

How do honey bees guard their colony from other honey bees?

Description of Research: Honey bee colonies comprise thousands of individual bees acting in concert to maintain the well-being of the colony as a whole. Keeping out invaders from other honey bee colonies presents special challenges to the bees guarding the hive. Guards shift how accepting they are of incoming bees in response to changes in the costs and benefits of allowing in nest mates and non-nestmates. Better understanding these costs and benefits as well as the as how guarding behavior is regulated is the focus of our research. Students interested in animal behavior, social insects, ecology, or in beekeeping are strongly encouraged to apply.



Description of Work: We are looking for a motivated undergraduate to help with video coding. Coding can be done on Tempe campus in our lab or possibly at home depending on your computer access. Expect to meet with researcher at least every other week. Periodically you will be tasked with reading journal articles and discussing them with the researcher to ensure you develop an understanding of the work. If interested, you may get involved working directly with hives when data is being collected, this is optional though. No prior experience with honey bees is required. Many experiments looking at different factors affecting guarding behavior are planned for the upcoming year. All assistants are encouraged to come out to Mesa to get a tour of the bee lab and to get some honey harvested from our hives. As the assistant gains experience, they are welcome to propose and carry out independent projects.

Students may register for 1-3 units of research credit per semester. You will be expected to commit at least 4 hours per credit unit per week. If interested send an email that: 1) lists past and present course work, 2) mentions any prior research experience if applicable, 3) briefly describes your career and academic goals, 4) includes a brief statement about what you want to get out this research experience, and 5) provides your schedule availability. Send your email to both Jon Jackson (joncolej@asu.edu) and Stephen Pratt (Stephen.Pratt@asu.edu).