

Opportunity Title: USDA-ARS Fellowship in Pathobiology of Prion Diseases

Opportunity Reference Code: USDA-ARS-2022-0322

Organization U.S. Department of Agriculture (USDA)

Reference Code USDA-ARS-2022-0322

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. 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

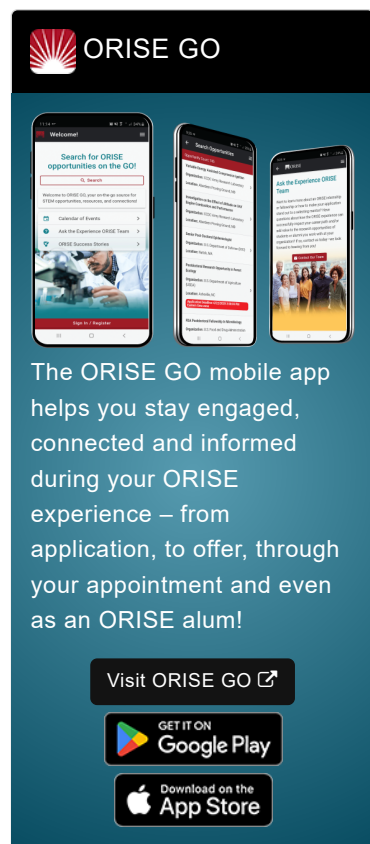
All documents must be in English or include an official English translation.

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

ARS Office/Lab and Location: A research opportunity is currently available with the U.S. Department of Agriculture (USDA), Agriculture Research Service (ARS), National Animal Disease Center (NADC) 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 of the agency is to provide global leadership in agricultural discoveries through scientific excellence.

Research Project: Under the guidance of a mentor, the selected candidate will conduct research on the transmission, differentiation, and pathobiology of prion diseases in livestock and laboratory animal models. The participant will have the opportunity to conduct research designed to develop new diagnostic techniques for prion disease, test shedding and transmission of prion disease agents, and further characterize the progression of prion disease in natural hosts. Specifically, the participant will be assigned to projects that aim to advance the development of diagnostics for the early detection of chronic wasting disease in white-tailed deer. Participation may also include collecting samples at necropsy, laboratory assays for the detection of abnormal prion protein, the development or refinement of protocols for the microscopic assessment of tissues for lesions associated with prion diseases, and the use of molecular techniques to characterize prion agents.



Opportunity Title: USDA-ARS Fellowship in Pathobiology of Prion Diseases

Opportunity Reference Code: USDA-ARS-2022-0322

Come Join Our Prion Disease Research Team! <https://youtu.be/6rOISP8i62Y>

Learning Objectives: Throughout the course of this research project, there may be opportunities to learn laboratory procedures such as western blot, enzyme immunoassay, immunohistochemistry, prion protein amplification assays, and in vivo assays for prion infectivity; to interact with scientists and technicians within the group to develop new projects; to develop clinical skills with livestock and rodents; and to develop skills in gross post-mortem examination of animal tissues.

Mentor: The mentor for this opportunity is Eric Cassmann (eric.cassmann@usda.gov). If you have questions about the nature of the research please contact the mentor.

Anticipated Appointment Start Date: Fall 2022 or Winter 2023. Start date is flexible and will depend on a variety of factors.

Appointment Length: The appointment will initially be for two years, 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.Midwest@ornl.gov 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 all degree requirements met by December 31, 2022.

Preferred Skills/Experience:

- Willingness to learn new laboratory techniques as needed to satisfy the needs of the project and willingness to process samples for microscopic examination.
- Ability to conduct research independently, as well as part of a team while building and nurturing collaborations with external research groups
- Ability to compile data and synthesize reports or manuscripts

Opportunity Title: USDA-ARS Fellowship in Pathobiology of Prion Diseases

Opportunity Reference Code: USDA-ARS-2022-0322

- Doctor of Veterinary Medicine and/or Doctor of Philosophy in Veterinary Sciences related field
- Experience with veterinary anesthesia and laboratory animal surgery and research
- Experience with immunohistochemistry and ELISA
- Strong organization and interpersonal skills

**Eligibility
Requirements**

- **Degree:** Doctoral Degree received within the last 60 months or anticipated to be received by 12/31/2022 11:59:00 PM.
- **Discipline(s):**
 - **Life Health and Medical Sciences** ([12](#) 👁)