

Organization U.S. Environmental Protection Agency (EPA)

Reference Code EPA-SSP-0024-10

DescriptionThe EPA Environmental Research and Business SupportProgram has an immediate opening for an EPA ToxicantExposure Research Associate with the Office of Research andDevelopment at the EPA Research 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 Clinical Research Branch (CRB) of the Environmental Public Health Division operates laboratories and clinical facilities at the EPA Human Studies Facility building (HSF) located on the campus of the University of North Carolina at Chapel Hill. CRB investigators conduct clinical studies involving human volunteers to determine the effects of exposure to ambient pollution on human health and elucidate the mechanisms through which these effects occur. CRB studies are conducted in close consultation with client offices in order to support the regulatory activities of the Agency.

The selected candidate shall work in the CRB-operated laboratory space at the HSF. Responsibilities shall include general laboratory duties as well as project-based tasks. Specifically, he/she shall assist in laboratory experiments aimed at identifying molecular and epigenetic mechanisms associated with adverse outcomes of pollutant exposure and biomarkers of susceptibility to the effects of pollutant exposure. He/she shall also assist in the development of in vitro methods for studying pollutant exposures.

The selected candidate shall conduct in vitro pollutant exposures, examine epigenetic modifications, assay gene and protein expression and function, maintain cell cultures, genotype samples, and assist with clinical study operations and sample processing. He/she shall also be expected to provide researcher support and contribute to project planning, data analyses, and communicate scientific findings in scientific journals and conferences.

Through his/her participation, the candidate shall learn a variety of fundamental and specialized biochemical and molecular techniques, as well as gain experience in translational clinical research studies. In addition, he/she shall learn how to design and manage studies to address scientific questions, and how to prioritize, sequence, and troubleshoot experiments in order to maximize efficiency and productivity.

🥼 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!





The selected candidate shall work side by with trainees at various stages of their doctoral studies or postdoctoral fellowship and thus be exposed to advanced instruction in the planning and execution of laboratory protocols, including data analysis methods. In addition, he/she shall attend regular staff meetings in which findings and related scientific principles are presented and discussed.

Communications-related responsibilities will 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

The candidate may be asked to present work performed as a poster at a scientific conference.

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

Salary: Selected applicant will become temporary employees of ORAU and will receive an hourly wage of \$20.65 for hours worked.

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 his/her work. The mentor for this position will be a federal EPA employee.

This position will involve work in a laboratory setting and can involve exposure to hazardous elements. The selected candidate will be working in a laboratory environment, with potential exposure to dangerous and toxic materials. He/she will be required to wear safety apparel and to closely observe safety requirements. Safety training, and proper personal protective equipment (PPE), will be provided before she/she will be allowed to work in the laboratory.

Travel: Occasional overnight travel may be required. Occasional overnight travel to scientific meetings to present research may also be required.

Expected Start Date: The position is full time and expected to begin September 2016. The selected applicant will be a temporary employee of ORAU working as a contractor to EPA. The initial contract period is through May 14, 2017, followed by three (3) additional 12 month option 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 a Bachelor of Science degree in biology, cell biology, biochemistry, molecular biology, or closely related field of biological science 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

The applicant shall have:

- Proficiency with general laboratory skills in a research laboratory setting outside the classroom, including: performing chemistry calculations (molarity), preparing solutions, pipetting, maintaining a scientific notebook, and electronic record keeping,
- Completed undergraduate courses (courses with lecture and laboratory components count as one course) in at least three of the following topics and received a grade of "B" or higher: general biology, molecular biology, genetics, microbiology, biochemistry, or toxicology,
- At least six months of mentor-directed laboratory research experience in biological science outside the classroom,
- Proficiency in polymerase chain reaction (PCR) in a research laboratory setting outside the classroom,
- Proficiency performing searches of the scientific literature using databases including PubMed, and
- Proficiency with Microsoft Word, Excel, and PowerPoint software.

Desired Expertise, Skills, Education, and/or Experience:

It is desirable, but not required, for the candidate to have handson experience with the following:

- RNA isolation, cDNA synthesis, and quantitative PCR in a research laboratory setting,
- Culturing mammalian cell lines in a laboratory setting,
- Basic molecular biology techniques such as plasmid preparations, transfections and gel electrophoresis,
- Conducting chromatin immunoprecipitation (ChIP) assays and associated quantitative PCR and data analysis in a laboratory setting, and
- Western blotting in a laboratory setting.

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.

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).
- Overall GPA: 2.00
- Discipline(s):
 - Chemistry and Materials Sciences (12 •)
 - Earth and Geosciences (21 ●)
 - Engineering (3
 ●)
 - Environmental and Marine Sciences (14 ●)
 - Life Health and Medical Sciences (45 ●)

Affirmation I certify that I am at least 18 years of age; a recent graduate with a Bachelor of Science degree in biology, cell biology, biochemistry, molecular biology, or closely related field of biological science 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.