

# 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 their colony. 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 changing costs and benefits of allowing nest mates and non-nestmates into the hive. Better understanding these costs and benefits as well as the regulation of guarding behavior is the focus of our research. Students interested in animal behavior, ecology, social insects, or in beekeeping should apply.

**Description of Work:** We are looking for motivated undergraduates to help with research projects to be conducted during the 2017/2018 academic year. NO prior experience with honeybees is necessary. Interested undergraduates will receive training in beekeeping sufficient to become a hobby beekeeper. Honey from colonies will be shared with undergraduates as a bonus. Undergraduates must have a car or other means to get to the Bee Lab south of the Polytechnic Campus in Mesa. Fall semester will involve training in beekeeping and in the classification/coding of bee behavior from video. Spring semester will involve working with honeybee colonies to collect data. Schedule permitting, undergraduate should attend one hour weekly lab meetings in Tempe. At the end of each semester undergraduates will report their work and findings to lab in a 20 minute presentation. We are seeking a couple undergraduates able to sign up for 2-3 units of research credits for both fall and spring semesters. One full day of work a week is needed. Continued work with the lab is possible after stated dates.



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](mailto:joncolej@asu.edu)) and Stephen Pratt ([Stephen.Pratt@asu.edu](mailto:Stephen.Pratt@asu.edu)).