

ASPB MIDWESTERN SECTION NEWSLETTER

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

2016 MW ASPB Meeting Report

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Chair, Midwestern Section, ASPB

The Midwestern ASPB section (MW ASPB) held its annual meeting March 19 – 20, 2016 at the Edgar McFadden Biostress Labs at South Dakota State University (SDSU) in Brookings, SD. There were over 100 attendees from 19 institutions, 10 states, and 1 Canadian province who were treated to 35 oral presentations and over 50 posters.

The Keynote Speaker was Dr. Federica Brandizzi (Michigan State University Foundation Professor, DOE Plant Research Laboratories) who discussed her lab's efforts to characterize both conserved and novel plant-specific factors involved in transport systems within plant cells. The featured speaker was Dr. Adrian Hegeman (Associate Professor of Horticultural Science and Plant Biology and the Microbial and Plant Genomics Institute, University of Minnesota-St. Paul) who described his lab's ongoing projects toward making plant metabolomics analyses faster, most effective, and of greater resolution. ASPB representatives Melanie Binder and Natalie Henkhaus detailed new membership initiatives and solicited feedback on ongoing efforts, including the evolution of Plantae.org. Carl Fellbaum advertised the value of serving as an ASPB ambassador, including CV enhancement, increased opportunities for professional development, and promotion of the plant sciences to diverse audiences.

The poster presentation sessions displayed the diverse array of pursuits within the section, including cell wall biochemistry, phycoremediation, changes in plant species diversity in the plains, genetic analyses of seed formation, evaluation of novel model organisms, and elucidation of microbial-plant interactions. Undergraduates learned about different graduate programs across the Midwest. Graduate students gained wisdom on obtaining post-doctoral research positions in various professional sectors. Post-Docs learned there are careers in plant biology outside of academia. All attendees had ample opportunities during breaks, between sessions, and at dinner (in a converted 1920s-era, brick and mortar fire hall) to network, and share a story and a laugh in a relaxed setting.

A major meeting highlight is the presentation of student awards. This year, eleven students earned travel grants. Awards for Best Undergraduate Oral

Inside This Issue

MW Section Meeting 2016	1
Five Questions With...	2
SDSU Plant Science GSA	3
Spring Blooms!	3
Planting Science	4
Announcements	5



Presentation went to Erik Carlson, University of North Dakota (1st place), Vaithish Velazhahan, Kansas State University (2nd place), and Jennifer Myers, University of Nebraska-Lincoln (3rd place). Awards for Best Undergraduate Poster were won by Jordyn Williams, Truman State University (TSU) (1st place), Maggie Campbell, TSU (2nd place), and Sarah Mislan, TSU (3rd place). For graduate students, Best Oral Presentation awards were given to Stacey Barnes, Iowa State University (ISU) (1st place), Suresh Damodaran, SDSU (2nd place), and Martha Ibore, ISU (3rd place). Best Poster Presentations for graduate students went to Stephanie Morriss, ISU (1st place), Anthony Schmitt, University of Minnesota-St. Paul (2nd place), and Rawnaq Chowdhury, SDSU (3rd place).

The meeting was formally closed Sunday afternoon by section chair Aaron Wyman with significant appreciation and gratitude extended to Vice-Chair Gustavo MacIntosh, Secretary-Treasurer Kathrin Schrick, Meeting Organizer Senthil Subramanian (SDSU), and the SDSU graduate students who worked tirelessly to staff, manage, prepare, and operate the sessions. Special recognition also was extended to the Biochemical Spatiotemporal NeTWork Resource (BioSNTR) Center of South Dakota, which provided substantial monetary and infrastructure support for the meeting. Attendees were thanked for participating in the 2016 MW ASPB Annual Meeting and encouraged to come to the July 2016 ASPB International Meeting in Austin TX.



2016 MW Section meeting photos. Courtesy of Suresh Damodaran.



Five Questions with Midwest Section members...

Karen Chanchavac (Senior Biology-Graduate Studies Major) and Sienna Lopez (Junior Biology Major), undergraduates at Spring Arbor University, MI, and undergraduate researchers in the lab of Dr. Aaron Wyman (Biology). Karen was a 2014 ASPB SURF Honorable Mention Recipient while Sienna was awarded a 2015 ASPB SURF.



Undergraduate ASPB MW members Karen Chanchavac (right) and Sienna Lopez.

1) What is your favorite thing about living and working in the Midwest? KC - I grew up in Chicago and enjoyed different events around the city. Attending school in Michigan completely changed my perception on the Midwest. Nothing compares to the beauty that Michigan seasons bring. Even the winters can like a winter-wonderland. However, nothing can beat the glamour of fall.

SL - Growing up in Detroit, I always loved all four seasons. Each one brought its own kind of fun: swimming in the summer, leaf piles in the fall, snow in the winter, and biking in the spring. Though my love for winter has died a bit each year of college (walking through sub-zero degree weather isn't inspiring), I still appreciate the joy a long winter brings when it finally breaks and spring arrives! Everyone who has been cooped up all winter is suddenly in a good mood. For instance, one of the first nice days this spring, my mom got in some car trouble and three people helped her fix it. That kind of comradery is special, I think, to those who have just escaped the grip of winter.

2) What has been the benefit to you of belonging to the Midwestern section of ASPB? KC - It has helped me develop communication, presentation, and networking skills that I can use in my future career, whatever that may involve. It has opened my eyes to the great work being done by talented individuals in Plant Biology.

SL - I've been given opportunities to learn and grow as a student that I wouldn't have had otherwise. I was able to pursue research topics of my own interest, including plants utilize the biomineralization process, and help my advisor (Dr. Aaron Wyman) prepare new labs for his classes, which I also TA. This summer, I'll get the chance to attend the ASPB meeting in Austin and present my findings.

3) Who or what has inspired your work the most? KC - I will be the first person in my family to graduate from a 4-year institution. My family has been a great influence and motivation. Dr. Aaron Wyman has also helped me navigate through college. Not only has he helped my growth as a scientist, he's also provided

me advice ranging from what classes to take to where I can find the best Mexican food in town.

SL - The science professors I've had at Spring Arbor University (Drs. Chris Newhouse, Tom Kuntzleman, Bruce Baldwin, Mike Buratovich, and Aaron Wyman) have challenged and encouraged me to accomplish my goals. I have to give a special thanks to my mentor, Dr. Wyman. He has given me opportunities, the confidence I needed to be successful in those endeavors, and has been consistently patient with me. I honestly would never have gotten to where I am today without his influence.

4) What projects are you excited about working on in the future? KC - I have been studying plant peroxisomal genes. I am excited to see where this project will go because it will give us more insights on the structure/function of these organelles.

SL - I'm excited to continue my research of plant responses to magnetic fields. Despite some setbacks, I've continued working on this project this spring and look forward to presenting our findings in this summer in Austin.

5) What is one of your hidden talents? KC - Not many people know this but my popcorn-making skills surpass those of the average college student. I have even won several awards. I like to think of myself as the manifestation of popcorn-popping-perfection; however, I am also very humble, so I do not talk about this gift very often (which is why this is a hidden talent).

SL - I love to dance! Maybe this wouldn't be called a talent because I've never taken a dance class nor am I particularly good at it, but when the music comes on, I lose all inhibition and dance unashamed. However, I have to say, I do pretty well with "The Worm" dance move (and if you know what that is, you should look it up on YouTube).

The SDSU Plant Science Graduate Students at Midwest ASPB 2016

Suresh Damodaran, Ph.D. student and PSGSA representative, SDSU

The plant science graduate student association (PSGSA) at South Dakota State University (SDSU) was pleased that the 2016 Midwest ASPB meeting was held at our campus. We saw this as an opportunity to enhance our professional development and leadership experience. We volunteered to help with organization of the meeting and worked with Dr. Aaron Wyman, Spring Harbor University (MW section President) and Dr. Sen Subramanian, SDSU (local meeting organizer).

PSGSA organized a student-led networking and career workshop for the participants presented by SDSU post-doctoral associate Dr. Svetlana Kurilova. The workshop was attended by over 30 participants from the meeting and they were tasked with making at least two new connections at the meeting.

In addition, PSGSA also organized a breakfast career workshop where 10 attendees had the opportunity to listen to experiences of members from academia, USDA and industry backgrounds [Dr. Aaron Wyman, Dr. Federica Brandizzi, Dr. David Horvath, Dr. Kathrin Schrick, Dr. Adrian Hegeman]. As volunteers, the members of



PSGSA volunteers at MW ASPB 2016.

PSGSA had the opportunity to hone leadership skills through their involvement in planning and organizing, budgeting, team work, problem solving and much more.

Dr. Subramanian said "The help from PSGSA ensured that the meeting ran very smoothly. They took care of the registration/welcome desk, the poster session, breaks, A/V help, and local transportation as needed. Their involvement in planning, budgeting, and overall organization was imminent for the success of the meeting and glad to note that the student found the experience a valuable one".

Spring Blooms!

A selection of spring blooms at the University of Wisconsin-Madison Arboretum. For more information, visit: <https://arboretum.wisc.edu/photo-galleries/spring-blooms/>



Skunk cabbage in Wingra Woods
Photo: Susan Day, UW-Madison Arboretum



Azalea in Longenecker Horticultural Gardens, Photo: Molly Fifield Murray, UW-Madison Arboretum



Pear blossoms in Longenecker Horticultural Gardens, Photo: Molly Fifield Murray, UW-Madison Arboretum



Seeking 100 new scientist mentors

to work online with middle and high school students
on student-led plant biology projects.

"It is a lot of fun interacting with students from an age group I don't have the chance to spend a lot of time with. It is a good reminder of where public knowledge of plant science stands, and a great opportunity for me to practice explaining key concepts in a simple and straightforward way." - PlantingScience mentor

"The thing I liked most was being able to talk to a scientist about what we were doing, and he gave us helpful suggestions on how to do things. Our scientist also asked us questions on what we were doing that helped us keep our minds working." - PlantingScience student

"It was great working with a scientist who took the time to give us meaningful feedback. It really helped me learn and experiment." - PlantingScience student

We're growing!

Help us keep up with all the new student teams we're expecting for our fall session.

*Share your passion for
plants and science
with the next generation!*

*~1 hour per week
from anywhere with an internet
connection.*

*Scientists at all career stages welcome,
undergraduate – emeritus.*

Learn more and register at:
<http://plantingscience.org/newmentor>



grow with us.

Have you paid your \$5 dues to become a member of Midwestern Section of ASPB? If you are not already a 2016 member, join [here!](#)

Announcements

2016 Ohio-PKAL Annual Conference, Columbus, OH, May 21st, 2016: [Ohio - Project Kaleidoscope \(OH-PKAL\)](http://www.aacu.org/pkal/regional/ohio/2016/spring-conference) would like to announce that the 2016 Ohio PKAL conference will be held at Capital University in Columbus, Ohio on May 21, 2016. This year's conference is entitled, Evidence-Based Practices in Undergraduate STEM Education and will have presentations from 9am - 5pm, Saturday May 21, 2016. Presenters are expected to be available at the time they are scheduled by the conference organizers. For more information: <https://www.aacu.org/pkal/regional/ohio/2016/spring-conference>

IPG Annual Meeting, University of Missouri, May 25-27, 2016: The Interdisciplinary Plant Group (IPG) at the University of Missouri will hold its 33rd annual symposium entitled "Heterosis: Working toward a genetic, molecular, developmental and physiological basis." This symposium will bring together plant scientists working on hybrid vigor and related phenomena from many different angles using a variety of techniques including genetics, genomics, proteomics, metabolomics, physiology and breeding strategies. The species studied include Arabidopsis, maize, rice, tomato, wheat, sorghum, yeast and cassava among others. The goal of the meeting is to foster greater awareness and identification of gaps in the knowledge about heterosis 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 on the University of Missouri campus in Columbia, Missouri. More information can be found at: www.ipg.missouri.edu/symposium. For registration information, please contact Vicki Bryan at bryanvj@missouri.edu.

Plant Cell Dynamics (PCD2016) Meeting, Washington University, St. Louis, MO, June 21-24, 2016: *Cheap and Cheerful* is the motto of an Innovative Meeting focused on mathematical and computational approaches to dynamic behaviors of plant cells.

Cheap: registration for all talks and posters, housing, breakfasts, coffee breaks, workshops, ground transportation during meeting, dinners, closing banquet, admission to the Missouri Botanical Garden, and speaking slot access is only \$464. Stay tuned to the web site as travel awards may become available.

Cheerful: Members of each attending lab will have the opportunity to give an oral presentation on their research. The PIs will provide a brief overview of key knowns and the current research questions. Students and postdocs will follow with 15-30 minutes of research presentation, all designed to explain experimental approaches and the results in a very clear and detailed manner. The focus will be to maximize the understanding by a broad audience. As anyone who has attended will know, we stay on schedule with a good laugh as presenters are unceremoniously drowned out by some catchy tune when their time expires.

Visit <http://www.midwestplantcellbiology.org/> to register and find more information.

SOY2016, Columbus, OH, August 7-10, 2016: The Ohio State University will host the 16th Biennial Conference of the Molecular and Cellular Biology of the Soybean in Columbus, Ohio. The Soy2016 conference will be held at the Hyatt Regency Columbus Hotel, located minutes away from OSU's main campus, and in walking distance to Columbus's finest shops and restaurants in the downtown and Short North districts. The program for the Soy2016 meetings will highlight the cutting-edge research by members of the soybean research community. Registration for this conference opens Friday, February 5th. For more information: Soy2016

Publication Manager Position Available

ASPB MW is searching for a new Publications Manager to oversee our newsletter. This is a great way to be creative, meet fellow section members and network! If interested, please contact MW Section chair, Aaron Wyman: aaron.wyman@arbor.edu