

**Opportunity Title:** CDC Geographic Information Systems Analysis

**Opportunity Reference Code:** CDC-DFWED-2021-0203

**Organization** Centers for Disease Control and Prevention (CDC)

**Reference Code** CDC-DFWED-2021-0203

**How to Apply** *Connect with ORISE...on the GO!* Download the new ORISE GO mobile app in the [Apple App Store](#) or [Google Play Store](#) to help you stay engaged, connected, and informed during your ORISE experience and beyond!

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
- One educational or professional recommendation

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

**Application Deadline** 9/15/2021 3:00:00 PM Eastern Time Zone

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

**CDC Office and Location:** A research opportunity is currently available with National Wastewater Surveillance System in the Waterborne Disease Prevention Branch, in the Division of Foodborne, Waterborne, and Environmental Diseases (DFWED), National Center for Emerging and Zoonotic Infectious Diseases (NCEZID) at the Centers for Disease Control and Prevention (CDC) in Atlanta, Georgia.

The Centers for Disease Control and Prevention (CDC) is one of the major operation components of the Department of Health and Human Services. CDC works to protect America from health, safety and security threats, both foreign and in the U.S. Whether diseases start at home or abroad, are chronic or acute, curable or preventable, human error or deliberate attack, CDC fights disease and supports communities and citizens to do the same.

**Research Project:** The selected participant will receive training relevant to National Waste Water Surveillance and the National Waste Water Surveillance System (NWSS). The participant will learn epidemiologic techniques to manage, analyze, and interpret data (e.g., surveillance, behavioral science, public health research, and analysis) as well as learn to describe epidemiologic patterns and trends and prepare analytic results for publication on websites, fact sheets, and peer-reviewed manuscripts.


The participant will contribute to the development of a suite of protocols for delineating wastewater service areas (sewer sheds) and estimating sewer shed population characteristics that are appropriate for varying levels of geographic data availability, support state, and local health departments in their efforts to develop sewer shed polygon files and estimate sewer shed population characteristics and support the development of data management strategies to efficiently manage a growing corpus of spatial data.


In addition to the above activities, the participant will train to develop spatial visualizations and analysis of wastewater surveillance data and provide support analysis of wastewater data, specifically analyses involving spatial data.




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**Learning Objectives:** The participant will collaborate closely with the Data and Epidemiology Leads, as well as other NWSS staff, to learn about wastewater surveillance data needs and develop solutions.

**Mentor(s):** The mentor for this opportunity is Darryl Mitchell ([dvm1@cdc.gov](mailto:dvm1@cdc.gov)). If you have questions about the nature of the research please contact the mentor(s).

**Anticipated Appointment Start Date:** **September 1, 2021.** Start date is flexible and will depend on a variety of factors.

**Appointment Length:** The appointment will initially be for one year, but may be renewed upon recommendation of CDC and is contingent on the availability of funds.

**Level of Participation:** The appointment is full-time.

**Participant Stipend:** The participant will receive a monthly stipend commensurate with educational level and experience.

**Citizenship Requirements:** This opportunity is available to U.S. citizens, Lawful Permanent Residents (LPR), and foreign nationals. Non-U.S. citizen applicants should refer to the [Guidelines for Non-U.S. Citizens Details page](#) of the program website for information about the valid immigration statuses that are acceptable for program participation.




**ORISE Information:** 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 CDC. Participants do not become employees of CDC, 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 visit our [Program Website](#). After reading, if you have additional questions about the application process please email [ORISE.CDC.NCEZID@ornl.gov](mailto:ORISE.CDC.NCEZID@ornl.gov) 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 with completion by the end of August 2021. Degree must have been received within the past five years.

Preferred skills:

- Proficiency with GIS software such as ArcGIS or QGIS
- Experience performing spatial analysis in R or Python, generating automated reports with tools like PowerBI, and field experience generating new spatial data sets

- Eligibility Requirements**
- **Degree:** Master's Degree received within the last 60 months or anticipated to be received by 8/31/2021 11:59:00 PM.
  - **Discipline(s):**
    - **Earth and Geosciences** (4 )
    - **Engineering** (2 )
    - **Life Health and Medical Sciences** (3 )