Opportunity Title: GLIMPSE Decision Support System for Air Quality Management
Opportunity Reference Code: EPA-ORD-NERL-SED-2019-11

Organization	U.S. Environmental Protection Agency (EPA)
Reference Code	EPA-ORD-NERL-SED-2019-11
How to Apply	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

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	11/6/2019 3:00:00 PM Eastern Time Zone
Description	***Applications will be reviewed on a rolling-basis.**

A research opportunity is available at the Environmental Protection Agency (EPA), Office of Research and Development (ORD), National Exposure Research Laboratory (NERL), Systems Exposure Division (SED) located in Research Triangle Park, North Carolina.

The objective of this project is to integrate the U.S. version of the Global Change Assessment Model (GCAM-USA) into the GLIMPSE decision support system, facilitating its use for long-term air quality and climate planning. GLIMPSE will provide Agency- and state-level analysts with levers for manipulating GCAM-USA inputs to simulate the application of air pollutant emission controls, as well as energy efficiency and renewable energy measures. GLIMPSE will provide visualization tools for exploring model outputs, including emissions and projected impacts, and its design will support an iterative and interactive management strategy exploration process.

The research participant will become a member of the multidisciplinary GLIMPSE research team and interact with EPA scientists and regulatory staff. Research activities may include the research participant assisting with modifications to GCAM-USA for application to air quality management (e.g., characterizing air pollution control devices for inclusion in the model); and application of GLIMPSE to provide long-term air and climate management insights (e.g., exploring the impact of additional states joining the Regional Greenhouse Gas Initiative, or widespread adoption of shared autonomous vehicles on air quality). The research participant will also learn about the GCAM-USA Human-Earth Systems Model and will become proficient in its application in climate and air quality management. The research participant may also learn software development skills, including the design and implementation of decision support systems and graphical user interfaces. The

research participant will also have the opportunity to communicate progress and findings to a diverse scientific and technical audience.

The mentor for this opportunity is Dr. Chris Nolte (nolte.chris@epa.gov).

Anticipated Appointment Start Date: November 1, 2019

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

Preferred skills:

- Experience with computational models and data visualization
- Experience working with large datasets

Eligibility Requirements

- **Degree:** Bachelor's Degree, Master's Degree, or Doctoral Degree.
- **Discipline(s):**
    - **Chemistry and Materials Sciences** (12 👁)
    - **Computer, Information, and Data Sciences** (16 👁)
    - **Earth and Geosciences** (21 👁)
    - **Engineering** (27 👁)
    - **Environmental and Marine Sciences** (14 👁)
    - **Life Health and Medical Sciences** (45 👁)
    - **Mathematics and Statistics** (10 👁)
    - **Other Non-Science & Engineering** (2 👁)
    - **Physics** (16 👁)
    - **Social and Behavioral Sciences** (28 👁)

Affirmation

I have received a bachelor's degree within the past 5 years, or am currently pursuing a master's or doctoral degree.

AND

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

years.