

Opportunity Title: Assessing Wildfire Effects on Air Quality, Water Quality, and Terrestrial and Aquatic Ecosystems

Opportunity Reference Code: EPA-ORD-NCEA-RTP-2019-01

Organization U.S. Environmental Protection Agency (EPA)

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How to Apply A complete application consists of:

- An application
- Transcripts – [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

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

If you have questions, send an email to EPARpp@orau.org. Please include the reference code for this opportunity in your email.

Application Deadline 3/31/2020 3:00:00 PM Eastern Time Zone

Description *Applications will be reviewed on a rolling-basis.

A research training opportunity is currently available at the U.S. Environmental Protection Agency's (EPA) Office of Research and Development (ORD). The appointment will be **located in Research Triangle Park, North Carolina**. Offices within ORD are responsible for environmental assessments informing regulatory offices of the EPA, regions, states, and authorized tribes. These assessments include environmental risk characterization, systematic reviews of the literature, rapid evidence assessments, and other syntheses of scientific evidence. Currently, ORD scientists are conducting assessments of the effects of wildfire and prescribed fire on air and water quality. Included in this are potential impacts to drinking water, aquatic and terrestrial ecosystems, and researching ways that communities can reduce their vulnerabilities.

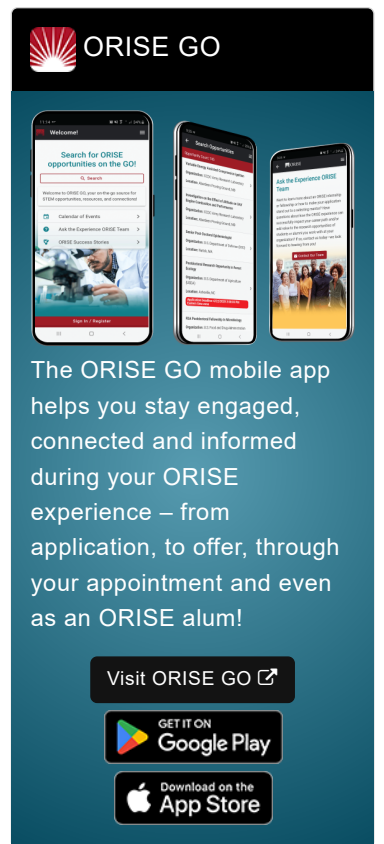
The research participant will engage in research projects aimed at assessing the environmental effects of wildfire and prescribed fire, and characterizing community risks and vulnerabilities. The research training activities may include:

- Contributing to ongoing literature assessments of wildfire effects on air quality, water quality, drinking water, and aquatic ecosystems
- Designing and implementing literature and data analyses of the ecosystem impacts of wildfire, with a focus on downwind effects of mobilized pollutants (e.g., ozone, mercury) on terrestrial and aquatic ecosystems
- Characterizing or assessing community risks and vulnerabilities using the scientific literature, secondary data, geospatial analysis, modeling, or other means
- Collaborating amongst staff across a range of disciplines, and contributing within the participant's area of interest
- Conducting evidence assessments, literature reviews, interpreting scientific study results, and writing summaries of published research
- Analyzing data using modeling, statistical, and/or geographic information system software
- Preparing peer-reviewed manuscripts and reports

The research participant will learn approaches used in EPA's scientific assessments for the evaluation, analysis, and integration of evidence on the effects of environmental pollutant exposures. The research participant will have the opportunity to be involved in a variety of projects that can include qualitative or quantitative analyses of study findings and data and to synthesize





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the findings to support science assessments. The research participant will gain an understanding of how scientific evidence is used to inform EPA decision-making processes. The research participant will collaborate with scientific staff across EPA, and potentially with EPA regional and policy staff.

The mentor for this opportunity is Stephen LeDuc (Leduc.stephen@epa.gov).

Anticipated Appointment Start Date: March 2, 2020

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. The initial appointment is for one year, but may be renewed upon recommendation of EPA and is contingent on the availability of funds. The participant will receive a monthly stipend commensurate with educational level and experience. Proof of health insurance is required for participation in this program. The appointment is full-time at EPA in the Research Triangle Park, North Carolina, area. Participants do not become employees of EPA, DOE or the program administrator, and there are no employment-related benefits.

Completion of a successful background investigation by the Office of Personnel Management (OPM) is required for an applicant to be on-boarded at EPA. OPM can complete a background investigation only for individuals, including non-US Citizens, who have resided in the US for the past three years.

Qualifications The qualified candidate should have received a master's or doctoral degree in one of the relevant fields, or be currently pursuing one of the degrees and will reach completion by the start date of the appointment. Degree must have been received within five years of the appointment start date.

Preferred skills:

- Strong knowledge in the environmental implications of wildfire
- Experience with conducting statistical analyses in R and geospatial analyses in ArcGIS
- Experience collaborating across a range of scientific disciplines
- Experience or familiarity with various biogeochemical and landscape models (e.g. SWAT, LANDIS-II)
- Good scientific writing skills evidenced by publications in peer-reviewed journals, as well as good communication skills such as giving oral presentations at scientific conferences

Eligibility Requirements

- **Degree:** Master's Degree or Doctoral Degree received within the last 60 months or anticipated to be received by 2/3/2020 11:59:00 PM.
- **Discipline(s):**
 - **Chemistry and Materials Sciences** (1 )
 - **Earth and Geosciences** (2 )
 - **Engineering** (1 )
 - **Environmental and Marine Sciences** (10 )
 - **Life Health and Medical Sciences** (8 )
 - **Mathematics and Statistics** (1 )
 - **Physics** (1 )

Affirmation I certify that I have lived in the United States for the past three years.