Opportunity Title: Postdoctoral Research Opportunity in Prion Diseases
Opportunity Reference Code: ARS-VPRU-2018-980-0014-02

Organization U.S. Department of Agriculture (USDA)

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How to Apply A complete application package 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. Selected candidate must provide proof of completion of the degree before the appointment can start. Proof must be sent to ORISE directly from the academic institution including graduation date and degree awarded. All transcripts must be in English or include an official English translation. Click **Here** for detailed information about acceptable transcripts.
- A current resume/CV
- Two references – While two references are requested, applications will be considered without reference information. It is preferred that a complete application package contains a minimum of one reference.

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

Description A chemistry/biochemistry research opportunity is available with the U.S. Department of Agriculture (USDA) Agricultural Research Service (ARS) National Animal Disease Center (NADC) Virus and Prion Research Unit (VPRU) in Ames, Iowa.

The participant will be conducting research on amyloid formation in diseases of livestock and wildlife which will include development and analysis of protein conformational stability and protein misfolding (amyloid formation) data. These studies will be for the purposes of understanding the pathogenesis, differentiation, and prevention of livestock disease. Specifically, the participant will evaluate genetic and environmental influences on protein folding and misfolding and work as part of a team to address folding and misfolding of proteins as relate to livestock disease.

Activities will include: 1) the use of spectroscopic methods to measure protein secondary structure; 2) thermodynamic analysis of protein stability; 3) evaluation of protein amyloid formation; and 4) analysis and interpretation of data derived from the aforementioned activities. Training in these activities will be available on an as needed basis.

Professional development opportunities will include informal research planning meetings and journal discussion groups as well as those typically afforded at scientific conferences.

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. The initial appointment is for one year, but may be renewed upon recommendation of ARS and is contingent on the

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availability of funds. The participant will receive a yearly stipend in the rage of $60,000-90,000 commensurate with educational level and experience as well as a monthly health insurance stipend supplement. Proof of health insurance is required for participation in this program. The appointment is full-time. Participants do not become employees of USDA, ARS, DOE or the program administrator, and there are no employment-related benefits. A relocation allowance may be provided. Full or partial reimbursement for travel expenses to conferences, scientific meetings, or training may be provided.

While participants will not enter into an employment relationship with ARS, this position requires a pre-appointment check and a full background investigation.

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.

For more information about the ARS Research Participation Program, please visit the **Program Website**.

Qualifications

To be eligible the applicant should have or be pursing a doctoral degree in Biochemistyr, Molecular Biology, or a related field. Applicants with a conferred degree must have earned their doctoral degree within 5 year prior to the start date. Applicant currently pursuing their doctoral degree must have completed all the degree requirements for a doctoral degree in Biochemistry, Biology, Molecular Biology or a related field prior to the start date.

The ideal candidate will be skilled in protein expression and purification and the analysis of protein folding, protein-protein interaction, or protein ligand interactions.

The ideal candidate will have:

- Knowledge of protein folding, stability, and misfolding.
- A track record of publication in leading peer-reviewed journals.
- Experience with protein expression and purification.
- Experience with molecular biology techniques necessary for expression and purification of recombinant protein.
- The capacity to work independently and in a team.

Eligibility Requirements

- **Degree:** Doctoral Degree.
- **Discipline(s):**
  - **Chemistry and Materials Sciences** (1 👁)
  - **Life Health and Medical Sciences** (3 👁)