Opportunity Title: EPA Laboratory Analyst Support Associate
Opportunity Reference Code: EPA-SSP-0028-3

Organization U.S. Environmental Protection Agency (EPA)

Reference Code EPA-SSP-0028-3

Description The EPA Environmental Research and Business Support Program has an immediate opening for an EPA Laboratory Analyst Support Associate with the Office of Research and Development at the EPA Research Triangle Park facility in Raleigh-Durham, NC.

The Office of Research and Development at the EPA supports 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 Integrated Systems Toxicology Division (ISTD) is one of three health divisions of the National Health and Environmental Effects Research Laboratory (NHEERL) within ORD/EPA. ISTD is located on EPA's Main Campus in Research Triangle Park, NC. The division applies a systems biology approach to describe normal biological, homeostatic processes and to identify key events that signal departure from those processes leading to adverse health outcomes. Research seeks to develop an integrated framework across health end points through the identification of toxicological pathways. This approach is accomplished by the use of computational and molecular approaches to identify "key events" for biologically based dose-response and mode-of-action-based models, the development of physiologically based pharmacokinetic models for linkage to biologically based dose-response models, and the application of genetic and epigenetic approaches for understanding differential life stage sensitivities.

The Carcinogenesis Branch within ISTD is seeking a candidate to assist a team of scientists who are performing experiments to identify and predict the pathways by which chemicals cause fatty liver disease, an environmentally relevant human disease that can lead to susceptibility to progressively worse disease, such as cancer. The selected candidate shall assemble archived data on linkages between chemicals, genes and fatty liver disease; perform experiments to validate predictive models of fatty liver disease including the analysis of steatosis induction in chemically-exposed hepatocyte cultures. The techniques to be used include: annotation/summary of published data, bioinformatics analysis of gene expression data, basic tissue culture including sterile technique, and the use of high-throughput imaging systems.

Literature searching and bioinformatic analysis responsibilities will include:

- Analyzing and curating microarray and gene expression databases,
- Quantifying and analyzing image-based assays (e.g., Cellomic Arrayscan VTi), and
- Curating and summarizing literature pertaining to chemical and genetic effects on fatty liver disease.

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Laboratory responsibilities shall include:

- Culturing cells (primary hepatocytes and cell lines) for maintenance and experimental use website development and content,
- Preparing stock solutions and assay reagents for experiments,
- Exposing cells to a variety of environmentally-relevant chemicals,
- Analyzing various endpoints relevant to assessing fatty liver metabolism and retention in cells, and
- Participating in general operations of a lab setting, including meetings, seminars, and discussions with team members.

Quality assurance responsibilities will include:

- Recording project activities in notebook (digital-based, e.g., Microsoft OneNote),
- Maintaining logbooks and chemical records,
- Maintaining inventory of chemicals and supplies,
- Providing maintenance and protocol for specific laboratory settings,
- Providing preliminary statistical analysis of experiments, and
- Writing portions of manuscript and reports relevant to the data and analysis generated by the selected candidate.

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

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

Travel: Occasional overnight travel may be required.

Working Conditions: This position will involve work in a laboratory or on a computer. The selected candidate will be required to wear safety apparel and to strictly obey all safety requirements.

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.

Expected Start Date: The position start date is August 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 toxicology, environmental science, cell/molecular biology, 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

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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 will have:

- Demonstrated lab course or work experience with general laboratory techniques, including pipetting, preparing reagent solutions, and use of balances, pH meters, centrifuges, and other lab equipment,
- Proficiency with cell culture and sterile technique,
- Demonstrated experience with fluorometric (e.g., luciferase measurements) and/or colorimetric assays (e.g., MTT assay),
- Demonstrated experience with polymerase chain reaction (PCR)-based assays,
- Proficiency with Microsoft Office applications (i.e., Excel, PowerPoint, Word, Outlook), and
- Strong written, oral, and electronic communication skills.

Desired Knowledge, Skills, Work Experience and Education

It is desirable for candidate to possess previous experience with high content imaging.

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 👁)
  - **Engineering** (3 👁)
  - **Environmental and Marine Sciences** (13 👁)
  - **Life Health and Medical Sciences** (45 👁)
  - **Mathematics and Statistics** (1 👁)

Affirmation I certify that I am at least 18 years of age; a recent graduate with at least a Bachelor’s Degree in toxicology, environmental science, cell/molecular biology, 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.