Opportunity Title: In Vitro Exposure Technology
Opportunity Reference Code: EPA-ORD-NHEERL-EPHD-2018-08

Organization U.S. Environmental Protection Agency (EPA)

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How to Apply A complete application consists of:

- An application
- Transcripts – Click here for detailed information about acceptable transcripts
- A current resume/CV, including academic history, employment history, relevant experiences, and publication list
- Two educational or professional references

All documents must be in English or include an official English translation.

If you have questions, send an email to EPArpp@orau.org. Please include the reference code for this opportunity in your email.

Description An opportunity is available at the US Environmental Protection Agency in Research Triangle Park, North Carolina.

This research project includes extensive collaboration with a large multi-disciplinary team of Federal health scientists, toxicologists, biologists chemists and engineers as well as other non federal students, trainees and contractors. In this research project, the participant will join an project areas assessing the health outcomes associated with exposure to volatile organic compounds (VOCs) and mixtures, but will have latitude to develop novel systems that provide predictive tools to mirror pathophysiological responses in animals and humans. This research opportunity will focus on researching and validating cellular and tissue (in vitro) correlates to those found in whole body (in vivo) systems and identifying potential adverse outcome pathways responsible for these effects. Specific areas of focus will include responses to VOCs and photo-chemically aged chemicals although other chemicals, mixtures and media may also apply.

The research participant will participate in developing specific research questions, preparing analytic plan(s), conducting data analyses, and presenting the findings in oral and written formats. The research participant will utilize a combination of tools including cell and molecular biology, analytical chemistry, gas and vapor generation and monitoring systems.

This program, administered by ORAU through its contract with the U.S. Department of Energy to manage the Oak Ridge Institute for Science and Education, was established through an interagency agreement between DOE and EPA. The initial appointment is for one year, but may be renewed upon recommendation of EPA contingent on the availability of funds. The participant will receive a monthly stipend commensurate with educational level and experience. Proof of health insurance is required for participation

in this program. The appointment is full-time at EPA in the Research Triangle Park, North Carolina, area. Participants do not become employees of EPA, DOE or the program administrator, and there are no employment-related benefits.

The mentor for this project is Mark Higuchi (higuchi.mark@epa.gov). The anticipated start date for the appointment is December 15, 2018.

Qualifications

- Doctoral degree in biology, chemistry, toxicology, environmental engineering or related fields earned within five years of the desired start date.
- Experience in cell based toxicity testing and molecular analysis of responses desirable.
- Experience in cellular toxicity testing with particular focus on in-vitro exposure systems preferred.
- Skills in data management and in-vitro exposure systems desirable.
- Interest in systems biology and pathway analysis with associated experience in commercial software applications desirable.
- Experience in air pollution and chemical safety research with focus on experimental systems that define health outcomes will enhance the research experience.

Eligibility Requirements

- **Degree:** Doctoral Degree received within the last 60 month(s).
- **Discipline(s):**
  - **Chemistry and Materials Sciences** (12 👁)
  - **Computer, Information, and Data Sciences** (1 👁)
  - **Earth and Geosciences** (2 👁)
  - **Engineering** (5 👁)
  - **Environmental and Marine Sciences** (3 👁)
  - **Life Health and Medical Sciences** (45 👁)
  - **Mathematics and Statistics** (2 👁)
  - **Physics** (4 👁)
  - **Science & Engineering-related** (1 👁)