## Student Seminar Day 18 September 2024 Genomics Auditorium

8:30-9:00 Continental Breakfast and Coffee (Genomics Lobby)

9:00-9:05 Welcome Remarks – Dr. Rick Redak, Chair and Hannah Chu, Master of Ceremonies

#### MORNING ORAL PRESENTATIONS SESSION I (9:05 – 10:20)

- **9:05 Molly Barber-** Impacts of Insect Herbivory on a Fire Follower in Coastal Sage Scrub
- **9:20 Mona Tran-** Unbinding the bindweed psyllid (*Bactericera maculipennis*) from its Convolvulus host exposes it to a novel bacterial symbiont
- **9:35 Jacqueline Holquinn-** Poultry Housing Transitions and Spillover Risks
- 9:50 Emily Ta- Behavioral Responses of the German Cockroach, *Blattella germanica* (L.) to Insecticidal Baits
- **10:05 Yadira Romero Diaz-** Comparative Analysis of Bumble Bee Body Size in Alaskan Habitats

10:20-10:30 Break

#### MORNING ORAL PRESENTATIONS SESSION II (10:30 – 11:45)

10:30 Savana Becerra- Immunity priming compounds have variable effects on muskmelon (*Cucumis melo*) resistance to insect-transmitted viral pathogens
10:45 Tobias Moyneur- Hormone Havoc: How Methoprene Messes with Ants' Weight, Wax, and Wits
11:00 Ashley Bui- Elucidating the geographic origins of a Wasmannia parasitoid wasp, *Orasema minutissima* (Chalcidoidea: Eucharitidae), in Hawai'i
11:15 Blanca Peto - Social Control of Egg-Laying in Independently Nest-Founding Bumble Bee Queens
11:30 Joshua Reger - Tracking California's tree nut nemesis: Using omics and isotopes to differentiate *Amyelois transitella* based on larval host

11:45-12:00 Break & Group Photo (Entomology Courtyard)

12:00-1:00 PM Lunch (Entomology Courtyard)

#### Poster Presentations Genomics Breezeway

#### POSTER SESSION I (1:00-1:40

**Christopher Allen-** What the F-st: Genomic comparison of two admixed honey bee populations

**Cerda Lauren-** Predation and Prey Size: A Comprehensive Study of Mantid Feeding Preferences

**Genesis Chong-** Mite Be Trouble: Protein Defense Mechanisms of Honeybee Larvae Post-Exposure

**Hannah Chu-** Decomposers in Joshua Tree National Park: Blow fly (Diptera: Calliphoridae) communities across the Mojave and Sonoran deserts

**Rattanan Chungsawat-** THEY DO NOT WORK! The failing performance of residual Over-the-Counter (OTC) sprays against German cockroach (Blattodea: Ectobiidae)

**Remi Flannery-** Are native plants outcompeted by invasive plants in an arid ecosystem?

**David Grajeda-** Benthic Macroinvertebrate Biodiversity in the Colorado Rockies

**Rebecca Keim-** Harvester ant nest and foraging trails associations with invasive plant species

**Daniella Lu-** Evaluation of Native Harvester Ants as a Vector for *Oncosiphon Piluliferum* Dispersal

**Jun Yin Lum-** Differential performance of commercial gel baits against two species of domiciliary pest cockroaches

Jessica Maccaro - Artistic Expression of Original Research: A Case Study on Symbiotic Science Communication

**Nagham Melhem** - Determination of ecdysteroidogenic tissues and stages in *Aedes aegypti* larvae

**Thomas Son -** Determining How a Plant Pathogen (Liberibacter) May Increase Insect Vector Fitness

#### Poster Change out 1:40-1:45

#### POSTER SESSION II (1:45-2:30)

Hannah Moore - Starvation and Its Effects on Male Bumble Bee Pheromone Production

**Meghan Moore-** Male incubation in bumble bees and its effects on early nest development

**Emily Najera-** Peek-a-Bee: Honeybee Behavioral Response to Olfactory Stressors

Lyna Ngor- From Soil to Sky: How Wastewater Shapes the Microbial World of Wild Bees

**Nicholas Poulos-** Determining the age of drywood termite fecal pellets utilizing comparative analysis of bacterial diversity

**Kunal Ramarapu-** Developing and implementing phenotyping approaches to quantify and assess the impact of trichome density on *B. tabaci* (whitefly) resistance in melons (*Cucumis melo*)

Jordan Reyes- Mosquito body mass variation affects permethrin susceptibility in *Aedes aegypti* 

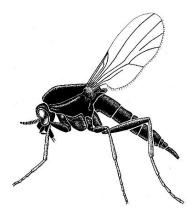
**Joelene Tamm-** Heat treatment protocols for sanitizing oak firewood infested with goldspotted oak borer, *Agrilus auroguttatus* (Coleoptera: Buprestidae)

**Sharmely Valladolid -** Influence of larval competition on behavior and adult traits in mosquitoes

**Maria Mendiola** - Mosquito larval competition and adult behavior **Benjamin van Raalte** - A low-cost staining method for improved visualization of sweet potato whitefly (*Bemisia tabaci* MEAM1) eggs on multiple crop plant species

Jessica Webb- Two bees or not two bees: a survey of comparative management styles between two honey bee genotypes

#### 2:30-2:40 Break



#### AFTERNOON ORAL PRESENTATIONS SESSION III (14:40 – 15:35)

2:40 Emilia Burnham- "To (*Nosema*) Immunity and Bee-yond!" Uncovering the molecular secrets of survivor and managed honeybee immunity in response to *Nosema ceranae*3:05 Tzu-Chia Chen- Investigation of Morphology, Colony Structure, and Population Dynamics of *Reticulitermes* spp. in Riverside County
3:20 Xingwei Feng- Indirect suppression of Pharaoh ant colonies

via horizontal transmission of bait toxicants targeting German cockroaches

**3:35 Karla Lemus Portillo -** Comparing Blow Fly Development Across Rearing Substrates

#### 3:35-3:45 Break

**3:45 Haneal Pae -** *Drosophila* require both green and UV wavelengths for sun orientation but lack a time-compensated sun compass

**4:00 Sakshi Watts -** The Symphony of Survival: Understanding Hive Health and Bee Communication

**4:15 Soon Kwon** - Non-Target Effects of Alginate Hydrogel Beads used for Argentine Ant Control in Citrus Orchards **4:30 Blanca Ortega (Guillen)** - Diploid Male Frequencies in Alaskan Bumble Bee Populations

4:45-5:00 Break

#### 5:00-7:00 Dinner Reception (UCR Botanic Gardens)

### Welcome New Entomology Graduate Students:

Emilia	Burnham	Dr. B Baer Dr. K Mauck
Rattanan	Chungsawat	Dr. C-Y Lee
Xingwei	Feng	Dr. C-Y Lee
Matthew	Fox	Dr. C Weirauch
Jenni Daniela	Garcia Quiceno	Dr. B Cass
Leon	Kataw	Dr. A Murillo
Karla	Lemus Portillo	Dr. A Gerry
Jorge	Mora	Dr. Q McFrederick
Thomas	Nonacs	Dr. J Purcell
Alejandra	Rocha	Dr. B Cass
Melissa	Thayer	Dr. H Wilson





# 31<sup>st</sup> Annual Student Seminar Day 18 September 2024

## **Genomics Auditorium**



