

The Annual Conference of these Premier Scientific Societies













CONFERENCE REPORT—BOTANY 2021

Overview

Participating Societies

Mycological Society of America American Fern Society American Society of Plant Taxonomists Botanical Society of America International Association of Plant Taxonomists Society of Herbarium Curators

Abstract Submissions

Oral and poster Presentations opened March 2, 2021 Recent Topics opened in early June

Presentation Video Uploads

Information about uploading pre-recorded posters/colloquia/contributed talks was emailed June 17; deadline to upload recordings is July 12

Conference Registration

Opened March 15; included demographic survey

Updates and News

New Opportunities

Botany 2021 and Plant Biology 2021 came together to organize a Joint Session to be open to all attendees of both conferences. The Joint Session will be in the format of a Symposium, with half-hour talks by five international experts who will speak on diverse symbioses, including endophytes, endofungal symbionts, mycorrhizae, and lichens. The session was organized by a team of three members selected from ASPB (American Society of Plant Biologists), MSA (Mycological Society of America), and Botanical Society of America.

Registrants for Botany 2021 and Plant Biology 2021 will have the opportunity to purchase access to on-demand recorded content for the other conference; information will be shared at some point during the conferences and interested registrants will be able to express their interest in obtaining information about how to purchase this access.

Procedural Changes/Notes

After several requests to "defer" colloquia and/or symposia that had been accepted for Botany Conference, it became apparent that we needed a policy for such requests. After discussion amongst the Planning Committee, it was decided that proposals that were withdrawn after being accepted for a Botany Conference would need to be resubmitted for the future conference and evaluated along with all other proposals: that is, proposals may be WITHDRAWN but they will no longer be considered as DEFERRED since they would need to compete for acceptance again (not automatic inclusion at the later conference).

Considering the financial struggles brought about by the COVID-19 pandemic, the BSA Board voted to cover the financial losses to the conference so that student and post doc registration fees could be significantly lowered for Botany 2021. These measures were done after consultation with all partnering societies.

Conference Content

Featured Speakers

Plenary Speaker – Beronda Montgomery
BSA's Emerging Leader – Christopher Muir
Annals of Botany Special Lecture – Mario Vallejo-Marin
ASPT Incoming President Talk – Carolyn Ferguson
Belonging in Botany Lecture: Perspectives on DEI - David Asai
Kaplan Memorial Lecture – M. Alejandra Gandolfo
Incoming BSA President Talk – Michael Donoghue
MSA Presidential Address - Marc Cubeta
MSA Karling Lecture – Anita Sil

Workshops

Complete descriptions are on the Botany 2021 website

All Day 9:00 am - 5:00 pm

• Using deep learning with digitized herbarium specimen image data

Submitted by: Richard Hodel, National Museum of Natural History

- Using Digitized Herbarium Data in Research: Applications for Ecology, Phylogenetics, and Biogeography Submitted by: Pamela S. Soltis, University of Florida
- de novo genome assembly and annotation with an emphasis on phylogenetic and population genetic studies

Submitted by: Jacob Landis, Cornell University and Boyce Thompson Institute

Introduction to High-Throughput Sequencing: Techniques, Applications, and Analysis

Submitted by: James Beck, Wichita State University

Morning, Half-Day, 9:00 am - 12:00 pm

• Navigating the submission and peer review process Submitted by: Michelle Gaynor, University of Florida

Morning, Two-Hour, 10:00 am - 12:00 pm

• Creating A Platform to Connect Research Across Plant Families

Submitted by: Chelsea Pretz – University of Colorado

• Deep Learning-Based Object Detection for Plant Scientists

Submitted by: Christoph Oberprieler

Afternoon, Half-Day, 1:00 pm - 5:00 pm

• Herbariomics-based biodiversity research: from specimen to phylogeny

Submitted by: Liming Cai, University of California, Riverside

Afternoon, Two-Hour, 1:00 pm - 3:00 pm

- Challenges and successes of research at primarily undergraduate institutions: Jump starting your 2021-2022 research program Submitted by: Jennifer Ison, The College of Wooster
- Tips for Success Applying to Graduate School Anna Monfils

Pre-conference Workshop June 15th

• Ace It! Preparing your Presentation - Bruce Kirchoff

Socials / Gatherings

- American Fern Society Luncheon
- Careers in Botany "Student Luncheon"
- Student Networking Social (two evenings)
- Belonging in Botany Discussion (following special lecture)
- LGBT and Friends Mixer
- BIPOC Mixer
- AAPI Mixer
- Sci-Comm Celebration
- MSA Auction
- MSA Musicians Jam Session

Symposia

Frontiers in Botany: Environmental DNA as an Emerging Tool for Measuring, Monitoring, and Managing Plant Biodiversity
Organized by: Brenda Molano-Flores and Mark Davis

Sponsored by: ASPT, and BSA Ecology, Genetics, and Northeast Sections

• The Hills are Alive: Ecology and Evolution of the Intermountain West Flora

Organized by: Catherine Rushworth and Susana Wadgymar

Sponsored by: ASPT, and BSA Ecology, Economic Botany, and Northeast Sections

Applications of CRISPR technology across the plant tree of life

Organized by: Shengchen Shan, Douglas E. Soltis, Pamela S. Soltis, W. Brad Barbazuk, and Bing Yang

Sponsored by: BSA Economic Botany, Genetics, and Northeast Sections

The Botany of Invasions

Organized by: Nicholas Kooyers, Brittany Sutherland, Craig Barrett, Maribeth Latvis, Erin Sigel, Michael McKain, and James

Sponsored by: ASPT, and BSA Ecology, Genetics, and Northeast Sections

• Gene regulatory networks in fungal development and morphogenesis - towards fungal evo-devo

Organized by: Jaqueline Hess and Laszlo G. Nagy

Sponsored by: MSA and BSA Mycological Section

Colloquia

• Chromosome and Karyotype Evolution in Plants

Organized by: Rebekah Mohn and Amanda Grusz

Mechanisms underlying exceptional plant diversity across eastern Asia

Organized by: AJ Harris and Huafeng Wang

Reasons for Rarity? Exploring Acclimatory and Adaptive Constraints to Commonness

Organized by: Jennifer Cruse-Sanders and Jennifer Nagel Boyd

• PhyloCode 2020: Naming the Tree of Life

Organized by: Nico Cellinese and Michael Donoghue

• The Contribution of Regional Flora Projects to the Global Strategy for Plant Conservation

Organized by: Nina Rønsted and David Lorence

Enhancing Quality and Use of Herbarium Collection Data through Community Data Curation

Organized by: Joe Miller, Gil Nelson, Erica Krimmel, Anne Bruneau, Barbara M. Thiers, and Sandy Knapp

• Darwins' reversals: What we now know about Feralization and Crop Wild Relatives

Organized by: Makenzie Mabry and Alex C. McAlvay

Modeling the processes that mediate speciation and extinction rates across plants

Organized by: Carrie Tribble and Rosana Zenil-Ferguson

Phytochemistry: From atoms to organisms

Organized by: Gaurav Moghe and Robert Raguso

• Speciation Mechanisms in Plants

Organized by: Patricia Bedinger, Lila Fishman, Kathleen Kay, Jeremiah Busch, and Susan Kalisz

Joint Symposium with Plant Biology World Summit 2021 (American Society of Plant Biologists)

• An Exploration of Inter-Kingdom Interactions

Organized by: Heather Hallen-Adams, Gary Stacey, and Elizabeth Kellogg

Other Conference Enhancements

Yoga sessions each morning

Botany Trivia Game - organized by Minya and Others

MSA Musicians - jam session

2 Botanical Drawing sessions - Betsy Barry (Tuesday) and Alice Tangerini (Friday) at noon

CV Review Sessions daily

Black Botanists Week Pre-Event

Presentation: William L. Brown Award for Excellence in Plant Genetic Resources Conservation

Botanical Concoctions with Rachel Meyer

Future Conferences

Re-Negotiated the contract with Boise - without penalties - July 22-26, 2023

Botany 2021- Virtual! Statistics

As of July 6th

• 1248 Registered

344 Professionals – 27.6%

506 Students - 40.6%

116 Post-Docs - 9.3%

795 BSA Members - 64%

52 Counties represented

1111 Presentations

669 Papers

315 Posters

9 Special Presentations

5 Symposia

1 Joint Symposium with ASPB

10 Colloquia

25 Lightening Talks

2 Discussion Sessions

18 Workshops