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 Savannah Horton - Impairment in Locomotion in Drosophila melanogaster Across a Hypergravity Continuum
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 Blanca Peto - Social Control of Egg-Laying in Independently Nest-Founding Bumble Bee Queens

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. J Heraty
Melissa	Thayer	Dr. H Wilson





31st Annual Student Seminar Day 18 September 2024

Genomics Auditorium



