Opportunity Title: Neurological and Peripheral Health Effects of Environmental Chemical and Non-Chemical Stressors
Opportunity Reference Code: EPA-ORD-NHEERL-EPHD-2018-05

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 A research training opportunity is currently available at the U.S. Environmental Protection Agency's (EPA) Office of Research and Development (ORD)/National Health and Environmental Effects Research Laboratory (NHEERL). The appointment will be served with the Environmental Public Health Division (EPHD) located at EPA's Human Studies Facility on the campus of the University of North Carolina in Chapel Hill, North Carolina.

The National Health and Environmental Effects Laboratory (NHEERL) is tasked to provide support to the Sustainable and Healthy Communities (SHC) program by generating experimental evidence to discern how environmental and non-chemical stressors can interactively affect the disease outcome in susceptible communities.

This collaborative research project involves toxicological studies examining health outcome of environmental and psychosocial stressors using animal models. A team of multiple principal investigators are involved in this collaborative research where the influence of environmental and non-chemical stressors are examined in multiple organs. The research participant may participate in research experiments involving toxicological studies using animal models.

With guidance from the mentors (Dr. Urmila Kodavanti from EPHD and Dr. Prasada Kodavanti from TAD), and a team of EPA scientists, the participant's research may include following activities:

- Handling and treating small laboratory animals (rats and mice)
- Physiological determinations
- Necropsy and preparation of tissues for biochemical analyses (such as enzyme assays, molecular evaluations and hormone measurements)
- Analytical chemistry techniques
- In vivo dosing via oral, ip, sc routes
- Histological analyses, sectioning, immunostraining, imaging
- Tissue extraction for chemical analysis, mRNA extraction for rtPCR, Western blotting

- Cell culture
- Statistical analysis graphical presentation.

The research will be performed in an EPA indoor office environment, and toxicology laboratory facility using laboratory instruments, standard desktop computers and software with occasional meetings held at other local offices.

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. For additional information about this program, please visit https://orise.orau.gov/epa/. This appointment may be part or full time. This research project is scheduled to be completed during the period from the date of appointment through June 1, 2018 (not to exceed ORISE appointment period). The participant will receive a monthly stipend based on level of education. Funding may be made available to reimburse the participant's travel expenses to present the results of his/her research at scientific conferences. No funding will be made available to cover travel costs for pre-appointment visits, relocation costs, tuition and fees, or participant's health insurance. The participant must show proof of health and medical insurance. **The participant does not become an EPA employee**.

The mentor for this project will be Dr. Urmila Kodavanti (kodavanti.urmila@epa.gov). The desired start date is August 20, 2018.

Qualifications

Applicants must have received a bachelor's degree in biology, environmental sciences, experimental psychology, biochemistry or closely related field within five years of the desired starting date, or must have completed all requirements for the degree prior to the start date. Experience in handling rodents, performing standard laboratory techniques such as Western blotting, immuno staining, PCR and biochemical assessment is desirable.

Eligibility Requirements

- **Degree:** Bachelor's Degree received within the last 60 month(s).
- **Discipline(s):**
  - **Chemistry and Materials Sciences** (3 👁)
  - **Engineering** (2 👁)
  - **Environmental and Marine Sciences** (5 👁)
  - **Life Health and Medical Sciences** (31 👁)
  - **Mathematics and Statistics** (1 👁)