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Katelyn Marcus
Washington University in St. Louis

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Mentor: Yehuda Ben-Shahar

In eusocial insects, nestmate recognition (NMR) is an adaptive behavior used to recognize and reject intruders, both conspecific and from different species. NMR cues in honeybees and most eusocial insects are composed of cuticular hydrocarbons (CHC), whose overall profile is specific to bees of the same colony and differs between colonies. The broadly accepted 'gestalt' model of NMR cue development states that colony-specific cues represent an emergent uniform mix of chemicals that are passively derived from the hive's environment and its individual members. Preliminary data from the Ben-Shahar Lab, however, indicate that the CHC profile of individual worker bees develops in association with their age-dependent division of labor via a two-phase process. In the first phase (2-8 days old), total non-specific CHC amount is built up, and in the second phase (between 16-19 days old, the age at which bees begin to forage) CHC profiles become colony specific, which we hypothesize is specifically used to gain access back into the natal hive. We sought to behaviorally test this hypothesis by determining at what age a bee is recognized as either a nestmate or an intruder by members of a colony. To do this we collected bees at various ages and tested their acceptance rate at their native versus an unrelated hive. We found that bees of all ages are accepted into their native hive. In contrast, bees are accepted unrestricted into an unrelated hive through 14 days of age, but bees of foraging age (21 days old) are rejected from entering an unrelated hive. Together with our previous findings about the age-dependent chemical maturation of individual CHC profiles, my data suggest that within honeybee colonies, NMR does not develop via a passive gestalt mechanism, but instead, actively develop in association with the behavioral development of individual worker honeybees, with a mature signal specifically present only in foraging bees.