

“6th International Oomycetes Workshop” satellite meeting at the International Congress of Plant Pathology (ICPP 2018) in Boston.

One hundred eight scientists including participants, speakers, moderators and collaborators from twenty five countries from all continents of the world including Australia, Argentina, Belgium, Canada, China, Check Republic, Estonia, France, Germany, India, Italy, Japan, Mexico, Netherlands, New Zealand, Nigeria, Philippines, Papua New Guinea, Peru, FSA of Puerto Rico, South Africa, United Kingdom, Uruguay, and the United States of America participated at the truly memorable 6th International Workshop on the Oomycetes (*Phytophthora*, *Pythium*, Downy Mildews and related genera) “Oomycetes in the era of Plant Health in A Global Economy”. This event was offered as a “satellite meeting” of the 11th International Congress of Plant Pathology (ICPP) in Boston, Massachusetts, USA during July 28th, 2018. The “satellite meeting” event was presented by the ISPP Subject Matter Committee (SMC) of the [Oomycetes](#) link with Chair and workshop organizer: **Gloria Abad** [USA - USDA-APHIS-PPQ-Center of Plant Health Science and Technology Beltsville Laboratory (CPHST-BL)]; Co-Chairs: **Marco Thines** (Germany - Biodiversity and Climate Research Centre and Goethe University - Frankfurt) and **David Cooke** (UK - The James Hutton Institute, Dundee), and 35 members from 14 countries. Along with Gloria Abad, the workshop content and planning was aided by David Cooke (UK), **Frank Martin** (USDA-ARS), **Guillaume Bilodeau** (CFIA- Canada), **Subodh Srivastava** and **Yazmín Rivera** (CPHST BL), **Ronald French-Monar** (USDA-APHIS-PPQ-FO-PGQP), **Carla Garzón** (Oklahoma State University, USA), and **Lina Quesada** (North Carolina State University, USA). This important international event had the International Patronage from the Italian Phytopathological Society (SIPaV); Latin American Association of Phytopathology (ALF) and Phytopathological Society of Nigeria (PSN) and was sponsored by five APS Committees including Diagnostics, Mycology, Plant Pathogen and Disease Detection, Regulatory Plant Pathology and the Office of International Programs and the APS-Caribbean Division.

The schedule of the event started with “Opening Remarks” by **Mary Palm** [American Phytopathological Society (APS) President, and the Introduction of the event was presented by Gloria Abad. **Greg Johnson** (ISPP President) visited the event during the lunch break. The Program for the workshop featured the contributions of 25 Speakers – world renowned authorities in the area of Oomycetes. Topics were presented in seven sessions including: **Session #1:** Taxonomy and Nomenclature: Past, present, and future. Moderator: **Hai Nguyen** (Canada), Speakers: Gloria Abad (USA); Carla Garzón with two co-authors (USA and Taiwan); and Marco Thines (Germany, remote presentation). **Session #2:** Identification and diagnostics: From the traditional tools to the Innovative Genomic Sequencing Technologies (IGST) including NGS and TGS. Moderator: Guillaume Bilodeau (Canada). Speakers: **Steven Jeffers** (USA); David Cooke with 7 co-authors (UK); Frank Martin (USA); **Richard Hamelin** (Canada). **Session #3:** Diversity in cultivated and natural environments: The global spread of pathogens. Moderator: Ronald French (USA). Speakers: Diversity in Europe by **Santa Olga Cacciola** with 3 co-authors (Italy, and UK); diversity in Japan **Koji Kageyama**; diversity in Latin America **Pablo Grijalba** with 10 co-authors (Argentina, Brazil, Colombia, Chile, Peru and Uruguay); diversity in North America by Guillaume Bilodeau with 4 co-authors (Canada, Mexico and USA); diversity in Oceania by **Treena Burgess** with 2 co-authors (Australia remote presentation), global spread of Downy Mildews by Marco Thines (Germany, remote presentation). **Session #4:** Management and control: Advanced IPM-tools, improved biocontrol, enhancing resistance, sustainable production, agricultural systems for the future. Moderator: Yazmín Rivera (USA). Speakers: **David Shew** (USA); **Lina Quesada** with 3 co-authors (USA); **Aleš Lebeda** with 3 co-authors (Czech Republic); **Mohamed Khan** (USA). **Session #5:** Plant pathogenic Oomycetes of concern: Trade regulations, advanced monitoring and certification. Moderator: Yazmin Rivera (USA). Speakers: **Jo Anne Crouch** with 2 co-authors (USA); **Susan J. Frankel** (USA); **Sarah Green, David Cooke** with 11 co-authors (UK). **Session #6:** Plant pathogenic Oomycetes: The era of genomics and microbiomics. Moderator: David Cooke (U.K.). Speakers: **Brett Tyler** (USA); **Richard Michelmore** with 15 co-authors (USA, India and Philippines). **Session #7:** New technologies for Oomycete research: looking to the future. Moderator: Frank Martin (USA). Speakers: Yazmín Rivera with 4 co-authors (USA, Taiwan); **Jimmy Botella** with 4 co-authors (Australia); **James Brayer** (USA); Shankar Shakya, **Niklaus Grünwald** with 11 co-authors (USA, Czech Republic, Australia, Italy); Gloria Abad with 4 co-authors (USA, Australia).

All authorities of the Oomycetes had “outstanding” presentations and some of them presented the work that they build in collaboration with one or many institutions around the world. Among them **James Brayer** (UK-USA Oxford Nanopore Technologies) presented aspects of a recently introduced portable sequencing device “MinION” for Next-Next Generation Sequencing (N-NGS = Third Generation Sequencing). This was the first time that the MinION (N-NGS) was presented in a forum of Plant Pathology. Another speaker **Jimmy Botella** with 4 coauthors (Australia) talked about an innovative method for DNA extraction in 30 seconds in his presentation “Nanotech + Molecular Biology + Electronics: Combining complicated technologies to simplify your life”. To close the event Gloria Abad made the official presentation to the international community of the Beta version of the “IDphy: Molecular and Morphological Identification of *Phytophthora* Based on the Types,” an “online resource” with Lucid Key, and Tabular Key that she has implemented in collaboration of Treena Burgess (Australia), **Amanda Redford**, John Bienapfl, Leandra Knight and Michael Coffey (USA). This IDphy online resource has been introduced to facilitate accurate and robust identification of species using Ex-type specimens and is the first online resource of this kind implemented for plant pathogens. Fourteen posters were presented by scientists working in Argentina (Grijalba et al.; **Palmucci and Wolcan**. **Canada (Van der Heyden et al.); Japan (Afandi et al.); Taiwan (Huang J.), and USA (DeJulio et al; Ratti and Goss; Estévez de Jensen et al.; LeBlanc et al.; Frankel, S.J. et al.)**. Special acknowledgement was presented during the event to Marco Thines who sponsored the remote presentations from Germany and Australia. This workshop has been considered as one of the best according to manifest of the participants.