

Opportunity Title: Entomologist/Chemical Ecologist Postdoctoral Research

Opportunity

Opportunity Reference Code: ARS-SHRS-2015-0023

Organization U.S. Department of Agriculture (USDA)

Reference Code ARS-SHRS-2015-0023

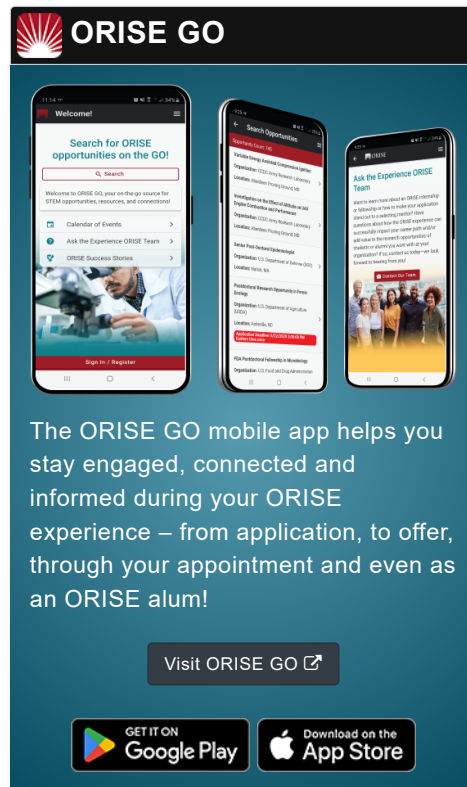
How to Apply A complete application package consists of:

- 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.
- A current resume/CV

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

Description An Entomologist/Chemical Ecologist postdoctoral research opportunity is available with the U. S. Department of Agriculture (USDA) Agriculture Research Service (ARS) Subtropical Horticulture Research Station in Miami, Florida. Research will encompass studies on insect chemical ecology, using a combination of chemical analysis, behavioral bioassays, field tests to identify new and/or improved semiochemical attractants for detection and control of invasive insect pests. The primary research responsibility will be isolation and identification of biologically active semiochemicals from host plant material, especially those that will lead to the development of female attractants for the redbay ambrosia beetle, although research may include attractants for tephritid and drosophilid fruit flies, or other insects. The research includes design and execution of research experiments; collection and identification of active semiochemicals through use of gas chromatography (GC and GC-MS); electroantennography (EAG, GC-EAD); laboratory behavioral bioassays and field tests. Experience in analytical chemical techniques such as GC and SPME is particularly desirable. Results will be documented as scientific papers for publication in refereed journals.

The appointment is full-time for one year and may be renewed upon recommendation of the ARS and availability of funding. The annual stipend rate for this position is \$50,706. A stipend supplement in the amount of \$5,160 is provided to offset the cost of an individual or family health insurance plan. The participant must show proof of health and medical insurance. Health insurance may be obtained through ORISE. Relocation expenses in the amount of \$2,000 will be reimbursed, with prior approval. A



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travel allowance in the amount of \$3,000 is available to reimburse travel-related expenses to scientific and professional development activities. The participant will not enter into an employee/employer relationship with ORISE, ORAU, USDA, or any other office or agency. Instead, the participant will be affiliated with ORISE for the administration of the appointment through the ORISE appointment letter and Terms of Appointment.

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, applicants must have received a doctorate degree in Entomology, Ecology, Biology, Chemistry or a related discipline in the biological or physical sciences within five years of the desired starting date. Experience in gas chromatography (GC), and mass spectrometry (GC-MS) as related to semiochemicals and/or working knowledge of electroantennography, insect behavioral bioassays and field trials of true fruit flies, beetles and moths, is desirable.

Preferred skills include:

- Laboratory analytical skills, including gas chromatography, mass spectrometry
- Experience with insect behavioral bioassays (wind tunnels, olfactometers) and electroantennography
- Experience with field tests, experimental design, statistical analysis
- Demonstrated ability to publish in peer-reviewed journals

Eligibility Requirements

- **Degree:** Doctoral Degree.
- **Academic Level(s):** Postdoctoral.
- **Discipline(s):**
 - **Chemistry and Materials Sciences** (12 )
 - **Life Health and Medical Sciences** (7 )