

Opportunity Title: USDA-APHIS Quantitative Ecology/Epidemiology/Statistics

Postdoctoral Fellowship

Opportunity Reference Code: USDA-APHIS-2023-0319

Organization U.S. Department of Agriculture (USDA)

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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. At least one recommendation must be received in order for the mentor to view your application.

Application Deadline 12/8/2023 3:00:00 PM Eastern Time Zone

Description *Applications are reviewed on a rolling-basis.

APHIS Office/Lab and Location: A research opportunity is currently available with the U.S. Department of Agriculture (USDA), Animal Plant Health Inspection Service (APHIS) located in Fort Collins, Colorado. **The selected participant may either relocate to Fort Collins or participate remotely.**

The Animal and Plant Health Inspection Service (APHIS) is a multi-faceted Agency with a broad mission area that includes protecting and promoting U.S. agricultural health, regulating genetically engineered organisms, administering the Animal Welfare Act and carrying out wildlife damage management activities. These efforts support the overall mission of USDA, which is to protect and promote food, agriculture, natural resources and related issues. APHIS' mission also includes addressing issues such as wildlife damage and disease management; regulation of genetically engineered crops and animal welfare; and protection of public health and safety as well as natural resources that are vulnerable to invasive pests and pathogens.

Research Project: The participant will collaborate with ecologists, statisticians, epidemiologists, and veterinary medical officers specializing in epidemiology, risk analysis, disease modeling, and surveillance, to operationalize and, when needed, improve analytical tools to characterize risk and inform surveillance guidance for foreign animal disease (FAD), specifically African Swine Fever (ASF). Activities will support improvement and



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implementation of national scale statistical and mathematical models to predict likelihood of FAD introduction. Additionally, the development of adaptive risk-based approaches to inform surveillance to mitigate introduction risks will be developed.

Learning Objectives: The fellowship will provide opportunities for the incumbent to learn about applied statistics and epidemiology. It will also offer the opportunity to participate in operationalizing analytical tools that support national scale programmatic decisions and policy.

Mentor(s): The mentor for this opportunity is Ryan Miller (ryan.s.miller@usda.gov). If you have questions about the nature of the research please contact the mentor.

Anticipated Appointment Start Date: **October 2023.** 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 APHIS and is contingent on the availability of funds.

Level of Participation: The appointment is full-time.

Participant Stipend: The participants will receive a monthly stipend commensurate with educational level and experience. **The current annual stipend for this opportunity is \$65,000 - \$78,000 and includes a medical insurance supplement.**

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

Background Investigation Requirements: Background investigations are required for the selected candidate so the individual can work in biocontainment without an escort and handle select agents. Adjudication of a Special Agency Check (SAC) is required before the selected candidate can start at Plum Island Animal Disease Center. An advanced BI security clearance will be conducted/adjudicated after start date, allowing for unescorted access to biocontainment. An APHIS Select Agent Clearance is also required so that the selected candidate can work with select agents. Paperwork for all of these clearances will be sent to the selected candidate after acceptance of the official offer from ORAU.

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 APHIS. Participants do not become employees of USDA, APHIS, 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.

This is an equal opportunity program open to all qualified individuals without regard to race, color, age, sex, religion,

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national origin, mental or physical disability, genetic information, sexual orientation, or covered veteran's status.

Questions: Please visit our [Program Website](#). After reading, if you have additional questions about the application process please email USDA-APHIS@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 be currently pursuing the degree with completion before December 29, 2023. Degree must have been received within six months of the appointment start date.

Preferred Skills:

- Demonstrated skills with quantitative methods. Specifically, Bayesian statistical methods and MCMC approaches and associated software (such as JAGS, BUGS, Nimble, Stan, etc).
- Programming experience in R.
- Experience with spatial data is beneficial but not required.

Eligibility Requirements

- **Citizenship:** U.S. Citizen Only
- **Degree:** Doctoral Degree received within the last 6 months or anticipated to be received by 12/29/2023 12:00:00 AM.
- **Academic Level(s):** Graduate Students or Postdoctoral.
- **Discipline(s):**
 - **Chemistry and Materials Sciences** (12 )
 - **Communications and Graphics Design** (2 )
 - **Computer, Information, and Data Sciences** (17 )
 - **Earth and Geosciences** (21 )
 - **Engineering** (27 )
 - **Environmental and Marine Sciences** (14 )
 - **Life Health and Medical Sciences** (48 )
 - **Mathematics and Statistics** (11 )
 - **Social and Behavioral Sciences** (2 )