

Opportunity Title: USDA-ARS Biodefense Postdoctoral Research Opportunity in Veterinary Clinical Studies

Opportunity Reference Code: USDA-PIADC-2023-0027

Organization U.S. Department of Agriculture (USDA)

Reference Code USDA-PIADC-2023-0027

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 recommendations

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

If you have questions, send an email to ORISE.ARS.Plains@orau.org. Please include the reference code for this opportunity in your email.

Application Deadline 12/22/2023 3:00:00 PM Eastern Time Zone

Description *Applications will be reviewed on a rolling basis.

ARS Office/Lab and Location: A postdoctoral research opportunity is available with the U.S. Department of Agriculture (USDA), Plum Island Animal Disease Center (PIADC), Foreign Animal Disease Research Unit in Orient Point, New York. **Remote/hybrid options are a possibility for some candidates.**

The Plum Island Animal Disease Center (PIADC) Research Participation Program offers biodefense research opportunities to motivated students and postgraduates interested in developing novel strategies to control foreign animal diseases, including foot-and-mouth disease (FMD) and African swine fever virus (ASFV).

Research Project: The postdoctoral research opportunities in veterinary clinical studies, molecular epidemiology and modeling will involve conducting research related to viral pathogenesis, molecular evolution, modeling, and descriptive epidemiology of foot-and-mouth disease virus (FMDV) and/or African swine fever virus (ASFV) within the PIADC BSL-3 containment laboratory. Distinct opportunities have different emphases including virus-host interactions, endemic FMDV ecology, the role of asymptomatic carriers as potential reservoirs, and ASFV pathogenesis. Some travel to study sites in endemic regions may be required. The research opportunities are available immediately and are funded for 1 year, with the opportunity of renewal for up to 5 years.

PIADC is the only U.S. laboratory facility performing research, development and diagnosis of foreign animal diseases of highest threat to the U.S. This critical national asset is located off the northeast coast of Long Island, NY, and accessible by government-provided ferry from Orient Point, NY, and Old Saybrook, CT. Research at PIADC is performed on animal diseases that threaten the nation's animal industries and exports. One of the missions of FADRU is to investigate foreign animal diseases (FADs) in their endemic settings to help mitigate the risks of catastrophic economic losses caused by these pathogens in the event of accidental or deliberate introduction to the United States.

Learning Objectives: Under the guidance of a mentor, the participant may be involved in the following activities:

- Study design for pathogenesis experiments involving exotic viral diseases of livestock



ORISE GO

The ORISE GO mobile app helps you stay engaged, connected and informed during your ORISE experience – from application, to offer, through your appointment and even as an ORISE alum!

Visit ORISE GO 

GET IT ON
 Google Play

Download on the
 App Store

Opportunity Title: USDA-ARS Biodefense Postdoctoral Research Opportunity in Veterinary Clinical Studies

Opportunity Reference Code: USDA-PIADC-2023-0027

- Execution of pathogenesis experiments involving exotic viral diseases of livestock
- Clinical examinations of livestock (pigs and/or cattle)
- Sample collection from living livestock
- Postmortem examination, dissection, and sample collection
- Polymerase chain reaction
- Tissue culture and virus isolation
- Data analysis
- Drafting manuscripts reporting experimental results
- Descriptive epidemiological analyses
- Study design for modeling of infection data
- Simulation modeling of infectious disease spread
- Viral phylogenetic and phylodynamic modeling

Mentor(s): The mentor for this opportunity is Dr. Jonathan Arzt (jonathan.arzt@usda.gov). If you have questions about the nature of the research, please contact the mentor(s).

Anticipated Appointment Start Date: 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 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.

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 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 ORISE.ARS.Plains@orau.org and include the reference code for this opportunity.

Qualifications The qualified candidate should be currently pursuing or have received a DVM or doctoral degree in one of the relevant fields.

Preferred skills/experience:

Opportunity Title: USDA-ARS Biodefense Postdoctoral Research Opportunity in Veterinary Clinical Studies

Opportunity Reference Code: USDA-PIADC-2023-0027

- Clinical veterinary competence (livestock preferred)
- Animal handling and sampling experience (livestock preferred)
- Postmortem examination of livestock (necropsy)
- Basic laboratory skills
- Molecular biology techniques
- Analytical epidemiology, including strong statistical skills
- Disease spread modeling and simulation
- Analysis of data from clinical and field studies

**Eligibility
Requirements**

- **Degree:** Doctoral Degree.
- **Discipline(s):**
 - **Life Health and Medical Sciences** ([15](#) 👁)
 - **Mathematics and Statistics** ([2](#) 👁)