

Opportunity Title: EPA Computational Biologist

Opportunity Reference Code: EPA-SSP-0017-4

Organization U.S. Environmental Protection Agency (EPA)

Reference Code EPA-SSP-0017-4

Description The EPA Environmental Research and Business Support Program has an immediate opening for an EPA Computational Biologist position 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 Research Cores Unit is one of four health divisions of the National Health and Environmental Effects Research Laboratory (NHEERL) within EPA/ORD. The Bioinformatics Core of RCU/NHEERL, located on EPA's Main Campus in Research Triangle Park, NC, serves to provide, among other functions, a bioanalytical and computational infrastructure to facilitate research on a variety of research topics, including systems biology, a variety of 'omics' disciplines, as well as database development and data curation. The National Center for Environmental Assessment (NCEA), headquartered in Washington, DC, is responsible for human health and ecological risk assessment within EPA/ORD.

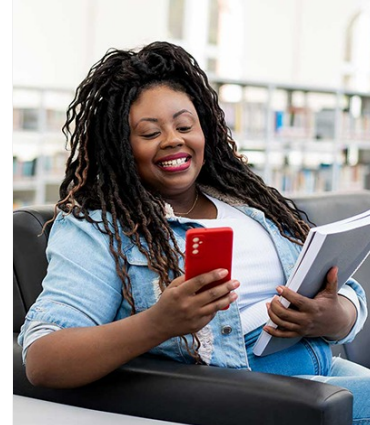
The Bioinformatics Core of the RCU/NHEERL is partnering with NCEA to address inter individual variation in response to environmental chemicals using multiple strategies related to (1) identifying genomic and transcriptomic datasets; (2) identifying molecular targets of interest in adverse outcomes; (3) characterizing functional variation across populations in response to environmental chemicals of interest to the US EPA; and (4) building computational workflows to integrate and extract biological information from large datasets.

In human health risk assessment, data on susceptibility can be derived based on a study of a susceptible population and/or an intra species uncertainty factor may be applied to the calculation of toxicity values to account for the lack of information on susceptibility. Defining genetic susceptibility in response to environmental chemicals across human populations is an area of interest in the NAS' new paradigm of toxicity pathway-based risk assessment. This project will explore the utility of new data streams in addressing issues of susceptibility to adverse outcomes for application to community and cumulative risk assessment.

The selected candidate will work with other members of NHEERL's Bioinformatics team in the integration of datasets relevant to human genetic susceptibility, and to develop computational code to analyze and extract information relevant to adverse outcomes related to chemicals of interest to the US EPA in humans. Training will be provided on current chemical and genomic databases and the existing code-base. He/she will be a member of a multi-disciplinary research team and shall be trained to support the development, programming, testing and maintenance of multiple



ORAU Pathfinder



Whether you are just starting your career or already at a senior level, ORAU offers internships, fellowships, research opportunities, and contract positions that can provide you with invaluable experience. Download the ORAU Pathfinder mobile app and find the right opportunity to propel you along your career path!

Visit ORAU Pathfinder [↗](#)



Opportunity Title: EPA Computational Biologist

Opportunity Reference Code: EPA-SSP-0017-4

applications that shall provide the foundation for all genetic susceptibility and related projects.

Application and Database Programming responsibilities shall include:

- Creating new applications and scripts to interact with a genomic and transcriptomic datasets and curated databases,
- Maintaining existing code and scripts that may or may not access databases, and
- Participating in team code reviews, maintaining records of meetings, correspondence, and action documents, and maintain a system to track projects in progress.

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 NCEA and other EPA scientists,
- Documenting code and analysis development efforts, and
- Presenting work performed as a poster presentation or presentation at a scientific conference or other forum.

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

Salary: The selected applicant will become a full time temporary employee of ORAU and will receive an hourly wage of \$20.65 for hours worked.

Hours: Full time

Travel: Occasional overnight travel may be required.

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 the candidate, and review the candidate's work.

This position will involve work in an administrative setting and is not expected to involve exposure to hazardous elements.

Expected Start Date: The position start date is December 2016. The selected applicant will be temporary employees of ORAU working as contractors to EPA. The initial contract period is through May 14, 2017. EPA may elect to renew the contract for an additional three 12-month optional periods

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 at least a Bachelor's degree in bioinformatics, computational biology, genetics, genomics or a closely related of study from an accredited university or college within the last 24 months, **and**

Opportunity Title: EPA Computational Biologist

Opportunity Reference Code: EPA-SSP-0017-4

- 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

The applicant shall have:

- Experience programming in at least one modern general purpose programming language such as Perl, Python, C++, R, or Java,
- Experience with Unix or Linux operating system,
- Coursework or equivalent work experience with analysis of large genomic datasets (e.g., those that are composed of tens of thousands to hundreds of thousands of data elements),
- Coursework or equivalent work experience with statistical genetics or population genetics theory,
- Strong written, oral and electronic communication skills, and
- Proficiency with Microsoft Office applications (i.e., Excel, PowerPoint, Word, Outlook).

How to apply:

- Submit application and supporting documents by clicking on *Apply Now* button.
- Do not contact EPA directly.

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

- Eligibility Requirements**
- **Citizenship:** LPR or U.S. Citizen
 - **Degree:** Bachelor's Degree, Master's Degree, or Doctoral Degree received within the last 24 month(s).
 - **Discipline(s):**
 - **Chemistry and Materials Sciences** ([12](#) 👁)
 - **Environmental and Marine Sciences** ([1](#) 👁)
 - **Life Health and Medical Sciences** ([45](#) 👁)
 - **Mathematics and Statistics** ([10](#) 👁)

Affirmation I certify that I am at least 18 years of age; a recent graduate with at least a Bachelor's degree in bioinformatics, computational biology, genetics, genomics 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.

ORAU is an Equal Opportunity Employer (**EOE AA M/F/Vet/Disability**); visit the [ORAU website](#) for required employment notices.