

ASPB MIDWESTERN SECTION NEWSLETTER

Spring 2015
Volume 1, Issue 3



States included: IA, IL, IN, KS, KY, MI, MN, MO, ND, NE, OH, OK, SD, WV, WI Canada - MB, ON

Another Successful MW Section Annual Meeting

Darron Luesse
Southern Illinois University Edwardsville
Chair, Midwestern Section, ASPB

The Midwestern section of the American Society of Plant Biologists held its annual meeting on March 21- 22 at the Donald Danforth Plant Science Center in St. Louis, MO. Over 150 attendees from 37 institutions across the Midwest were present for 32 oral presentations and over 70 posters. The talks and presentations were mainly given by undergraduate and graduate students, but also included two talks from postdoctoral associates and one representative from industry. The keynote address was delivered by Dr. Scott Peck from the University of Missouri, Columbia. The meeting also included a featured talk from Dr. Sona Pandey from the Donald Danforth Plant Science Center. Susan Cato and Shoshana Kronfeld from the ASPB were also on hand to deliver information about new membership initiatives and solicit feedback from members of the section.

In addition to oral presentations, the meeting featured several chances for informal scientific interactions and catching up with friends. The poster session on Saturday afternoon was a great chance to see examples of the cool science being done across the section. There were also several coffee breaks for catching up with friends and tours of the impressive Donald Danforth Plant Science Center. Saturday was capped off by the traditional banquet, allowing everyone to relax after a long day.

One highlight of the meeting was the presentation of student awards. While all of the presentations and posters were of very high quality, the section recognizes those that stand out above their peers. Awards for Best Undergraduate Oral Presentation were given to Dennis X Zhu, University of Missouri-Columbia, (1st place), Charles A Cook, Ohio University (2nd place), and Spencer Schreier, South Dakota State University (3rd place). Awards for Best Undergraduate Poster were given to Marissa Fabbri, Truman State University (T-1st), Jordyn Williams, Truman State University (T-1st), Helen Liu, University of Illinois at Urbana-Champaign (T-2nd) and Roberto Alers-Velazquez, Ohio State University

Inside This Issue

Recap of MW Section Meeting	1
Five Questions With...	2
Cleveland Botanical and Holden Arb Integrate	3
Fascination of Plants Day	4
'Sounds of Science'	5
Announcements	5

(T-2nd). In the graduate student categories, Best Oral Presentation awards were given to Carina Collins, University of Missouri-Columbia (1st), Xiaolong Lu, Saint Louis University (2nd), Tami Coursey, Ohio State University (T-3rd), and Enkhtuul Tsogtbaatar, The Ohio State University (T-3rd). Best Graduate Student Poster Presentation awards were given to Sarah Hutchinson, Southern Illinois University Edwardsville (T-1st), Nadeesha Rajapaksha, Saint Louis University (T-1st), Lingyan Jiang, University of Missouri (T-2nd), Columbia, Tyler Dowd, University of Missouri-Columbia (T-2nd), and Nicholas Heller, University of Illinois at Urbana-Champaign (3rd).

At the business meeting, it was determined that the next meeting would likely be held in the western portion of the section, possibly South Dakota. It will be organized by ascending section chair Aaron Wyman. The meeting was brought to a close on Sunday afternoon by section chair Darron Luesse, after thanking everyone who helped organize the meeting, including vice-chair Aaron Wyman and local organizer Dmitri Nusinow.

We hope everyone will join us again next spring in South Dakota for another great meeting.



Photos from the 2015 MW Section meeting in St. Louis. Courtesy of Darron Luesse.

Five Questions with Midwest Section member...

...Susanne Hoffmann-Benning, Assistant Professor in the Department of Biochemistry and Molecular Biology at Michigan State University.

1) What is your favorite thing about living and working in the Midwest? Midwesterners are easy going and very welcoming to newcomers. The science community is very supportive of new faculty, postdocs and students. I particularly like how we have come together to integrate students, both graduate and undergraduate, and how we give students and postdocs an opportunity to practice giving oral presentations at our MW section meetings. These opportunities are becoming increasingly rare and will serve them well after graduation and during job searches.

2) What has been the benefit to you of belonging to the Midwestern section of ASPB? I've made a lot of new friends and connections at the MW Section meeting that I might have missed out on at the big meetings. The biggest benefit though, due to the low cost and proximity, is that I can afford to bring my students, even undergrads, to the MW section meeting and give them insight into what a scientific meeting and being a member of a science community is like. It's a great experience for them. The undergrads are typically completely burned out by the end of the meeting; but they are also excited about the interactions, the interest in their work, the feedback to their presentations and the friendly and constructive atmosphere. All of my students tend to be bubbling with ideas on the way home. More than one has gotten hooked on science that way.

3) Who or what has inspired your work the most? Jan Zeevaart - he was on my thesis committee and several years later, my postdoctoral advisor. He gave me the freedom to stray from the originally defined topic and branch into a slightly different field. The methods I learned while in his lab and the data I obtained inspired my current research. What impressed me most was how Jan managed to find time to do experiments and kept learning new techniques up until his retirement. He was demanding but at the same time he was very proud of the



"...we are never too old to learn new things and...it's okay to diverge from the established path."

accomplishments of his students and postdocs. He showed me that we are never too old to learn new things and that it's okay to diverge from the established path.

4) What projects are you excited about working on in the future? Scientifically speaking: I would love to show if and how lipids move in the phloem or, at the very least, how these phloem (phospho-) lipids interact with phloem proteins and what their function is. There may be new aspects of signaling that we haven't uncovered yet and that may show us paths to produce more food.

Education: The Midwest Section meetings have made me realize that undergraduate students in my university are not as skilled in giving talks as student in smaller colleges. I would love to introduce a class that teaches undergraduates how to critically read a paper, how to extract the relevant information, and how to present and discuss it. This would also serve as a confidence-building exercise so that they are not afraid (shy) to discuss science and interact with other (more senior) scientists.

My most exciting project: my first two graduate students will defend their theses at the end of summer/early fall. It is a little sad but also very exciting to see them take flight.

5) What is one of your hidden talents? Not so hidden to my family and nothing fancy, but I love baking and changing the recipes to improve the outcome.

Have you paid your \$5 dues to become a member of Midwestern Section of ASPB? If you are not already a 2015 member, join [here!](#)



Cleveland Botanical Garden and the Holden Arboretum Launch Integration

Vicki McDonald, Holden Arboretum vmcdonald@holdenarb.org

In an unprecedented move for large public gardens nationwide, The Holden Arboretum and Cleveland Botanical Garden this past fall announced the formal launch of their integration with one another. The Board of Directors for each organization voted to officially begin the process of joining together.

The new entity, which will become the 13th largest public garden in the United States, will do more to enhance Northeast Ohio and the world through trees and plants than either organization ever could on its own.

“Our members, donors and the community at large have given our plan a resounding endorsement; and we are so grateful for the incredible philanthropic support we have received,” says Natalie Ronayne, who has headed the Botanical Garden since 2007 and will become Executive Vice President of the integrated organizations. “Because of their endorsement, Clevelanders and Northeast Ohioans will enjoy one of the finest public gardens in the world with both urban and exurban campuses to visit and explore all year long.”

“The community support has been phenomenal, and we believe this integration will serve as a model for other not-for-profits to collaborate in significant ways for the betterment of their communities for generations to come,” says Clement W. Hamilton, Ph.D., who has headed the Arboretum since 2008 and will serve as President and CEO of the new organization.

As a result of the Arboretum and Botanical Garden coming together, the communities, schools and forests of Northeast Ohio will benefit as they build upon their already successful education and outreach efforts. Those include, to name a few, the Botanical Garden’s urban-agriculture program for teens and the Arboretum’s community-forestry program and Growing Students and Science for 2nd through 5th graders.

“Now, we will have the scale to do so much more to establish our campuses as world-class visitor experiences, to become leaders in scientific research and to make a greater positive impact on our communities through urban-greening and community-forestry initiatives,” says Hamilton. “The opportunities ahead are amazing.”



About Cleveland Botanical Garden

Cleveland Botanical Garden is an ever-changing urban escape featuring beautiful gardens, an exotic glasshouse and enchanting events. Founded in 1930 and located on 10 acres in the heart of Cleveland’s University Circle cultural district, the Botanical Garden attracted 188,000 people in 2013 and has its highest membership ever – 8,300 households. As a year-round attraction, the Botanical Garden educates and inspires guests inside its Eleanor Armstrong Smith Glasshouse, which is the only conservatory in the country with two distinct biomes – the rainforest of Costa Rica and the spiny desert of Madagascar. The Botanical Garden manages six learning farms in urban areas as part of its outreach program, Green Corps, which provides work-study opportunities for teens and school gardens for students of all ages.

About The Holden Arboretum

The Holden Arboretum is an outdoor living museum that promotes the beauty and importance of trees and other woody plants to create sustainable and healthy communities in the Great Lakes region and beyond. Covering more than 3,600 acres, Holden is one of the nation’s largest arboretums. It is home to a diverse collection of trees from around the world, themed gardens, over 2,000 acres of protected forests, and more than 20 miles of hiking trails. Holden envisions a Northeast Ohio in which trees, forests, and gardens provide maximum ecological and social benefits to the region’s communities. To that end, Holden focuses its mission programs on growing trees and communities, conserving native forests, and engaging children with plants. Founded in 1931, Holden is supported by The Holden Trust, earned revenue, and many generous donors. Holden attracts over 90,000 visitors annually and has a membership of around 6,500 households.

Fascination of Plants Day

Katie Engen

ASPB Education Coordinator

Fascination of Plants Day is a worldwide celebration of all plant-related topics including basic plant science, agriculture, horticulture & gardening, forestry, plant breeding, plant protection, food & nutrition, environmental conservation, climate change mitigation, smart bioproducts, biodiversity, sustainability, renewable resources, plant science education & art. The primary goal is to fascinate the world public with the essential role plants play in all our lives and to inspire exploration of the new potential applications plant sciences can offer.

FoPD Roots

Launched under the umbrella of the European Plant Science Organisation (EPSO—www.epsoweb.org), Brussels, the third international FoPD will be held on May 18th 2015. This follows up on the success of the first event which took place in 2012 and the second in 2013 for which over 689 institutions from more than 54 countries world-wide organized over 1000 events attracting many thousands of people. Information about the international components of this initiative can be accessed at www.plantday.org

Planted in the USA

ASPB serves as the National Coordinator in the US. Our goal is for a large number of US-based scientific institutions, universities, botanical gardens, museums, farmsteads and companies, to host a variety of plant-based events for all interested people from toddlers to grandparents.

Our online basecamp full of ideas starts with this landing page where users can find:

- Specific resource guides here. The guides are designed to serve K-12, Higher Education, Media, Public or Informal Education audiences. Most all the suggested resources are free.
- Events others have organized so far are posted on the FoPD US Map. It will be great to add yours!
- The four FoPD-US contests:
 - i. Photo
 - ii. Design a T-shirt
 - iii. Video (short)
 - iv. Coming soon: Name a Cultivar



Get on the FoPD Map!

As soon as you have an idea, contact Katie Engen (katie@aspb.org). A blurb and location details will be posted on the FoPD US Map. Not only does this get your campus or group a little PR boost, but since we link with the international website you also will get recognition on the world stage. And your idea may inspire other plant experts – anywhere in the U.S. or the world - to try something, too.

FoPD – Before, On or After May 18

Of course most college campus calendars do not align well with May 18th. So you can use May 18 as a target date for reporting your event's success (and not as an event deadline). Many event organizers host activities throughout the day and then send a follow up recap with me by ~May 18th.

A Tiny Seed Will Grow

You may not have time for a big event. Small works, too. Really – just adding a 20-minute 'something little' to an undergraduate lecture with the intention of generating fascination with plants is a great. Examples: a TED Talk video with 1-2 related follow up questions; an assignment to tweet using #FoPD and #plantsci about something 'fascinating' that plants do or make.

Be sure to report whatever you will do to [Katie@aspb.org](mailto:katie@aspb.org)



'Sounds of Science' Make Plants Sing

Berkley Walker

*USDA/Carl Woese Institute for Genomic Biology
University of Illinois*

Sounds of Science is a unique collaboration between plant scientists and music students at the University of Illinois. The scientists provide primary research data which the musicians then use to create an original musical piece. "As composers, our material is sound..." says Kyle Shaw, a music composition graduate student at the University of Illinois, "...anytime we get the opportunity to get our hands on new clay...that's always very exciting". Shaw and six other composition students showcased their work alongside plant scientists this past fall at the Krannert Art Museum. The concert brought together a diverse group of musicians and scientists to help expose audiences to the plant science research that is

fundamentally shifting our understanding of how plants work and how we can sustainably use them to meet growing demands for food, fiber and fuel. Additionally, the performance brought new insight to young scientists. "The visual aspect of looking at data is dramatically different from actually hearing your data. It makes a big difference," said Setu Chakrabarty, a graduate student in Plant Biology at the University of Illinois. Both a [short](#) and [long](#) format of the conference are available on YouTube. The entire concert will be broadcast via public television in the central Illinois area throughout the month of April. For more details, contact Berkley Walker at Berkley@illinois.edu. Berkley is a postdoctoral researcher in the lab of Don Ort, USDA-ARS/University of Illinois and an ASPB member since 2010.

Announcements

Registration is now open for IPG Symposium being held May 27-29

The 32nd Annual Interdisciplinary Plant Group symposium entitled "Plants Between a Rock and a Hard Place: The Interface Between Abiotic and Biotic Stress Responses", will bring together plant scientists working on abiotic and biotic stress responses, emphasizing the integration of stress responses by plants. The goal of the meeting is to foster greater awareness and identification of gaps in the knowledge that will need to be addressed by multi-disciplinary, collaborative research teams. The symposium will be held in the Christopher S. Bond Life Sciences Center May 27 - 29, 2015. More information can be found at: www.ipg.missouri.edu/symposium. For registration information, please contact Vicki Bryan (bryanvj@missouri.edu).



Springtime in Grant Park (Chicago, IL)

Want to advertise a position, share some exciting news, or be featured in our Fall 2015 newsletter? Please send items to Valerie Haywood by August 1, 2015: vxh20@case.edu (anticipated delivery date of August 15th, 2015)