

Opportunity Title: Biomarkers and Human Health and Wellbeing Research at

EPA

Opportunity Reference Code: EPA-SSP-0024-14R-07-27-18

Organization U.S. Environmental Protection Agency (EPA)

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**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 an immediate opening for a Biomarkers and Human Health and Wellbeing Research position at EPA with the Office of Research and Development at the EPA's facility in Chapel Hill, 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 Epidemiology Branch (EB) of the Environmental Public Health Division (EPHD), National Health and Environmental Effects Research Laboratory (NHEERL), Office of Research and Development (ORD) at EPA conducts epidemiological research supporting EPA's regulations and helping communities to make better decisions to sustain a healthy society and environment. A research team in EB is working collaboratively with EPA's National Exposure Research Laboratory (NERL) to explore the beneficial health effects associated with exposure to urban green space and other natural environments, and to assess health risks associated with microbial contamination of public drinking water supplies and recreational water bodies.

The selected candidate shall assist the EB team with providing technical laboratory support for epidemiological research projects which include recruitment and examination of human subjects, biological sample collection, physical examinations, collection of questionnaire data, and laboratory analysis of various biomarkers in blood, saliva, and stool samples, data processing, statistical analysis and preparation of reports.

## Technical laboratory support responsibilities shall include assisting with:

- Preparation of Quality Assurance Project Plans,
- · Contributing to preparation of survey forms and other data collection tools,
- Coordinating receipt and distribution of saliva, blood, and stool samples and associated documentation to the appropriate EPA laboratories,
- Processing of samples received, including filtration, centrifugation, and solvent extraction,
- Analysis of biomarkers in human samples including antibody responses to specific pathogens, and biomarkers of immune, metabolic and neuroendocrine functions using various assay technologies including Enzyme-Linked Immunosorbent Assay (ELISA), kinetic assay, Meso Scale Discovery (MSD) electorchemoluminescense assay and LuminexTM multiplex suspension assays,
- Nucleic acid extraction and molecular analyses using a variety of commercial kits,
- Maintaining careful and accurate records in designated laboratory notebooks,
- · Maintaining inventory of supplies and preparing lists of supplies to be ordered, as needed, and
- Data processing and basic statistical analysis of assay results.

## Communications-related responsibilities will include:

- Participate as a member of a multi-disciplinary research team,
- Interact with EPA scientists and other members of the laboratory team, and
- Document experimental and sample collection efforts.

The selected candidate may be asked to present work performed as a poster at a scientific conference, and may be asked to assist with writing a manuscript or report describing the research.

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Location: This job will be located at EPA's facility in Chapel Hill, NC.

**Salary:** The selected applicant will become a full time temporary employee of ORAU and will receive an hourly wage of \$28.56 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 selected candidate, and review his/her work.

The work will be in a laboratory setting and may involve exposure to hazardous elements.

**Expected Start Date:** The position start date is August/September 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. EPA may elect to renew the contract for an additional one (1) 12-month optional periods.

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# Qualifications Eligible applicants must:

- · Be at least 18 years of age and
- Have earned at least a Master's degree in biology, microbiology, molecular biology, public health, environmental sciences, engineering, or a closely related field 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 candidates shall have:

- Knowledge of general laboratory safety practices,
- Proficiency with general laboratory techniques, including aseptic and sterile technique,
- Substantial practical experience beyond college coursework and demonstrated proficiency in the use of various biomarker tests listed in Section 3.
- Demonstrated experience in molecular biology research, including experience with nucleic acid extractions, polymerase chain reaction (PCR), reverse transcription (RT)-PCR, quantitative (q)PCR, and gel electrophoresis,
- Proficiency with Microsoft Office applications (i.e., Excel, PowerPoint, Word, Outlook),
- · Strong communication skills including written, oral, and presentation abilities, and
- Experience with data processing, cleaning, quality controls and data analysis techniques, including fitting
  dose-response curves to serially diluted standards, producing plots and summary tables, checking for outof-range observations, and manipulating datasets, at a level enabling the selected candidate to process
  data with a minimal amount of instruction and guidance from EPA employees.

#### Desired Knowledge, Skills, Work Experience, and Education

It is desirable for the candidate to possess

- Experience with using statistical analysis software, such as SAS or R, and
- Experience with Luminex and MSD platforms.

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# Eligibility Requirements

- Citizenship: LPR or U.S. Citizen
- **Degree:** Master's Degree or Doctoral Degree received within the last 24 month(s).
- Discipline(s):
  - Engineering (27 ●)
  - Environmental and Marine Sciences (1 ●)
  - Life Health and Medical Sciences (45 ●)

## Affirmation

I certify that I am at least 18 years of age; have earned at least a Master's degree in biology, microbiology, molecular biology, public health, environmental sciences, engineering or closely related field 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.

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