

EEB Seminar Series – Spring 2018
Graduate Student Research Presentations
Abstracts

Monday, February 12, 2018

Speaker: **Pierre Lau** (Rangel Lab)

Title: Are honey bees picky eaters? A nutritional perspective to honey bee foraging preferences

Abstract: Organisms have a nutritional strategy to balance their nutritional state and to maximize their fitness. In the Nutritional Geometry model, animals can be graphically represented in a nutrient space defined by food components. Individuals in insect societies, such as honey bees, have different nutritional requirements depending on their age. Understanding honey bee nutritional ecology is critical for improving colony health. To date, no artificial pollen supplement rivals the qualities of natural pollen. This talk will be focused on honey bee nutritional ecology and how colonies regulate their nutritional intake. In particular, I will be talking about honey bee foraging preferences.

Speaker: **Jocelyn Holt** (Medina Lab)

Title: Characterization of the Sugarcane Aphid Microbiome

Abstract: Although the sugarcane aphid (*Melanaphis sacchari* Zehntner) has been in the continental US since 1977, it was not until 2013 that it became an economic pest in grain sorghum. What could have caused the sudden pest outbreak of sugarcane aphids in grain sorghum, after being established for over 35 years in US sugarcane? The bacterial composition or microbiome of an insect can allow individuals of the same species to consume different host plants. Using Illumina Sequencing we characterized the sugarcane aphid microbiome to understand what role this may have played in the recent pest outbreak on grain sorghum.