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 postdoc research fellow will participate in collaborative research to develop knowledge bases of the behavior, ecology, physiology, and genetics of invasive insect pests and their natural enemies for development of effective biological control strategies and associated technologies against high-impact invasive insect pests such as spotted lanternfly, Lycorma delicatula (order Hemiptera: Fulgoridae), spotted wing drosophila, Drosophila suzukii (Diptera: Drosophilidae), Asian longhorned beetle, Anoplophora glabripennis (Coleoptera: Cerambycidae), emerald ash borer, Agrilus planipennis (Coleoptera: Buprestidae), brown memorated stink bug, Halyomorpha halys (Hemiptera: Pentatomidae) as well as newly emerging pest such cotton jassid, Amrasca biguttula (Hemiptera: Cicadellidae). Research will occur both in a laboratory quarantine facility and in agricultural fields or forests across the U.S.

Learning Objectives: Under the guidance of a mentor, the fellow will gain experience in:

Cooperating with ARS and University scientists to discover new biological control agents;

Evaluating host ranges of newly discovered or previously introduced biocontrol agents both by laboratory testing and genomic analysis of the genetic architecture underlying the host association of concerned natural enemies, and;

Conducting both laboratory-host specificity testing and genomic analysis of post-introduction adaptation of previously introduced agents to various environmental conditions for enhanced biological control efficacy.

Mentor(s): The mentor for this opportunity is Jo Anne Crouch (joanne.crouch@usda.gov). If you have questions about the nature of the research, please contact the mentor(s).

Anticipated Appointment Start Date: January 2026. 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. The anticipated stipend range is $7,500 - $8,500 monthly.

Citizenship Requirements: 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 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.Northeast@orau.org and include the reference code for this opportunity.

The qualified candidate should be currently pursuing or have received a doctoral degree in the one of the relevant fields (e.g. Biology, Entomology, Ecology or related field). Degree must have been received within the past five years, or anticipated to be received by summer 2026.

Preferred skills:

Strong skills in molecular biology, population genetics and bioinformatics.