

From: Ben Sadd
Subject: Available Postdoc: Ullinois Bumblebee-Pathogen Functional Genomics

UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN
DEPARTMENT OF ENTOMOLOGY
FUNCTIONAL GENOMICS OF DISEASE AND PESTICIDE SUSCEPTIBILITY IN BUMBLE BEES

POSTDOCTORAL POSITION
SALARY \$43,000-\$47,500 per yr.

Applications are invited to join the Cameron Lab in the Department of Entomology at the University of Illinois. Research will focus on experimental studies of the functional genomics and ecological effects on bumble bee health of the fungal pathogen *Nosema bombi*, and its interactive effects with neonicotinoid pesticides. We are looking for expertise in the laboratory production and bioinformatic analysis of gene expression data (RNAseq, qPCR, etc.).

The collaborative research team includes Dr. Ben Sadd, Illinois State University, (https://urldefense.proofpoint.com/v2/url?u=https-3A__faculty.sharepoint.illinoisstate.edu_bmsadd&d=DwIFAw&c=Ngd-ta5yRYsqeUsEDgxcqY1Xs5ogLxWPA_2Wlc4&r=e2OJ1azRfN8ihJzb2HxZT0AqoiqLvxfeeATyN59ZLol&m=m9pOeK0r0ZITwecrxspDXsk3FEnf3189gbi3nbjo&s=XCm3OGBKTWuqWIKxsmGryG_HZYfYqvwWFBF4RUHXrM&e=) and James Strange, Utah State USDA Bee Biology Lab (https://urldefense.proofpoint.com/v2/url?u=https-3A__www.ars.usda.gov_pacific-2Dwest-2Darea_logan-2Dut_pollinating-2Dinsect-2Dbiology-2Dmanagement-2D&d=DwIFAw&c=Ngd-ta5yRYsqeUsEDgxcqY1Xs5ogLxWPA_2Wlc4&r=e2OJ1azRfN8ihJzb2HxZT0AqoiqLvxfeeATyN59ZLol&m=m9pOeK0r0ZITwecrxspDXsk3FEnf3189gbi3nbjo&s=oQekWN5pH9IESyz3N1MCSJCwhJCyceogWEoinJD3GLc&e=systematics-research/people/dr-james-strange/).

The research includes a series of lab experiments on both declining and stable populations of bumble bees, with the broad goal of understanding causal factors of decline in U.S. bumble bee populations. We will examine how bumble bee species vary in susceptibility to pathogens and pesticides, investigating how these stresses can interact to the detriment of bee viability. An integration of colony-level, whole-organism, cellular, and transcriptomic approaches will address how susceptibility is linked to decline status. The postdoc will play a key role in setting up and analyzing RNAseq data, with an ultimate goal to identify expression and genetic diversity associated with infection and pesticide susceptibility. Major responsibilities will be to interact with the research collaborators to participate in experiments and develop the transcriptome datasets.

A strong bioinformatics or statistical genetics/population genetics background with a PhD degree in the relevant areas is required. Communication skills are essential; programming and analytical skills are desirable.

To apply for this position, please submit your CV and a Statement of your interest in the position, including discussion of how your skills are concordant with the project's research needs, along with names and contact information including email addresses for three professional references. We will consider all applications until selection of the appropriate candidate is made.

For informal inquiries please contact Sydney Cameron (scameron@life.illinois.edu).

The University of Illinois is an Equal Opportunity, Affirmative Action employer. Minorities, women, veterans and individuals with disabilities are encouraged to apply. For more information, visit https://urldefense.proofpoint.com/v2/url?u=http-3A__go.illinois.edu_EEO&d=DwIFAw&c=Ngd-ta5yRYsqeUsEDgxcqY1Xs5ogLxWPA_2Wlc4&r=e2OJ1azRfN8ihJzb2HxZT0AqoiqLvxfeeATyN59ZLol&m=m9pOeK0r0ZITwecrxspDXsk3FEnf3189gbi3nbjo&s=oi4MhrHzGlaEfol_CeQZoxNlkdLnF4YZSk1h0jzy7s&e= . To learn more about the University's commitment to diversity, please visit https://urldefense.proofpoint.com/v2/url?u=http-3A__www.inclusiveillinois.illinois.edu&d=DwIFAw&c=Ngd-ta5yRYsqeUsEDgxcqY1Xs5ogLxWPA_2Wlc4&r=e2OJ1azRfN8ihJzb2HxZT0AqoiqLvxfeeATyN59ZLol&m=m9pOeK0r0ZITwecrxspDXsk3FEnf3189gbi3nbjo&s=WBC531prdvRbjZPEND8di6EyVRKdgg77kbMTI4QVcDw&e= . The University of Illinois conducts criminal background checks on all job candidates upon acceptance of a contingent offer.