Opportunity Title: USDA-ARS Postdoctoral Research Opportunity in Microbiology
Opportunity Reference Code: USDA-ARS-2021-0052

Organization U.S. Department of Agriculture (USDA)

Reference Code USDA-ARS-2021-0052

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
- 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.

Application Deadline 10/18/2021 3:00:00 PM Eastern Time Zone

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

ARS Office/Lab and Location: A microbiology postdoctoral research opportunity is available with the U.S. Department of Agriculture (USDA), Agricultural Research Service (ARS), National Animal Disease Center (NADC), Food Safety and Enteric Pathogens Research Unit (FSEPRU) located in Ames, Iowa.

The Agricultural Research Service (ARS) is the U.S. Department of Agriculture's chief scientific in-house research agency with a mission to find solutions to agricultural problems that affect Americans every day from field to table. ARS will deliver cutting-edge, scientific tools and innovative solutions for American farmers, producers, industry, and communities to support the nourishment and well-being of all people; sustain our nation's agroecosystems and natural resources; and ensure the economic competitiveness and excellence of our agriculture. The vision the agency is to provide global leadership in agricultural discoveries through scientific excellence.

Research Project: The selected participant will be conducting research to identify novel mechanisms in the interactions of the human foodborne pathogen Salmonella with the host (swine and poultry) and the host microbiota to develop targeted interventions. This research program involves multiple projects focusing on the identification of alternatives to antibiotics in food animals (such as vaccines, biotherapeutics, feed additives, etc.) as well as the investigation of antimicrobial resistance mechanisms in multi-drug resistant (MDR) Salmonella serovars.

Learning Objectives: The selected participant will collaborate with a team of microbiologists, immunologists, bioinformaticians, and veterinarians to achieve the learning objectives: investigate host-microbe interactions for the discovery of antimicrobial resistance mechanisms and antibiotic alternatives that will benefit animal health and food safety.

Mentor(s): The mentor for this opportunity is Shawn Bearson (shawn.bearson@usda.gov). If you have questions about the nature of the research please contact the mentor(s).

Anticipated Appointment Start Date: Now until November 1, 2021. Start date is flexible and

Opportunity Title: USDA-ARS Postdoctoral Research Opportunity in Microbiology
Opportunity Reference Code: USDA-ARS-2021-0052

will depend on a variety of factors.

Appointment Length: The appointment will initially be for one year, but may be renewed upon recommendation of ARS 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. **The annual stipend rate will be $62,236 and a supplement of up to $5,679 for an individual plan ($16,043 for a family plan) will be provided to cover the cost of an individual or family health insurance plan. Relocation expenses in the amount of $500 will be reimbursed, with prior approval. An annual allowance of $3,000 will be available to reimburse travel-related expenses to science and professional development activities.**

Citizenship Requirements: This opportunity is available to U.S. citizens only.

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 ARS. Participants do not become employees of USDA, ARS, 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 USDA-ARS@orau.org and include the reference code for this opportunity.

Qualifications

The qualified candidate should have received a doctoral degree in one of the relevant fields, or are currently pursuing the degree and will reach completion by the start date of the appointment. Degree must have been received within five years of the appointment start date.

Knowledge, skills, and experience in one or more of the following areas is preferred: animal models of infectious disease (particularly swine and turkeys), bacteriology, in vitro cell culture experiments, immunological assays (e.g. ELISA, flow cytometry, immunohistochemistry), and molecular biology techniques (e.g. DNA and RNA isolation, PCR, qRT-PCR, RNAseq).

Eligibility Requirements

- **Citizenship:** U.S. Citizen Only
- **Degree:** Doctoral Degree received within the last 60 months or currently pursuing.
- **Discipline(s):**
  - **Life Health and Medical Sciences** (7 👁)