15th Biennial Meeting *of the* Florida Phytopathological Society

May 1-3, 2017

Hosted by:

Department of Plant Pathology
Plant Pathology Graduate Student Organization (PPGSO) and
North Florida Research and Education Center (NFREC)
University of Florida

Sponsors of the event:

Location: UF IFAS-NFREC, 155 Research Road, Quincy, Florida, 32351-5677

15th Biennial Florida Phytopathological Society Meeting

Event Coordinators: Susannah Wright (s.wright@ufl.edu, (850) 875-7138), and Charlene Cupp (accupp@ufl.edu, (850) 875-7101)

Agenda

May 1st (Monday): Reception and industry opportunities: Organized by: Wael Elwakil and Patricia Soria

5:30 p.m. Reception starts, followed by industry discussions and dinner (provided)

6:15 p.m. A crop consultant's perspective - Dr. Charlie Mellinger, Director of Technical Services, Glades Crop Care

6.30 p.m Chemical-biological industry opportunities - Dr. Mike Riffle, Manager, Field Development, Valent U.S.A

6.45 p.m Opportunities in the seed industry - Dr. Heather Olson, Research Trial Manager, Monsanto Company/Seminis

May 2nd (Tuesday): Key-note presentation

8:30 a.m. Introduction - Mathews Paret

8:35 a.m. Wilts, Blights and Rots: Health and Survival of Palms in Florida - Dr. Monica Elliott, Professor, Plant Pathology, FLREC, Davie

Special technical session: "Our science and vision for plant pathology in Florida"

Chair/s of the session: Erica Goss and Robin Choudhury

9:35 a.m. Effectors from filamentous pathogens of citrus - Liliana Cano

10:00 a.m. Research towards improved understanding of citrus diseases and their biology and epidemiology and developing effective control strategies - Ozgur Batuman

10:25 a.m. Break

10:40 a.m. A bright future for applied epidemiology: translating information into action - Ian Small

11:05 a.m. Manipulating the soil microbiome for pest control - Jason Hong

11:30 a.m. New tools to study *Citrus Tristeza Virus* and *Candidatus* Liberibacter in vivo - Amit Levi

11:55 a.m. Living in two worlds: Understanding the dual lifestyle of vector-borne plant pathogens through interdisciplinary research - Nabil Killiny

12:20 p.m. Lunch (provided)

1:20 p.m. Demonstration of Research on Precision Agriculture and Unmanned Aerial Vehicles and Guidelines for UAV research - Ian Small, Mathews Paret, Nicholas Dufault, Darren Raj (Agribugs), and David Eyerly (UAV Program Director, EHS, UF)

2:20 p.m. Break

Technical sessions on Plant Pathogens:

Chair/s for the session: Gary Vallad, Wardatou Boukari, Ying-Yu Liao, and Shaheen Bibi

2:30 p.m. Epidemiological studies on *Tomato chlorotic spot virus* - Bindu Poudel

2:45 p.m. Managing reniform nematode (*Rotylenchulus reniformis*) in Florida cotton - Zane Grabau

3:00 p.m. Temperature effects on Fusarium wilt - Sajeewa Amaradasa

3:15 p.m. Impact network analysis of avocado laurel wilt disease - Robin Choudhury

3:30 p.m. Effect of orange rust on sugarcane breeding program at Canal Point - Sushma Sood

3:45 p.m. Calcium signaling is under attack by pathogen effectors - Shad Ali

4:00 p.m. Exploration of (neglected) microbiome of medicinal plants as biocontrol agents - Irum Iqrar

4:15 p.m. TALEome sequence mining reveals a specific adaptation of *Xanthomonas oryzae* pv *oryzae* strains to Japonica rice varieties - Jose Huguet Tapia

4:25 p.m. Break

4:35 p.m. Identification of the novel type III effector XopAZ in *Xanthomonas cynarae* - Jeff Jones

4:50 p.m. The Elongator complex and its role in plant immunity - Zhonglin Mou

5:05 p.m. Role played by soil bacteria in fungal disease - Frank White

5:20 p.m. Practical researches in plant disease diagnosis and management - Xiaoan Sun

5:35 p.m. Whole genome sequencing of *Xanthomonas perforans* strains provides insights into bacterial evolution - Sujan Timilsina

5:50 p.m. Advancing integrated practices for managing bacterial spot in tomato - Gary Vallad

6:10 p.m. Potential of a SAR inducer in reducing symptom expression of Rose rosette disease - Mathews Paret

6:30 p.m. Dinner (provided) and Music by The Crawlers - The americana and bluegrass sounds of The Crawlers feature songs of love, loss, and how to deal with them. Presenting Ross Beck (Banjo), David Laperati (Mandolin), and Kevin Robertson (Guitar): organized by Eric Newberry

"Blight Bowl": Organized by Brantlee Spakes Richter and Jeannie Klein (Guidelines for Blight Bowl in Page 6)

Distinguished Service Awards: Dr. Ariena van Bruggen and Dr. Monica Elliott (Introduced by Amanda Strayer and Sanju Kunwar)

May 3rd (Wednesday): Graduate student competition

8:25 a.m. Introduction and guidelines - Brantlee Spakes Richter

8:30 a.m. Investigations into yellow leaf of sugarcane caused by *Sugarcane yellow leaf virus* in Florida - Wardatou Boukari

8:45 a.m. Phenotypic and genotypic comparisons of *Stagonosporopsis* spp. in Florida, Georgia, and China - Mason J. Newark

9:00 a.m. New findings on pathogen biology of *Plasmopara obducens*, causal agent of impatiens downy mildew - Stephanie N. Suarez

9:15 a.m. Spore production dynamics of *Phyllosticta* spp. in citrus leaf litter associated with citrus black spot in Florida - Ke Zhang

9:30 a.m. Reliability of Florida 1-10 scale for making peanut disease management decisions – Wael Elwakil

9:45 a.m. Developing a GC/MS-based method for phytohormone profiling of *Citrus sinensis* (L.) tissues. - Yasser Nehela

10:00 a.m. Break

10:15 a.m. Transcriptomic analysis of citrus roots in response to *Phytophthora parasitica* infection - Zunaira Afzal

10:30 a.m. Mapping the determinants of self-interaction of *Citrus tristeza virus*-encoded p33 protein - Thi Nguyet Minh Dao

10:45 a.m. Respiration inhibitors vs *Corynespora cassiicola*: Complex resistance revealed in the target spot pathogen of tomato in Florida - Keevan MacKenzie

11:00 a.m. Transgenic approach for improving host resistance in tomatoes against bacterial wilt disease - Sanju Kunwar

11:15 a.m. Tolerance of grapefruit cybrids to citrus canker: New insights in the citrus-pathogen interaction - Mayara M. Murata

11:30 a.m. Lunch (provided)

12:30 p.m. In-vitro azoxystrobin sensitivity of *Colletotrichum gloeosporioides* isolates causing anthracnose on blueberry in north and central Florida - Maria C. Velez-Climent

12:45 p.m. Investigations into sugarcane rusts: Disease prediction modeling and management - Bhim Chaulagain

1:00 p.m. "With a little help from my friends": Towards development of a new epidemiologic model incorporating pathogen biology, management efficacy, and diagnostic information flow within the Florida pepper industry - James Fulton

1:15 p.m. Antibacterial potential of Magnesium oxide nanomaterial to manage bacterial spot disease of tomato - Ying-Yu Liao

1:30 p.m. Resistance of *Colletotrichum gloeosporioides* from strawberry to azoxystrobin and thiophanate-methyl - Michelle S. Oliveira

1:45 p.m. Evaluation of current fungicides for efficacy against cucurbit downy mildew on cucumber - Andrew Shirley

2:00 p.m. Effect of advanced copper nanomaterials on bacterial populations in the soil microbiome - Amanda Strayer-Scherer

2:15 p.m. Steam-generated Thermotherapy: How does Canopy and Root of HLB-affected Citrus trees respond to it? - Naweena Thapa

2:30 p.m. Heat treatment for management of *Botrytis cinerea* inoculum on strawberry - Adrian I. Zuniga

2:45 p.m. Concluding remarks - Mathews Paret and Nicholas Dufault

3:00 p.m. Results of the graduate student competition (*First, second and third prizes*)
Sponsors: Valent, Syngenta, Gowan, Bayer, Sakata, UPI

For additional information contact:

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Registration: https://www.eventbrite.com/e/15th-florida-phytopathological-society-biennial-meeting-tickets-32591110890?utm_term=eventurl_text

Late registration - $80 Deadline: **April 27, 5 p.m,** On-site registration - $90

Free Commuting from Gainesville: Sponsored by: Dr. Rosemary Loria, Chair and Professor, Department of Plant Pathology: To facilitate transport for graduate students, post-doctoral fellows, other scientists and faculty traveling from Gainesville and further south, we will be arranging vans, which will start from outside Fifield Hall, May 1st afternoon. Please contact Dr. Nicholas Dufault - nsdufault@ufl.edu, or sign up using google docs (https://docs.google.com/spreadsheets/d/1p2xof5IHQZmxrp3l2RrZJ7En5k1Vj3SO6g0oW90P5tA/edit?usp=sharing) by **April 24th, 2017** if you would like to use this opportunity, save some money and travel with a group of people and have fun.
Hotel reservation: A block of rooms has been reserved at Hampton Inn, Quincy at $89/night. Please call 850-627-7555 to make the reservation and refer to as "Florida Phytopathological Society Meeting block Rate". Additional information is given below. Deadline for this block rate registration: **April 24th, 2017.**

Confirmation Numbers	Number of Rooms	Room Type
82300969	25	2 Queen Beds
87309961	10	2 Queen Beds
87309961	10	1 King Bed

http://hamptoninn3.hilton.com/en/hotels/florida/hampton-inn-quincy-QUIFLHX/index.html

The 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) will sign up ahead of the meeting. These may be lab groups, research-interest groups, student cohorts, REC centers, extension programs, companies, etc.; groups can form around any common identifier, but we need to know prior to game day how many teams we have signed up so that we can build the bracket. I've set up a google docs sign-up sheet, so that you can enter your team: https://docs.google.com/document/d/10McidIPNW69dc1ygEBvhqTq0oD_T0BQ89tBK58C-SnI/edit?usp=sharing. If a team does not have 5 members at first, they can still sign up and add members later. Please declare your team on the sign-up sheet by **Thursday, April 27th**. And please be careful to edit only your own group entry! There wasn't a free and effective sign-up method available that would let teams continue to edit their own information as they added members while also denying access to other groups' rosters, so we have to accept the risk with the google document and just ask everyone to be careful and honest.
- 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 15 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.

2017 FPS Abstract Submission Guidelines for Graduate Student Competition

Abstracts are limited to 250 words **OR** 1490 characters including spaces, and should include justification, research objectives, methods, results, and significance of the work. If you have submitted an abstract to APS, you may use the same abstract for FPS. The abstracts will appear in the final meeting program distributed on-site, but they will not be published in a publicly available format. Please format your abstract as follows:

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Abstracts will be evaluated on the following criteria:

- Abstract title clearly and accurately reflects the scope of work presented
- Abstract includes justification, research objectives, methods, results, and significance of the work
- Abstract is free of spelling, grammatical, and typographical errors
- Construction is clear and logical, reader can understand the work that was done
- Abstract represents original research findings
- Work to be presented is of significant merit, has potential impact for science/growers

Oral presentations for the graduate student competition will be limited to 15 minutes, including time for questions. Presentations will be rated on both content (50%) and delivery (50%). The following criteria will be evaluated in each category:

Content:

- Research topic is clearly justified
- Current study is contextualized (related to prior research)
- Research objective(s) clearly stated
- Clear hypothesis, if hypothesis-driven (or prior expectation, if discovery-driven)
- Methods are appropriate for the stated objectives/hypothesis
- Adequate experimental controls were used
- Appropriate analyses (molecular, statistical, etc.) were conducted
- Data were appropriately summarized/interpreted
- Conclusions are clearly drawn and consistent with the data presented
- Findings are contextualized (significance explained, future research directions indicated)

Delivery:

- Speaker composure (confident, relaxed)
- Speaker demeanor (enthusiasm, professionalism)
- Audibility and clarity of speech
- Pacing (content fit within allotted time, not rushed, no dead spaces)
- Transitions (leads audience smoothly through the material)
- Level appropriate to audience (pathologists in other research areas would be able to understand and appreciate the work)
- Slide design (clear, consistent, legible, not text-heavy)
- Images and figures (clear, high-quality, easy to read, effectively used)
- Headings and text (free of typographical, spelling, and grammatical errors)
- Audience interaction (speaks to audience, answers questions well)