

Opportunity Title: EPA Contaminant Reduction in Recycling Streams Research

Opportunity

Opportunity Reference Code: EPA-REG3-2020-15

Organization U.S. Environmental Protection Agency (EPA)

Reference Code EPA-REG3-2020-15

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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. Click <u>here</u> for detailed information about recommendations.

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

Application Deadline 2/8/2021 3:00:00 PM Eastern Time Zone

Description *Applications may be reviewed on a rolling-basis and this posting could close before the deadline. Click <u>here</u> for information about the selection process.

EPA Office/Lab and Location: A research opportunity is available at the Environmental Protection Agency (EPA), Region 3 in the Land Chemicals and Redevelopment Division located in Philadelphia, Pennsylvania.

Research Project: Research opportunity that seeks to understand why and how some recycling programs continue to succeed in the current challenging environment by answering the following overarching research questions: What are common factors of successful municipal recycling programs, and to what extent is the viability or success of municipal recycling programs dependent on contamination rates? How can states and communities quickly identify communities/neighborhoods with room for improvement in recycling viability and reduction in contamination rates? And finally, what package of interventions is most likely to reduce contamination rates at the local level?

The US recycling industry is facing major challenges that threaten its viability. Single-stream recycling, while an easier system for consumers, has led to increases in levels of contaminants in recycling streams, thereby lowering the overall value of materials collected and their viability on international markets. Some municipalities are still successfully implementing recycling programs at a cost-benefit, which strongly suggests that levels of contamination are low in many of these locations. Whereas a host of socio-demographic and structural factors that influence household recycling rates have been identified and studied extensively in the scientific and professional literature, factors influencing contamination rates and

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continued viability of municipal recycling programs in this context have received much less attention.

Using a mixed social and systems-science approach, this project will identify locations with "cleaner" than average recycling streams, look for socio-demographic, structural, systemic, and behavioral commonalities between them, and assess the extent to which those common factors represent potential leverage points or opportunities to improve the quality of recovered recyclables in communities across the US.

Learning Objectives: The research candidate will gain valuable understanding of social, structural, and behavioral factors influencing the success or failure of materials recovery programs. This experience has broad applicability, and will draw from, science and theory in several relevant disciplines such as urban planning, geography, behavioral science, public policy, anthropology and sociology, decision science, economics, and demography. In addition to possible scientific presentations and publications stemming from the research , the intern will learn how to conduct a desk-based research review of factors influencing policy performance and environmental outcomes, will gain experience working with stakeholders and stakeholder interactions, and will play a substantial role in writing the professional research report.

<u>Mentor(s)</u>: The mentors for this opportunity are Michael Nye (<u>nye.michael@epa.gov</u>) and David Iacono (<u>iacono.david@epa.gov</u>). If you have questions about the nature of the research please contact the mentor(s).

Anticipated Appointment Start Date: March 1, 2021. All start dates are flexible and vary depending on numerous factors. Click <u>here</u> for detailed information about start dates.

<u>Appointment Length:</u> The appointment will initially be for one year and may be renewed up to three or four additional years upon EPA recommendation and subject to availability of funding.

Level of Participation: The appointment is full-time.

Participant Stipend: The participant will receive a monthly stipend commensurate with educational level and experience. The annual stipend will be up to \$60,000. Click <u>here</u> for detailed information about full-time stipends.

EPA Security Clearance: All non-federal personnel are required to complete a security onboarding process before starting an ORISE Research Participant at U.S. Environmental Protection Agency (EPA), Region III. This process must be completed for ORISE Research Participants to obtain a smart card identification badge, which is called an EPA Personnel Access and Security System (EPASS) badge. Delays in completing this process will have directly impact the ORISE Research Participant start date at an EPA facility.

ORISE Information: This program, administered by ORAU through its



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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. Participants do not become employees of EPA, DOE or the program administrator, and there are no employment-related benefits. Proof of health insurance is required for participation in this program. Health insurance can be obtained through ORISE.

Questions: Please see the <u>FAQ section</u> of our website. After reading, if you have additional questions about the application process please email <u>EPArpp@orau.org</u> and include the reference code for this opportunity.

Qualifications The qualified candidate should have received a master's degree in one of the relevant fields, or be currently pursuing the degree and will reach completion by February 2021. Degree must have been received within five years of the appointment start date.

A Master's level degree in a relevant discipline including planning, demographics and social statistics, public policy, and social/ behavioral science with expertise in areas relevant to the study including:

- Population and demographics
- Improving materials management and resource recovery programs
- Community characteristics and characterization
- Secondary social data collection (e.g. census data) and social statistics
- Pro-environmental behavior and behavior change
- Public policy and environmental programs
- Data wrangling and use of analytic platforms such as SAS or SPSS
- · Development of metrics or indicators for complex socio-environmental problems
- Science and technical writing

Eligibility • C

- Citizenship: U.S. Citizen Only
- Requirements
- Degree: Master's Degree or Doctoral Degree received within the last 60
- months or anticipated to be received by 2/28/2021 11:59:00 PM.
- Discipline(s):
 - Other Non-Science & Engineering (2.)
 - Social and Behavioral Sciences (14 (14)
- Veteran Status: Veterans Preference, degree received within the last 120 month(s).