Opportunity Title: Non-Targeted Research Analyst at EPA
Opportunity Reference Code: EPA-SSP-0027-14R-5-23-18

Organization	U.S. Environmental Protection Agency (EPA)
Reference Code	EPA-SSP-0027-14R-5-23-18
How to Apply	**How to apply**

- Submit application and supporting documents by clicking on Apply Now button.
- *For more information, contact* EPAjobs@orau.org. Do not contact EPA directly.

Description

The EPA Environmental Research and Business Support Program has immediate opening for a PhD Non-Targeted Research Analyst with the Office of Research and Development at the EPA facility in Research Triangle Park, NC.
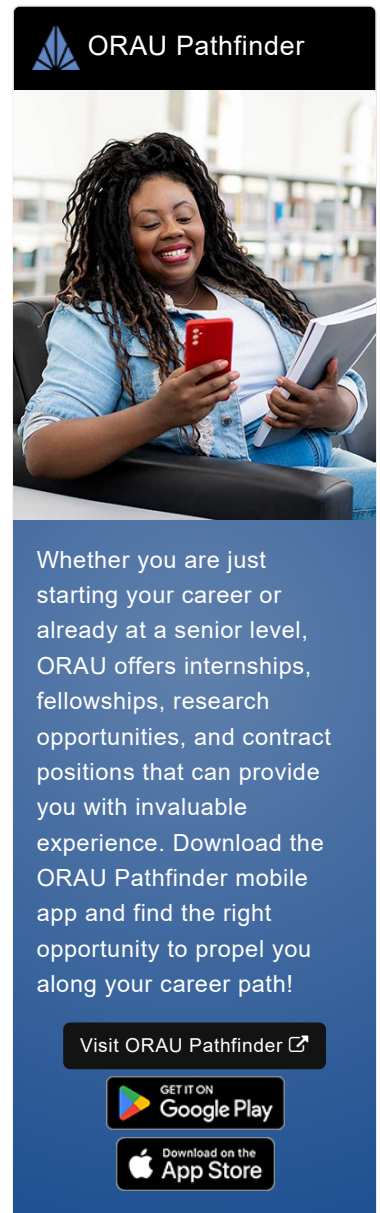
The Office of Research and Development at the EPA supports high-quality research to improve the scientific basis for decisions on national environmental issues and help EPA achieve its environmental goals. Research is conducted in a broad range of environmental areas by scientists in EPA laboratories and at universities across the country.

The Exposure Methods and Measurement Division (EMMD) of ORD's National Exposure Research Laboratory (NERL) provides the science that underlies the measurement of environmental stressors and their interactions with biological systems. This science includes methods development, evaluation, and field and laboratory testing. These measurement methods are foundational to the Agency's regulatory programs and stakeholder needs in protecting public health and the environment. Non-targeted analysis (NTA) methods are new laboratory techniques that are being evaluated by ORD as means to further support the agency's mission. EPA's Non-Targeted Analysis Collaborative Trial (ENTACT) is collecting NTA data from labs around the world to evaluate the utility of these methods for meeting EPA's needs.
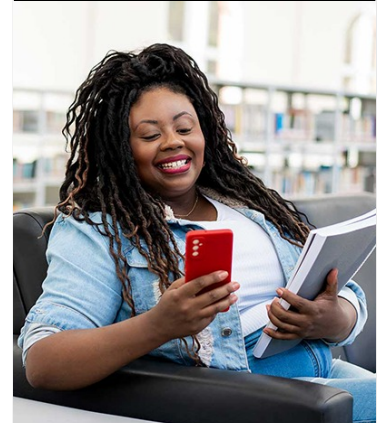
The selected candidate shall provide data management, data curation and data analysis support to the ENTACT project. Specific efforts include MySQL database management, file management, data curation and extraction, quality control, and performing qualitative and quantitative data analysis (e.g., machine learning modeling). He/she shall work with other members of the ENTACT project team to generate and maintain an ENTACT database, perform quality control on entered data, and conduct downstream analysis. The selected candidate shall be a member of a multi-disciplinary research team and shall be trained to support the development, maintenance, and analysis of the ENTACT database.

ENTACT data curation and analysis shall include:

- Assisting with quality control of entered data (data entered by third party);
- Running automated data quality tests;
- Curating data into the ENTACT database;

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- Developing analysis tools for exploring and visualizing ENTACT data;
- Developing scripts to provide reports on the data; and
- Utilizing machine learning approaches to evaluate ENTACT data.

Communications-related responsibilities shall include:

- Participating as a member of a multi-disciplinary research team;
- Interacting with other members of the development team as well as EPA scientists; and
- Documenting code and database development efforts.

Selected candidate may be asked to present work performed as a poster/oral presentation at a scientific conference.

Location: This job will be located at EPA's facility in Research Triangle Park, NC.

Salary: Selected applicant will become a temporary employee of ORAU and will receive an hourly wage of $41.02 for hours worked.

Hours: Full time.

Working Conditions: The selected candidate shall be supervised by a mentor who will provide day-to-day direction, as well as coach, advise and counsel them, and review their work.

Travel: Occasional overnight travel may be required.

Expected Start Date: The position is full time and expected to begin August 2018. The selected applicant will be a temporary employee of ORAU working as a contractor to EPA. The initial contract period is through May 14, 2019, followed by one (1) additional 12 month option period.

For more information, contact EPAjobs@orau.org. Do not contact EPA directly.

Qualifications **Eligible applicants must:**

- Be at least 18 years of age **and**
- Have earned a PhD in chemistry, biology, bioinformatics, cheminformatics, statistics, computational biology, math, physics, information science, or a closely related field of study from an accredited university or college within the last 24 months **and**
- Be a citizen of the United States of America or a Legal Permanent Resident.

EPA ORD employees, their spouses, and children are not eligible to participate in this program.

Required Knowledge, Skills, Work Experience, and Education

Successful candidate shall have:

- A working knowledge of organic and analytical chemistry;
- Experience implementing machine learning approaches/building

machine learning models;

- Demonstrated education and/or experience in MySQL database management, file management, and data curation;
- Python programming (or other scripting language) experience; and
- Strong written, oral and electronic communication skills.

Eligibility Requirements

- **Citizenship:** LPR or U.S. Citizen
- **Degree:** Doctoral Degree received within the last 24 month(s).
- **Discipline(s):**
    - **Chemistry and Materials Sciences** (12 👁)
    - **Computer, Information, and Data Sciences** (1 👁)
    - **Environmental and Marine Sciences** (1 👁)
    - **Life Health and Medical Sciences** (45 👁)
    - **Mathematics and Statistics** (10 👁)
    - **Physics** (16 👁)

Affirmation

Certification:

I certify that I am at least 18 years of age; a recent graduate with a PhD in chemistry, biology, bioinformatics, cheminformatics, statistics, computational biology, math, physics, information science, or a closely related field of study from an accredited university or college within the last 24 months; a citizen or a Legal Permanent Resident of the United States of America; and not a current employee of EPA ORD or the spouse or child of an EPA ORD employee.