAS bioavailability models
- Preparation and submission manuscripts for publication in peer reviewed journals

**Learning Objectives:** The research participant will have the opportunity to gain experience in the acquisition and modeling of empirically derived PFAS bioavailability data. The research participant will also be given the opportunity to present this research through a combination of reports, presentations, and contributions to manuscript preparation for submission to a peer-reviewed science journal.

**Mentor(s):** The mentor for this opportunity is James Starr ([starr.james@epa.gov](mailto:starr.james@epa.gov)). If you have questions about the nature of the research please contact the mentor(s).

**Anticipated Appointment Start Date:** ~September 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 one year and may be renewed up to four additional

**Opportunity Title:** EPA Postdoctoral Fellowship in Analytical Chemistry and PFAS

**Opportunity Reference Code:** EPA-ORD-CEMM-WECD-2021-05

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 [ORISE.EPA.ORD@orau.org](mailto:ORISE.EPA.ORD@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 and will reach completion by September 15, 2021. Degree must have been received within five years of the appointment start date.

Preferred skills:

- Experience with in vivo research
- ADME skills
- Knowledge of analytical chemistry methods
- Liquid chromatography-mass spectrometry skills
- Biostatistics skills

## Eligibility Requirements

- **Citizenship:** U.S. Citizen Only
- **Degree:** Doctoral Degree received within the last 60 months or anticipated to be received by 9/15/2021 11:59:00 PM.
- **Discipline(s):**
  - **Environmental and Marine Sciences** (3 )
  - **Life Health and Medical Sciences** (7 )
  - **Other Physical Sciences** (4 )
- **Veteran Status:** Veterans Preference, degree received within the last 120 month(s).