



**ICPP**  
**BOSTON**  
JULY 29 -  
AUGUST 3 **2018**

# From Start to Finish, Good Times Await!

## Connect with Your Colleagues at the Welcome Reception

Immediately following the Opening Plenary Session on Sunday, July 29, join us in Hall D for the Welcome Reception to experience all the local flavors of Boston. Stroll through different food stations that represent the various neighborhoods of Boston—the North End, Seaport District, Chinatown, Southie, and Fenway—to sample the ethnic flavors and culinary delights of each part of this historic city as you reconnect with colleagues and make new acquaintances.

## Boston Red Sox vs. Phillies on 7/31 at 7:10PM

You just can't plan a trip to Boston that doesn't include Fenway Park! Experience the Major League Baseball tradition at one of the most iconic, oldest ballparks in America! Sit with your colleagues from ICPP in reserved seating in the grandstand and outfield bleachers when the Boston Red Sox take on the Philadelphia Phillies on Tuesday, July 31 at 7:10 PM Eastern Standard Time. Tickets in the block for ICPP2018 must be purchased at the following website:

<https://groupmatics.events/event/icppnight>

Print your tickets before your trip to ICPP and bring them with you to the game. See you at the ballpark!



## Closing Party at House of Blues!

The fun times don't end Tuesday... Get ready for a BIG closing party for ICPP2018 on Thursday, August 2 at the House of Blues, Boston featuring the World Premier Band! Always a crowd-pleaser, the World Premier Band's music will have you dancing and celebrating with hit songs spanning decades and multiple genres to please music lovers. Get a taste of true Americana with great food in addition to great tunes at the House of Blues. This show is just steps away from Fenway Park! Preregistration and ticket purchase is required; see ICPP2018 website for details.

**REGISTER NOW!**

# Are You Ready for ICPP2018?

ICPP2018 will make history in Boston as ISPP celebrates its 50th anniversary. Connect with industry colleagues, meet others from around the world, and discuss new technologies and trends. There may never be a better time for you to attend ICPP than this year in Boston!

## Abstracts Online

Meeting **abstracts are available online** for posters and concurrent sessions. Content in your area of expertise or another specific area of science will be available. Search by keyword and find a topic of interest; then get additional information about it at the meeting. A list of session titles appears on page 83.

## Engaging Session Formats, and Emerging Topics!



### POD Talks

Phytopathologists of Distinction share insights and lessons learned in their colorful career paths in plant pathology. These POD talks are open, informal discussions for anyone at any career stage. Join us for a talk!



### Idea Cafés

Meet with great minds to discuss 20-plus specific topics related to plant pathology, such as teaching, professional advancement, and more.



### Hot Topics

These sessions focus on new and emerging threats and issues and how we can respond to them.



### Workshops

Get hands-on experience with plant-microbe interactions, or study how parasitic nematodes impact crop yields through lab techniques and a slide preparation. Interact and exchange ideas with the ICPP Subject Matter Committee on the topic of *Rhizoctonia* spp. Choose from more than 10 workshops, ranging from introductory to advanced topics.



### Unable to make it to Boston this July? Then participate in live streaming sessions!

To make this meeting more readily available to a global audience, ICPP2018 will offer individuals the opportunity to participate in the Opening and Monday Plenary Sessions via a [live stream](#). Visit the [\\*live stream site\\*](#) for links the day of the event.



## ICPP2018 Sponsors

Thank you to the generous sponsors of ICPP2018. If your organization is interested in becoming a sponsor, visit the ICPP2018 website to learn more. (Sponsors are listed by sponsor level and as of June 21, 2018.)

### PLATINUM

American Phytopathological Society

APS Foundation

Corteva Agriscience, Agriculture Division of DowDuPont

MONSANTO

### GOLD

Chiquita Fresh North America

Mars

Syngenta Crop Protection

### SILVER

Compass Minerals Plant Nutrition

### BRONZE

FMC Corporation

Harsco Metals and Minerals

Plant Tuff Inc.

### SUPPORTING

APS/APHIS Widely Prevalent

Virus Committee

BASF Corporation

Biotrigo Genética

BioWorks, Inc.

Brandt Consolidated

Canadian Phytopathology Society

Chinese Society of Plant Pathology

CSP Labs

French Society for Phytopathology (FSP)

Fungicide Resistance Action Committee (FRAC)

Gylling Data Management

Indigo Ag, Inc.

Italian Phytopathological Society (SIPaV)

Lipman R&D

Phytopathological Society of Japan

Sumitomo Chemical Company, Ltd.

Valent USA LLC

Vanderbilt Minerals

Widely Prevalent Plant Pathogenic Fungi List Working Group

## Get Personal, Get Inspired: Check Out POD Talks at ICPP2018!

Conversations with Phytopathologists of Distinction (PODs) offer congress attendees in all stages of their careers an opportunity to connect with notable phytopathologists in an informal setting, as they discuss their individual career journeys. This year's POD Talk speakers

bring fresh, exciting perspectives that you won't want to miss—plus there is time built in for discussion after each talk! All POD Talks will be presented in the Exhibit Hall.



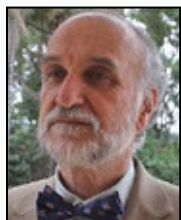
### MONDAY, JULY 30

🕒 16:30



**Jimmy Botella**, University of Queensland, kicks off the series with a talk titled “From

Quantum Theory to Plant Pathogens: You Never Know Where You're Gonna End Up!” Botella started his academic career in quantum chemistry and took exactly one biology class. “Plants were those green bits that stuck out of your Big Mac.” He later came to realize that biology is not a dead science but exactly the opposite. Find out what changed his mind, and learn how he still uses his background in the middle of the jungle!

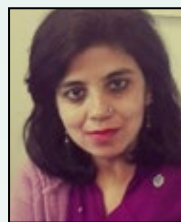


Over the course of his 40-year career, **Francisco J. Reifschneider** has learned to strike a balance

between research and managing international programs. As he has found ways to learn the policies and politics behind international development, he has also continued his research in developing disease-resistant vegetables. This journey has enriched his experience and knowledge as a plant pathologist. Be sure to turn out for his talk to learn more!

### TUESDAY, JULY 31

🕒 16:30



For **Shazia Iram**, Fatima Jinnah Women University, the journey to becoming an accomplished

plant pathologist was not easy. Growing up as a woman in Pakistan presented particular barriers to her science education. Unable to secure a place at a medical school, Iram still continued her education, obtaining an McSc, MPhil, and PhD in plant pathology. Along the way, Iram relied on invaluable mentors, who encouraged her and guided her toward her current career. Her talk will describe this journey and the impact that plant pathologist Iftikhar Ahmed had on her life. This talk is sure to inspire and inform!

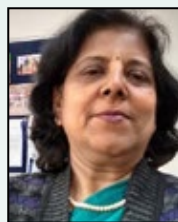


It took one day in a rice field to spark **You-Liang Peng's** passion for plant pathology. After

observing that a heavy rice blast killed almost all the rice seedlings in one field but did not affect a neighboring field, Peng, China Agricultural University, decided to focus his graduate studies on rice blast. In his talk, titled “Environment-friendly management of the rice blast, the goal of my career,” Peng talks about his training and the training and advisors who guided him. Learn more about Peng's ultimate goal, to achieve environment-friendly management of rice blast, and his journey at his talk!

### THURSDAY, AUGUST 2

🕒 16:30



**Rashmi Aggarwal** dreamed of joining the Indian Agricultural Research Institute

(IARI) after finishing her botany honors degree as an undergraduate. After meeting renowned mycologist **K. G. Mukherjee**, Aggarwal became fascinated with mycology and plant pathology. She was selected to work at IARI and specialized in karnal bunt of wheat. Her experiences in the laboratory and the field have taken her on many adventures, and over the span of her 33-year career, she has never looked back. Hear about her journey and work at her talk.



A self-described “accidental plant pathologist,” **Jan Leach** initially felt destined for

veterinary medicine. She soon realized that she didn't want to spend her career seeing animals in pain. A part-time job in plant pathology and some excellent members inspired her to work with sick plants instead. She will share how her other early experiences—from a lab building burning to “accidental tumbles into rice paddies”—brought her to “scientific bliss.” Be sure to catch her presentation for more!

### THURSDAY, AUGUST 2

🕒 17:30



The last POD talk of the congress offers a glimpse into the strong, passionate community of plant

pathologists in Nigeria. **Sylvester Osemare Aigbe** shares the founding story of the Phytopathological Society of Nigeria (PSN). PSN started as a Yahoo Group! in 2008. Inspired by the meetings of other phytopathological societies, Aigbe decided to take on the challenges that came with forming a society in Nigeria. In his own words, “How did a young plant pathologist, from a state university in the countryside, come to form a nationwide phytopathological society, attracting and uniting eminent plant pathologists from all over the nation and abroad? Just come and listen to my story!”

# ICPP2018 Sessions at a Glance

Visit the [ICPP2018 website](#) for abstracts and more information about the sessions and to [register for the congress](#) if you haven't yet! Be sure to [download the official meeting mobile app](#) to start building your meeting schedule!

SUNDAY, JULY 29		
P.M.	<b>Opening Plenary Session: A Healthy Future for Plant Health</b>	
MONDAY, JULY 30		
A.M.	<b>Plenary Session:</b> Plant Health is Earth's Wealth	<b>Concurrent Sessions</b> <ul style="list-style-type: none"> <li>• Microbial Interactions and Resilience for Plant Health</li> <li>• Variability: Friend or Foe of Emergent Forest Diseases?</li> <li>• The History of Plant Pathology- Celebrating the 50th Anniversary of the International Society for Plant Pathology</li> <li>• Interactions Between Endophytes and Pathogens</li> <li>• The Vulnerability of Banana to Globally Developing Disease Threats</li> <li>• Understanding Mechanisms of Resistance and Resistance Costs to Improve Plant Yield</li> </ul>
	<b>Panel Discussion</b> A global classroom: Technology and Teaching Come Together for Better Education on Plant Health	
P.M.	<b>Hot Topic</b> Chocolate Under Threat from Old and New Cacao Diseases	<b>Concurrent Sessions</b> <ul style="list-style-type: none"> <li>• Virus Biology</li> <li>• New Insights into Rice-Pathogens Interactions</li> <li>• Improving Disease Control Through Decision Support with Remote Sensing</li> <li>• Plant Health in a Global Economy: Mobilizing Global Support for a Healthy Planet</li> <li>• Potato Late Blight – Global Research and Networking</li> <li>• Precision Turf and Ornamental Disease Management in the 21st Century</li> <li>• Molecular Virus-Plant Interactions</li> <li>• Mango and Banana Diseases</li> </ul>
TUESDAY, JULY 31		
A.M.	<b>Keynote Session I:</b> Emerging Plant Diseases and Global Food Security	<b>Concurrent Sessions</b> <ul style="list-style-type: none"> <li>• Biocontrol</li> <li>• Emerging Issues and Pathogens Causing Blackleg and Soft Rot of Potatoes World-Wide</li> <li>• This First Line of Defense Against Plant Disease in the Developing World: Mineral Nutrition</li> <li>• Multi-Scale Influence of Weather on Pathogens and Disease Development</li> <li>• Where the Wild Barberry Are: Alternate Hosts, New Virulence and Rust Pandemics That Never Quit</li> <li>• Resistance Breaking Isolates of Plant Viruses: What Are We Going to Do Now?</li> <li>• Aflatoxins</li> <li>• Microbiomes and Disease Management</li> </ul>
P.M.	<b>Panel Discussion</b> Risk and Horizon Scanning Plant Diseases in a Global Economy	<b>Concurrent Sessions</b> <ul style="list-style-type: none"> <li>• Impact of Global Climate Change on Plant Disease</li> <li>• The Most Wanted Global Tree Pathogens: Big Data Approach to Protect Our Forests</li> <li>• Unlocking the Secrets of Suppressive Soils: Insights From the Microbiome.</li> <li>• Innovative Pest Control Technologies for Smallholder Farmers: Cases From the Field</li> <li>• Xylella Fastidiosa: Re-emerging Epidemics of a Global Pathogen and New Challenges for Its Control</li> <li>• Vector Biology and Virus Epidemiology – New Advances That Will Propel Science for the Next Decade</li> <li>• Detection and Diagnostics</li> </ul>
WEDNESDAY, AUGUST 1		
A.M.	<b>Keynote Session II:</b> Novel Approaches to Controlling Insect-Vectored Plant Diseases	<b>Concurrent Sessions</b> <ul style="list-style-type: none"> <li>• Global Impacts of Plant Disease Epidemics</li> <li>• Accessory Genomes, Genome Islands, and Dispensable Chromosomes Fuel Rapid Adaptations in Plant Pathogens</li> <li>• Why Light Matters: New Concepts, Tools, and Practices to Suppress Plant Pathogens and Enhance Plant Health</li> <li>• Progress in Chemical Disease Control</li> <li>• Sequence Based Taxonomies for Plant Pathogens</li> <li>• Molecular Mechanisms of Biocontrol</li> </ul>
	<b>Phyto View</b> Feeding the Future: Partners in Plant Health	

Sessions, continued on page 5

<b>THURSDAY, AUGUST 2</b>		
<b>A.M.</b>	<b>Keynote Session III:</b> The Role of Plant Pathology in Food Safety	<b>Concurrent Sessions</b> <ul style="list-style-type: none"> <li>• Taxonomy of Plant Pathogenic Fungi</li> <li>• Pathogenicity and Resistance in Post-harvest Diseases- Part I</li> <li>• Modern Approaches in Weed Biological Control</li> <li>• Global Impact of International Seed Movement: Regulatory Implications of Seed Health Testing</li> <li>• Challenges and Successes of Agricultural Technology Transfer Globally</li> <li>• Biology of Nematodes</li> </ul>
	<b>Phyto View</b> Agricultural Habits in Epidemiology and Plant Health	
<b>P.M.</b>	<b>Panel Discussion</b> Assessing the Real Impact of Plant Pathology: The Many Hidden Losses Due to Plant Diseases	<b>Concurrent Sessions</b> <ul style="list-style-type: none"> <li>• Farmers and Technology as Partners in Disease Management</li> <li>• Novel and Integrated Approaches to Control Post-harvest Diseases - Part II</li> <li>• Real-time and Spatial Disease Risk Monitoring</li> <li>• Population Dynamics of Fungicide Resistance</li> <li>• Global Challenges in Plant Diagnostics</li> <li>• The Two-for-One Deal: Mechanisms of Plant Cross-tolerance to Biotic and Abiotic Stresses</li> <li>• Nematode Control (IPM)</li> </ul>
<b>FRIDAY, AUGUST 3, 2018</b>		
<b>A.M.</b>		<b>Concurrent Sessions</b> <ul style="list-style-type: none"> <li>• The EMPHASIS Project and Networks for Pest and Disease Management. Practical Solutions for Effective Integrated Management of Pests and Harmful Alien Species</li> <li>• Surveillance for Emerging Plant Diseases</li> <li>• Frontline of Fungal Secondary Metabolite and Mycotoxin Research to Mitigate Threats to Food Security</li> <li>• CRISPR/Cas9 Genome Editing for Plant Pathology and Disease Management</li> <li>• How Apoplastic Events Mediate Host-Pathogen Interactions</li> <li>• Resistance to Nematodes</li> <li>• Molecular Fungi-Plant Interactions</li> <li>• Regulatory Issues Surrounding the Global Movement of Cultures and Collections</li> <li>• COST Action DIVAS: Impacts of Next Generation Sequencing Era in Plant Virology</li> <li>• Advancing Disease Resistance Traits from Lab to Field</li> <li>• Development of Innovative Management Strategies for Economically Important Bacterial Diseases</li> <li>• Advances in Modeling the Fluid Dynamics of Pathogen Transmission and Dispersal</li> <li>• Fungal Effectors</li> </ul>
<b>P.M.</b>	<b>Closing Plenary</b> Global Food and Nutrition Security – From Challenges to Solutions	<b>Concurrent Sessions</b> <ul style="list-style-type: none"> <li>• Advances in Oomycete Detection and Screening</li> <li>• Oomycetes in Global Agriculture</li> <li>• Disease Control and Fungicide Resistance</li> <li>• Wheat Blast – Developing Strategies for Assessing and Managing a Global Threat on the Move</li> <li>• Innovative Technologies for Monitoring Emerging Diseases</li> <li>• Vector-Pathogen Complexes Around the World: What Could Be the Next Big Threat to Food Security?</li> <li>• Fungal Canker and Vascular Diseases: A Global Threat to Woody Plant Health and Introduction of the Sentinel Concept</li> <li>• Bacterial Effectors</li> <li>• Fungicide Resistance Management</li> </ul>

## Premeeting Events

SATURDAY, JULY 28, 2018		
Field Trips	Workshops	Satellite Meetings
<ul style="list-style-type: none"> <li>• New England Forest Health Issues: Drought, Forest Insects and Diseases</li> <li>• Cranberry Production and Disease Tour</li> <li>• Ornamental</li> <li>• A New England and Plant Pathology Foray</li> </ul>	<ul style="list-style-type: none"> <li>• Introduction to R for Plant Pathologists</li> <li>• Effector-Detector Plants: Teaching and Research tools for Monitoring Pathogen Virulence Live</li> <li>• Population Genomics in R</li> <li>• Introduction to Multivariate Statistics Using R</li> <li>• Rhizoctonia at a Crossroads: Research Advances and Challenges</li> </ul>	<ul style="list-style-type: none"> <li>• Impact of Viroid Research on Seed Health, Plant Certification and World Trade</li> <li>• 6th International Oomycetes Workshop: Phytophthora, Pythium, Downy Mildews and Related Genera</li> <li>• Fusarium Wilt Disease of Banana: Recurrence of a Global Menace</li> <li>• The International Agricultural Microbiome Research Coordination Network: Scope, Synergies, and Scale</li> <li>• Biology of Rust–Host Interactions and the Future of Durable Disease Resistance</li> </ul>
SUNDAY, JULY 29		
Field Trip	Workshops	
Arnold Arboretum at Harvard University	<ul style="list-style-type: none"> <li>• Applications of Information Theory in Plant Disease Management: Theory and Practice</li> <li>• Leveraging Cultural Diversity</li> <li>• Using Microscopy for Nematode Diagnostics</li> <li>• English Scientific Writing: Avoiding Some Common Writing Errors</li> <li>• Hands-On Analysis of Amplicon Sequence (AmpSeq) Data for Targeted Multiplexed Genotyping</li> <li>• How to Develop a Research Program in Africa: Lessons From Across the Developing World</li> <li>• How to Write Winning Grant Proposals</li> <li>• Analysis of Microbiome Community Data in R</li> <li>• Network Analysis in Plant Pathology</li> <li>• Fungicide Resistance - Detection, Characterization and Management</li> </ul>	



### Download the ICPP2018 App for the Program and More

The ICPP2018 mobile app is now available for your smartphone or tablet. Browse the program and exhibitor list, customize your schedule, connect with other attendees, or even make an appointment with a poster author. The ICPP Mobile App is a must if you will be attending! [Download the app](#) and start setting up your schedule ahead of time!

## 2018 APS Annual Meeting Exhibitor List

Representatives from leading industry suppliers will answer questions and share information about their products and services. (Exhibitors are listed as of June 21.)

Agdia, Inc.	Corteva Agriscience,	Nano Diagnostics, LLC
APS Foundation	Agriculture Division of	New Phytologist Trust
APS Office of International Programs (OIP)	DowDuPont	OPS Diagnostics
APS Office of Public Relations and Outreach (OPRO)	CSP Labs, Inc.	OptiGene Limited
APS PRESS	Dino-Lite Scopes	PathSensors, Inc.
APS Public Policy Board (PPB)	Environmental Growth Chambers	Penn State Department of Plant Pathology and Environmental Microbiology
BASF Corporation	Fungicide Resistance Action Committee (FRAC)	Percival Scientific, Inc.
Bio Chambers Incorporated	Gylling Data Management, Inc.	PhytoAB, Inc.
BIOREA AG/Eurofins	International Congress for Molecular Plant-Microbe Interactions (IC-MPMI)	<i>Phyto</i> Technology Laboratories
BioDiagnostics, Inc.	International Society for Plant Pathology	Springer
British Society for Plant Pathology	Microbiology International	The Phytopathological Society of Japan
CABI	MONSANTO	U.S. Department of Agriculture (USDA)
Convion		