

*16<sup>th</sup> Biennial Meeting of the*  
**Florida Phytopathological  
Society**



**May 8-10, 2019**

Hosted by:  
UF/IFAS Department of Plant Pathology  
Plant Pathology Graduate Student Organization (PPGSO)  
UF/IFAS Citrus Research and Education Center  
University of Florida

UF/IFAS Citrus Research and Education Center  
700 Experiment Station Road, Lake Alfred, Florida



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Florida Phytopathological Society  
website!  
<https://bsr270.wixsite.com/floridaphytopath>

## FPS Council and Event Personnel



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**UF/IFAS CREC  
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## Agenda

### **Wednesday, May 8, 2019**

- 5:30 pm Reception begins
- 6:00 pm Employer Panel Discussion: Opportunities Outside of Academia

#### **Panel Presenters**

Jason Hong, USDA-ARS  
Timothy Riley, USDA-APHIS  
Madeline Mellinger, Glades Crop Care  
John Taylor, Syngenta  
Stanely Royal, Corteva agriscience  
Hector Urbina, FDACS

- 6:30 pm Dinner (County Seat Café)

### **Thursday, May 9, 2019**

- 8:00 am Poster setup
- 8:25 am Introduction: Nick Dufault
- 8:30 am **Keynote Presenter Erin Rosskopf:** 20 years of alternatives to methyl bromide research
- Special Session: Impacts of Disease in Experimental and Emerging Specialty Crops** (Moderator: Jeannie Klein-Gordon)
- 9:30 am **Katia Xavier:** Pomegranate pathology in Florida
- 10:00 am **Aleyda Acosta Rangel:** Common diseases of hops-A Florida perspective
- 10:30 am Break
- 10:45 am **Ian Small:** Development of an integrated disease management strategy for *Brassica carinata*
- 11:15 am **Brantlee Spakes Richter:** Florida Tea? Horticulture and pathology of *Camellia sinensis* in north central Florida
- 11:45 am Lunch ends at 1:30 pm (Tijuana Flats)  
Citrus Tour (12:45 pm - 1:15 pm)

## Agenda

**Thursday, May 9, 2019**

**Technical Session I.** Moderator: Brett Lane

- 1:30 pm **Juliana Baggio:** Characterization, pathogenicity, and fungicide sensitivity of *Pestalotiopsis* spp. on strawberry in the U.S.
- 1:45 pm **Norma Flor:** Further phylogenetic analysis of the *Botryosphaeriaceae* associated with blueberries in the Southeast
- 2:00 pm **Juan Gonzalez:** Insights into *Helminthosporium* genetics using short and long read genome sequencing technology
- 2:15 pm **Paulo Pinto de Mello Neto:** Effect of UV-C exposure on *Botrytis cinerea* fitness parameters and infection on strawberry
- 2:30 pm **Mayara Bolognesi de Moraes:** Bee vectoring technology using *Clonostachys rosea* as biological control for Botrytis fruit rot on strawberry in Florida
- 2:45 pm **Frank Manthey:** Antimicrobial properties of trans-cinnamic acid as potential treatment to control citrus greening bacteria
- 3:00 pm **Beatriz de Toledo Franceschi:** Application of metam potassium using drip stakes for the control of *Macrophomina phaseolina*
- 3:15 pm **Jim Graham:** Integration of soil applied acibenzolar-S-methyl and neonicotinoids with copper sprays for canker control on grapefruit
- 3:30 pm **Brent Johnson and Craig Heim:** FMC Fungicide Portfolio update and introduction to Lucento Fungicide: A new and novel fungicide from FMC
- 3:45 pm Break

## Agenda

**Thursday, May 9, 2019**

**Technical Session II.** Moderator: Kellee Britt

- 4:00 pm **Jeremy Brawner:** Disease tolerance in forest trees
- 4:15 pm **Sushma Sood:** Screening sugarcane cultivars for disease resistance
- 4:30 pm **Turksen Shilts:** Differential susceptibility of Sun-Chu-Sha to *Citrus tristeza virus* maps to the replicase of the T36 strain
- 4:45 pm **Chooa El Mohtar:** Effect of size and position of foreign insert on efficiency of virus induced gene silencing by *Citrus tristeza virus*
- 5:00 pm **Robin Chaudhury:** Carrots or sticks? How to structure incentives to manage diseases across landscapes
- 5:15 pm **Jason Hong:** Legacy effect of anaerobic soil disinfestation on the soil microbiome
- 5:30 pm **Wayne Hunter:** Gene Targeting Asian Citrus Psyllid: CRISPR-Cas9
- 5:45 pm **Dayse Pulici:** '*Candidatus Liberibacter asiaticus*' in roots: local and systemic effects of infection
- 6:00 pm **Yasser Nehela:** *Candidatus Liberibacter asiaticus* alters the TCA cycle of their host plant via GABA shunt and polyamines pathway
- 6:15 pm **Nabil Killiny:** Construction of a disease without its causal agent to understand the pathogenicity mechanism
- 6:30 pm Dinner (County Seat Café), Blight Bowl, and Career Service Award

## Agenda

### Friday, May 10, 2019

**Graduate Student Competition.** Moderators: André Bueno  
Gama, Anuj Sharma, James Orrock

- 8:25 am Introduction and guidelines, Brantlee Spakes Richter
- 8:30 am **Mustafa Jibrin:** Identification and characterization of a novel avrBs3-like TAL effector, pthXp1, in *Xanthomonas perforans* which delays pustule formation in citrus
- 8:45 am **Shaheen Bibi:** Examining the role and localization of an EF-Hand Protein in *Xanthomonas*
- 9:00 am **Fernanda Iruegas Bocado:** Effector profiles of *Xanthomonas perforans* and *X. euvesicatoria* provide insights into the evolution of host range and virulence in Bacterial Leaf Spot pathogens
- 9:15 am **Yanan Zhang:** Stringent response regulators ppGpp and DksA positively regulate virulence and host adaptation of *Xanthomonas citri*
- 9:30 am **Pei-ling Yu:** Testing a two-phase infection model in *Sclerotinia sclerotiorum*
- 9:45 am **Kamaldeep Bansal:** Insights into the pollen-mimicking floral infection of mummy berry
- 10:00 am **Peiqi Zhang:** Hyphal movement and phytohormone production by endohyphal *Enterobacter* sp. from *Rhizoctonia solani*
- 10:15 am Break
- 10:30 am **Gideon Alake:** A decade of nematode diagnostic data – looking to the past for future direction on pest management



## Agenda

**Friday, May 10, 2019**

### **Graduate Student Competition (continued)**

- 10:45 am **Kellee Britt:** The detection and surveillance of Asian citrus psyllid (*Diaphorina citri*)-infecting viruses in Florida citrus groves
- 11:00 am **Jeannie Klein-Gordon:** It's complicated: The *Xanthomonas perforans* population across Florida commercial tomato fields
- 11:15 am **Andrew Shirley:** Regional, temporal, and host population structure of *Pseudoperonospora cubensis* in Florida
- 11:30 am **Julie Boswell:** Opening the door for Koch's Postulates in citrus
- 11:45 am **Brett Lane:** Appearance of a novel *Pyricularia* species on Japanese Stiltgrass in Indiana
- 12:00 pm **James Orrock:** Diversity of *Colletotrichum* species on culinary and ornamental camellias in Florida
- 12:15 pm **Alex Deiulio:** Complete genome sequence of *Xanthomonas* phage RiverRider, a novel podovirus that infects the strawberry pathogen *Xanthomonas fragariae*
- 12:30 pm Lunch (Panera)
- 1:30 pm **Chad Vosburg:** Genomic structure and characterization of Wnt signaling genes in *Diaphorina citri*
- 1:45 pm **Anuj Sharma:** Genetic mapping of bacterial spot resistance gene against *Xanthomonas gardneri* in Hungarian pepper

## Agenda

**Friday, May 10, 2019**

### **Graduate Student Competition (continued)**

- 2:00 pm **Deana Bayo:** Grafting as a management tool for bacterial leaf scorch in blueberries, and insights into *Xylella* detection
- 2:15 pm **André Bueno Gama:** Fungicide applications prevent *Colletotrichum acutatum* secondary conidiation from appressoria and conidiogenous hyphae on citrus leaves
- 2:30 pm **Adrian Zuniga:** Resistance evaluation of *Botrytis cinerea* isolates from strawberry to Isofetamid
- 2:45 pm **Michelle Oliveira:** Resistance of *Colletotrichum gloeosporioides* species from strawberry to thiophanate-methyl and azoxystrobin
- 3:00 pm **Naweena Thapa:** Assessing the thermal kill of *Candidatus Liberibacter asiaticus* (CLas) via RNA-assay, as well as graft-based assay
- 3:15 pm Poster session (Coffee & Snacks)
- 4:00 pm Graduate student competition awards  
Business Meeting

### Business Meeting Agenda

Volunteer and Sponsor Acknowledgement

Treasurer's Report, Phil Harmon

Nominate and Elect Secretary for 2019-2021

Select Meeting site for 2021

Business from the Floor

Passing of the Gavel

## Poster Session

**Julie Boswell:** Top Down Novel Method to Inoculate Plants

**Marina Ascunce:** Identifying the vectors and host range of Phytoplasma, the causal agent of the Lethal Bronzing Disease of palm

**Xuechun "May" Wang:** First report of *Bipolaris yamadae* on Guinea Grass in Florida

**Maxwell Duncan:** In vitro inhibition of *Gaeumannomyces graminis* var. *graminis* by St. Augustinegrass rhizobacteria

**Nan-Yi Wang:** Thermotherapy via aerated steam is a safe practice for managing disease in strawberry nursery stock

**Jinyun Li:** Evaluation of the in planta minimum inhibitory concentration of oxytetracycline against *Candidatus Liberibacter asiaticus*

**Sheo Shankar Pandey:** Targeted early detection of citrus HLB causal agent '*Candidatus Liberibacter asiaticus*' before the symptoms expression

**Jin (Joey) Xu:** The structure and function of the global citrus root-associated microbiome

**Hongge Jia:** CRISPR-LbCas12a-mediated modification of citrus

**Wayne Hunter:** Improving RNA interference activity to suppress insect vectors (Hemiptera: *Liviidae*)

**Mahnaz Rashidi:** Localization of Flavi-like virus in Asian citrus psyllid, *Diaphorina citri*, the insect vector of the causal pathogens of Huanglongbing

**Crissy Massimino:** Molecular evolution of yellow genes in *Diaphorina citri* reveals duplications and losses

**Maxwell Reynolds:** Shedding light on cryptochrome and the circadian rhythm pathway in *Diaphorina citri*

**Blessy Tamayo:** A metabolic insight into the Asian citrus psyllid: Annotation of glycolysis and gluconeogenesis pathways

**Yesmarie De La Flor:** Annotation of genes from the melanin biosynthesis pathway in the citrus greening vector, *Diaphorina citri*

**Doron Teper:** TfmR, a novel TetR-family transcriptional regulator, modulates the virulence of *Xanthomonas citri* in response to fatty acids

**Donielle Turner:** Up regulation of membrane trafficking related genes in *Candidatus Liberibacter Asiaticus* infected Asian citrus psyllid

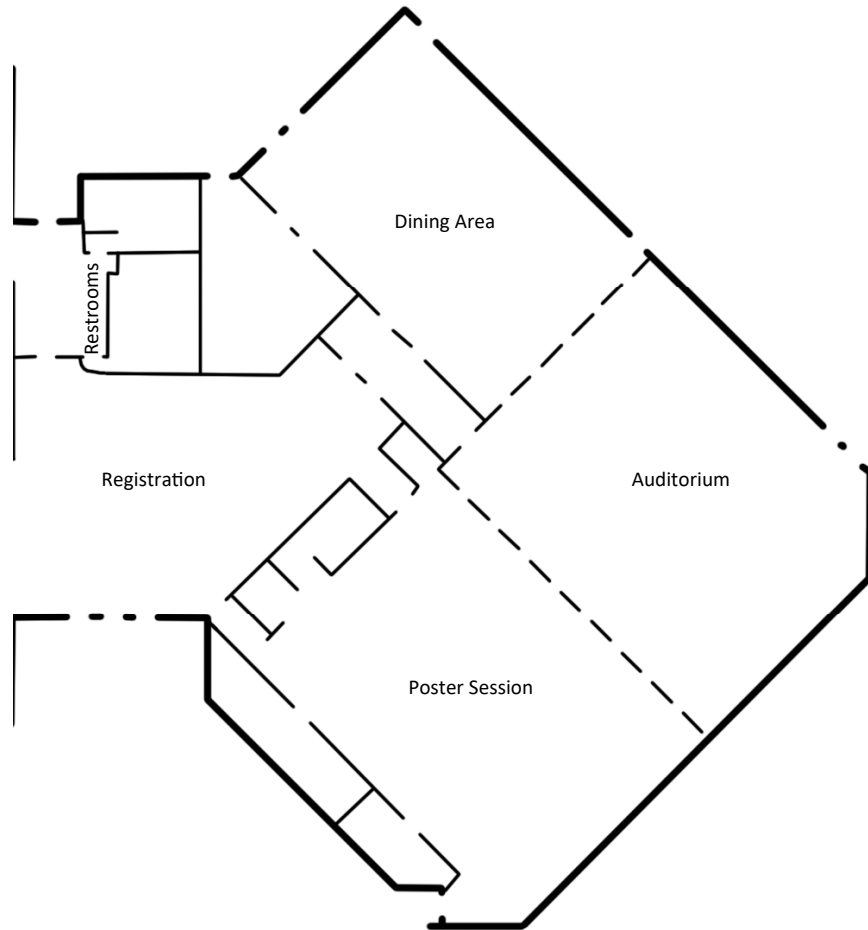
**Megan Dewdney:** Zinkicide improved yield and fruit size on young Huanglongbing-affected trees

## **Blight Bowl Guidelines**

*General Description:* The Blight Bowl is based on a former APS Annual Meeting Event, the DeBary Bowl. Old-timers may remember this once-popular event, which faded away after its organizer and champion, Donald White, retired. The game originally pitted APS divisions against each other, in a (mostly?) friendly competition, held in conjunction with the evening alumni socials. We have adapted the game for the FPS meeting, as follows:

- Teams (5 members each) may be lab groups, research-interest groups, student cohorts, REC centers, extension programs, companies, etc.; groups can form around any common identifier. A sign-up sheet will be available in the registration area from the beginning of the meeting until 6pm on Thursday. A minimum of four teams will be required for the tournament to run.
- At the event, teams will play off in pairs, with the winner of each pair-off advancing to the next bracket, until the “championship” round between the final two teams. Each round will play to 7 points. A question will be posed to the two opposing teams. The first team to buzz in gets to answer the question. If they buzz in before the question is completed, the MC will stop reading the question at the point that the team buzzes in. The team will have 10 seconds to answer the question. Team members may consult with one another prior to answering. If they answer correctly, the team receives a point. If they answer incorrectly, the other team has 10 seconds to supply a correct answer and earn the point. If neither team can provide the correct answer, the MC will read out the answer before moving on to the next question.
- There will be a prize for the members of the winning team. There is no guarantee that the prize will have any aesthetic, utilitarian, or cash resale value.

## Facilities



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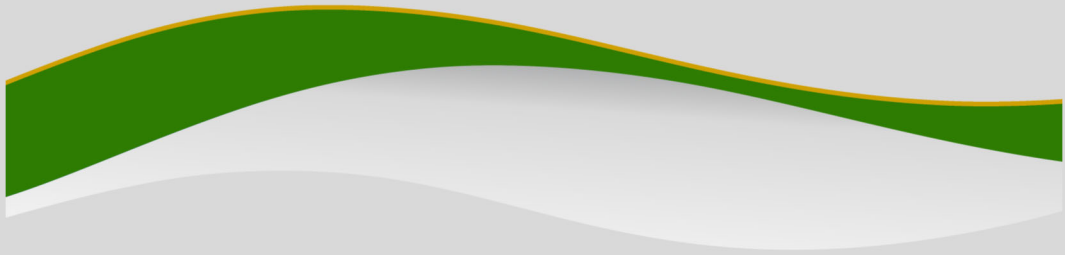


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