

Research Associate (Post-doc) in Bumble Bee Pathology at the USDA-ARS Logan Bee Lab

GS-0414-11 \$57,982 (GS-11)

The USDA-ARS Pollinating Insects Research Unit (PIRU) in Logan, Utah is hiring a Research Associate to investigate the role of pathogens in bumble bee rearing and management to begin in summer 2014. Under the direction of a Research Entomologist, the incumbent will conduct field and laboratory studies directed at understanding the role of pathogens in bumble bee pollinated agro-ecosystems. The assignment is to: 1) investigate the parasite and pathogen communities that occur in western North American bumble bees and commercial bumble bee populations, 2) develop techniques for rapid and accurate parasite and pathogen detection where needed and 3) assess the potential for pathogen movement among wild and managed bumble bee populations in agro-ecosystems. The primary mission of the PIRU is the development of non-honey bee species as managed, sustainable pollinators of agricultural crops. The incumbent's assignment is part of a broader project focused on the development of western North American bumble bees for commercial use, a component of ARS National Program 305, Crop Protection – Bees & Pollination.

The incumbent's specific research will be performed in cooperation with a supervising entomologist. The research associate will couple field surveys with studies of lab-reared bumble bees to investigate the dynamics of intra- and inter-colony pathogen growth during the colony cycle. Concurrently, both PCR-based and microscopy-based detection methodology will be developed and /or refined and tested on lab-reared colonies and wild-caught bumble bees. Using epidemiological models the incumbent will identify potential pathways of spread and best management practices to mitigate the risk of pathogen outbreaks. The research is expected to improve the sustainable management of bumble bees in crop production. Additionally, methodology for detection of parasites and pathogens will be refined for use by producers. Findings will be used by crop producers, bumble bee producers, other scientists, and extension agents to enhance pollination using bumble bees.

Submit a CV, cover letter and names of three references by March 17, 2014 to:

Dr. James Strange
USDA-ARS-PIRU
255 BNR, Utah State University
Logan, UT 84322-5310

Inquiries can be directed to james.strange@ars.usda.gov

This position requires a Ph.D. in entomology, invertebrate pathology, or a related field. Knowledge of bee biology, epidemiological modeling, pathology, or crop production systems, or evidenced ability to learn such systems is required. Hiring will be at the GS-11 level (approximately \$57,982 per year).

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