

Opportunity Title: National Antimicrobial Resistance Monitoring System
(NARMS) Fellowship - CDC

Opportunity Reference Code: CDC-NCEZID-2016-0159



Organization Centers for Disease Control and Prevention (CDC)

Reference Code CDC-NCEZID-2016-0159

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 CDCrpp@orau.org. Please include the reference code for this opportunity in your email.

Description A fellowship is currently available within the National Center for Emerging and Zoonotic Infectious Diseases (NCEZID), Division of Foodborne, Waterborne, and Environmental Diseases (DFWED), at the Centers for Disease Control and Prevention (CDC) in Atlanta, GA.

The Enteric Disease Laboratory Branch (EDLB) at the U.S. Centers for Disease Control and Prevention (CDC) in Atlanta, Georgia has an opportunity to expand its program on *Escherichia coli*, *Salmonella*, *Vibrio* spp., and other foodborne pathogens. The National Antimicrobial Resistance Monitoring System (NARMS) is a three agency (CDC, FDA, and USDA) collaboration which tracks antimicrobial resistance among enteric pathogens in the U.S.

The Applied Research Unit of the National Antimicrobial Resistance Surveillance Team (NARST) is looking to add an advanced degree Microbiologist to our unit to perform research to further our understanding of antimicrobial resistance among bacteria that cause enteric infections. The fellow will have the opportunity to learn to perform ongoing genetic and other rapid diagnostic technologies to predict antimicrobial resistance and bacterial subtypes that contribute to the burden of antimicrobial resistant infections in humans. He/she may have an opportunity for additional training on antimicrobial resistance mechanisms, use of whole genome sequencing to predict resistance, and in molecular diagnostics and epidemiology.

The fellow will have an opportunity to be involved in the following activities in support of NARST:

- Designing, developing, and conducting microbiological research with an emphasis on whole genome sequence analysis to enhance our understanding of the molecular basis for antimicrobial resistance among foodborne enteric bacteria.
- Providing solutions to critical problems using existing approaches, and standards within the team. The candidate will need to be knowledgeable about and able to contribute to the establishment of new methods, approaches, and technologies to new and unusual situations occurring within our research projects, particularly in the realm of whole genome sequencing and other advanced microbial diagnostics as they pertain to antimicrobial resistance.
- Assisting with the establishment of procedures for a Quality Management System (QMS) including Quality Assurance (QA) and Quality Control (QC) of molecular and sequence data analysis in the context of this project.
- Providing information and technical support on assigned research projects to collaborators and managers, participating in/with others in developing proposals and in groups and task forces.
- Contributing to the development and validation of schemes to rapidly predict antimicrobial susceptibility of

Opportunity Title: National Antimicrobial Resistance Monitoring System

(NARMS) Fellowship - CDC

Opportunity Reference Code: CDC-NCEZID-2016-0159

enteric pathogens.


- Co-authoring of papers or reports filling narrow gaps in an existing framework of antimicrobial resistance knowledge, to corroborate existing theory, or to report findings.

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 CDC. The initial appointment is for one year, but may be renewed upon recommendation of CDC 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 CDC in the Atlanta, GA area. Participants do not become employees of CDC, DOE or the program administrator, and there are no employment-related benefits.

Qualifications

- A master's or doctoral degree in microbiology, biology, or a general biological field earned within five years of the appointment.
- Experience with microbiology, and molecular biology laboratory techniques.
- Knowledge and experience with molecular techniques (nucleic acid extraction, PCR, real-time PCR and sequencing). Experience with Microsoft Excel, Microsoft Word, and Microsoft PowerPoint.
- Candidate should have prior experience with bacterial genome sequencing and analysis.
- Familiarity with policy issues surrounding foodborne disease and antimicrobial use in humans, food animals, and the environment.
- The candidate must possess excellent oral and written communication skills.
- Have strong interpersonal skills since the work is to occur in a multidisciplinary team environment and extensive interaction with people across CDC and external partners is required.
- Have strong written and oral presentation skills.
- Be capable of developing and executing research tasks independently.

Eligibility Requirements

- **Degree:** Master's Degree or Doctoral Degree received within the last 60 month(s).
- **Discipline(s):**
 - **Life Health and Medical Sciences** (7 )