

# **Opportunity Title:** Foreign Animal Disease Diagnostic Laboratory Internship **Opportunity Reference Code:** USDA-APHIS-2022-0087

Organization U.S. Department of Agriculture (USDA)

Reference Code USDA-APHIS-2022-0087

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.

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

#### Application Deadline 3/30/2022 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 and Plant Health Inspection Service (APHIS) Foreign Animal Disease Diagnostic Laboratory (FADDL) at the Plum Island Animal Disease Center located in Orient Point, New York. This laboratory provides diagnostic capability to assist the United States and the USDA in diagnosing and responding to Foreign Animal Disease (FAD) threats. Specifically, the FADDL provides diagnostics for foreign animal diseases.

**<u>Research Project</u>**: The selected Fellow will collaborate with microbiologists, veterinarians, statisticians, and biotechnicians to support the diagnostic mission. Activities include, but are not limited to:

- Learn and perform high-throughput nucleic acid extraction and real-time polymerase chain reaction (rtPCR) methodologies for the detection of foreign animal disease agents.
- Learn and perform high-throughput Next Generation Sequencing -Illumina platform, for the detection of foreign animal disease agents.
- Conduct diagnostic assay performance characteristic evaluation in support of the validation of foreign animal disease diagnostic assays.
- Analyze data, summarize findings on forms, reports, and via presentations.
- Update and create standard operating procedures, and other documentation in accordance with ISO-17025 procedure.
- · Assist in routine laboratory activities to ensure quality programs and

#### **OAK RIDGE INSTITUTE** FOR SCIENCE AND EDUCATION

## 💹 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!





Opportunity Title: Foreign Animal Disease Diagnostic Laboratory Internship Opportunity Reference Code: USDA-APHIS-2022-0087

maintenance programs are supported.

Assist in laboratory diagnostic needs in support of foreign animal disease case investigations.

**Learning Objectives:** The Fellow will have the opportunity to learn about transboundary animal diseases and their impact on trade, surveillance procedures and methods, diagnostic testing algorithms for testing in series, sample handling and management, as well as how automated platforms are used in laboratories.

<u>Mentor(s)</u>: The mentor for this opportunity is Vivian O'Donnell (<u>Vivian.odonnell@usda.gov</u>). If you have questions about the nature of the research please contact the mentor.

<u>Anticipated Appointment Start Date</u>: As soon as a qualified candidate is identified. Start date is flexible and will depend on a variety of factors.

**<u>Appointment Length</u>**: 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 participant(s) will receive a monthly stipend as support for their living and other expenses during this appointment. The annual stipend rate will be determined upon selection and will range between \$42,000 and \$52,000. Relocation expenses are not available. Candidates will be eligible to receive a health insurance allowance.

<u>Citizenship Requirements</u>: 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 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.

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.

Research is performed in a BSL-2/3 laboratory. Working with unknown



**Opportunity Title:** Foreign Animal Disease Diagnostic Laboratory Internship **Opportunity Reference Code:** USDA-APHIS-2022-0087

pathogenic agents mandates the use of biocontainment hoods and wearing personal protective gear, which is strenuous on the individual.

The position requires daily travel to and from Orient Point, NY or Old Saybrook, CT and Plum Island aboard government-provided marine vessels.

As a condition of this opportunity, all personnel entering the BSL-3 biocontainment facilities at Plum Island shall not be in contact with specific susceptible animals off the Plum Island premises for a period of five (5) days after leaving biocontainment. Currently, restricted species are cattle, sheep, goats, deer, other ruminants & swine. Horses, birds (agricultural and pet birds) & rabbits are normally permitted but restrictions may be placed on individuals working with contagious agents affecting these species. Restricted livestock or other restricted animals should not be housed on the premises where the individual under guarantine restrictions lives.

This is an equal opportunity program open to all qualified individuals without regard to race, color, age, sex, religion, national origin, mental or physical disability, genetic information, sexual orientation, or covered veteran's status.

**Questions:** Please visit our <u>Program Website</u>. After reading, if you have additional questions about the application process please email <u>USDA-APHIS@orau.org</u> and include the reference code for this opportunity.

Qualifications The qualified candidate should have received a bachelor's or master's degree in one of the relevant fields.

Preferred skills:

- Knowledge of general laboratory practices including aseptic technique and the use of common laboratory equipment (centrifuge, micropipettes, biosafety cabinets, as some)
- · Ability to demonstrate a level of familiarity with PCR techniques
- Proficiency in technical writing, oral communication, interpersonal and organization skills, as well as critical thinking skills to analyze and interpret data
- Demonstrate flexibility and self-motivation to complete assigned tasks
- · Eagerness to learn from peers and to work in a team environment
- Be proficient in using basic word processing and data management software
- · A background in cell biology, virology, and/or foreign animal diseases
- BSL-3 laboratory experience
- Experience in working with select agents
- Knowledge of molecular biology methodologies (PCR, NGS)
- · Able to demonstrate a level of familiarity with NGS techniques

### Point of Contact Justina

Eligibility • Citizenship: U.S. Citizen Only



Opportunity Title: Foreign Animal Disease Diagnostic Laboratory Internship Opportunity Reference Code: USDA-APHIS-2022-0087

Requirements • Degree: Bachelor's Degree or Master's Degree.

- Discipline(s):
  - Communications and Graphics Design (1. )
  - Life Health and Medical Sciences (48 )