

Opportunity Title: Study of Morphogenetic Fusion with 3-D Stem Cell Cultures Opportunity Reference Code: EPA-ORD-NHEERL-ISTD-2019-06-A

Organization U.S. Environmental Protection Agency (EPA)

Reference Code EPA-ORD-NHEERL-ISTD-2019-06-A

How to Apply This is a repost of a previous posting. If you previously submitted your application to this reference code without the "-A" at the end, then you do not need to reapply. Example: If you applied to "EPA-ORD-NERL-IO-2020-13" you do not need to reapply to "EPA-ORD-NERL-IO-2020-13-A".

A complete application consists of:

- · An application
- Transcript(s) For this opportunity, an unofficial transcript or copy of the student academic records printed by the applicant or by academic advisors from internal institution systems may be submitted. All transcripts must be in English or include an official English translation. 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 recommendations

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

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

Application Deadline 6/1/2020 3:00:00 PM Eastern Time Zone

Description *Applications will be reviewed on a rolling-basis.

A research opportunity is available at the Environmental Protection Agency (EPA), Office of Research and Development (ORD), National Health and Environmental Effects Research Laboratory (NHEERL), Integrated Systems Toxicology Division (ISTD) in Research Triangle Park, North Carolina.

The research participant will have the opportunity to participate in a project that is a component of the Virtual Tissue Models Project within the Chemical Safety and Sustainability Program. This research project addresses critical cellular events in tissue fusion in human embryonic development that are susceptible to disruption. The project involves culture of human stem cells and human primary tissue-derived cells, monitoring of their growth and activity over time, and evaluation of chemical interruption of these processes.

The research participant will gain experience using basic sterile cell culture techniques and advanced 3D cell culture models such as spheroids and organoids. The research participant will have the opportunity to learn to use instrumentation such as confocal microscopy, image analysis programs, and spectrophotometers/luminometers to collect data. The research participant may also have the opportunity to perform various biochemical assays which provide information regarding cell proliferation, migration, differentiation and cell viability. The research participant will gain experience in experimental design, quality control, record keeping, data analysis and participation in a multidisciplinary research team.

The mentor for this research opportunity is Sid Hunter (<u>Hunter.sid@epa.gov</u>).

Anticipated Appointment Start Date: Spring/Summer 2020

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This program, administered by ORAU through its contract with the U.S. Department of Energy (DOE) to manage the Oak Ridge Institute for Science and Education (ORISE), 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 and is 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.

Completion of a successful background investigation by the Office of Personnel Management (OPM) is required for an applicant to be on-boarded at EPA. OPM can complete a background investigation only for individuals, including non-US Citizens, who have resided in the US for the past three years.

Qualifications The qualified candidate should have received a bachelor's or master's degree in one of the relevant fields, or be currently pursuing one of the degrees and will reach completion by June 1, 2020. Degree must have been received within five years of the appointment start date.

Preferred skills:

- Basic laboratory techniques such as reagent preparation
- Experience in cell culture, immunohistochemistry, molecular biology assays, microscopy or statistics
- · Basic knowledge of computer programs such as Excel, PowerPoint and Word
- Good communication skills

Eligibility • Citizenship: U.S. Citizen Only

Requirements

• Degree: Bachelor's Degree or Master's Degree received within the last

- 60 months or anticipated to be received by $6/1/2020 \ 11:59:00 \ PM.$
- Discipline(s):
 - Engineering (<u>1</u><)
 - Life Health and Medical Sciences (7_)
- Veteran Status: Veterans Preference, degree received within the last 120 month(s).