

ASPB MIDWESTERN SECTION NEWSLETTER



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

Connect, Learn, and Share at the Annual Section Meeting

Important Details

When: March 3 – 4, 2018

Where: Iowa State University, Ames IA

Abstract Deadlines

Feb 1 for consideration for a talk

Feb 28 for poster inclusion in program

Official Hashtag #ASPBMW18

The 2018 Midwestern ASPB Meeting continues our tradition of presenting, discussing, and celebrating research pursuits from all areas of plant biology. We look forward to learning about novel efforts involving ecological restoration, educational tools and techniques, phytoremediation, hormonal signaling, global gene networks, biotechnological innovations, disease and stress tolerance, field crop breeding, space biology, and far more.

This meeting provides scientists at all career stages and diverse positions opportunities to discuss research efforts, teaching programs, administrative circumstances, funding scenarios, career designs, and other topics influencing the growth of plant biology. It also serves as a superb networking opportunity for undergraduate researchers to make connections with potential graduate programs and advisors. For graduate students and post-doctoral research associates, the meeting promotes interactions with possible future post-doctoral advisors or employers in the private or public sector.

Attendees of the Midwest Section meeting have been invited to Iowa State University's W. M. Keck Metabolomics Research Laboratory for a half day metabolomics workshop featuring hands on

INSIDE THIS ISSUE

Midwest Section Meeting	1
Five questions with...	2
ASPB Educational Grants	2
PlantingScience Mentoring	3
Announcements	4

instruction on their state of the art GC-MS instrument. Enrollment is limited to 20 –25 individuals This workshop will be held on March 2 from 12:30 – 5pm. If you are interested, email Dr. Ann Perera metabolomics@iastate.edu with a brief description of why this workshop would benefit you.

Abstract submission is currently open! Abstracts are limited to 300 words. If you are interested in being considered for an oral presentation, please submit your abstract by February 1. All abstracts submitted by February 28 will be accepted for poster presentations and included in the program book.

Registration costs are \$80 postdocs and PIs, \$40 graduate and undergraduate students. Student travel grants (up to \$250) are available. Travel grant deadline is Feb 1. Visit the Midwest section group website for more information.

<https://midwest.aspb.org/meeting>

Two hotels are offering special rates for attendees of this meeting. Mention “American Society of Plant Biologists Midwest Regional Meeting” to get these special rates. Gateway Hotel & Conference Center \$119/night

<http://bookings.ihotelier.com/bookings.jsp?groupID=2058214&hotellID=2958> and Microtel Inn & Suites for \$89/night 515-233-4444. We hope to see you all there!

Connect with us on social media using the meeting's official hashtag #ASPBMW18

Five Questions with Midwest Section member...

Paul Twigg: Paul is a Professor in Biology at University of Nebraska-Kearney.

1) What is your favorite thing about living and working in the Midwest?

The hard working affable Midwestern people that I've met and the students that pass through my classrooms

2) What has been the benefit to you of belonging to the Midwest section of ASPB?

I love attending ASPB meetings. I started as a first semester graduate student at the University of Tennessee in 1987. The best part is meeting interesting people that I can learn from.

3) What projects are you excited about working on in the future?

I'm a part of a NSF-EPSCoR project in NE called the Center for Root-Rhizobiome Innovation. We're working on understanding that interactions of roots, root exudates, and the soil microflora. I'm looking forward to seeing what we learn. I'm also working to better bioenergy plants such as switchgrass and to make lignin more useful.



"My favorite thing about my job is working with students on independent projects"

4) What is your favorite/most unique part about your job?

My favorite thing about my job is working with students on independent projects. I've had ~170 such projects with students in almost 26 years at UNK.

5) Who or what has inspired you the most?

I'd have quite a list here, but the single most important person to me in this respect would be my grandfather. He had a huge garden and inspired me to love plants from a very early age.

ASPB Educational Grants

Plant Biology Learning Objectives, Outreach Materials, and Education (BLOOME)

- Plant BLOOME 2018 is open to ASPB members with education and outreach projects that advance youth, student and general public knowledge and appreciation for plant biology. Maximum award \$50,000, closing date: April 2. For more information and to apply visit: <https://aspb-bloome.secure-platform.com/a/>

Master Educator Program (MEP)

- MEP offers financial support to participate in focused, substantive, and practical professional development with the aim of creating undergraduate plant biology. Maximum award \$3,500 for registration and travel to ASPB annual meeting to present materials. Closing date March 12. For more information and to apply visit: <https://aspb-mep.secure-platform.com/a/>

Summer Undergraduate Research Fellowship (SURF)

- Funding for promising undergraduate students to conduct research in plant biology. Successful applicants receive a \$4,000 summer stipend, membership in ASPB, and \$700 (to mentor) for supplies. Closing date March 15, 2018. For more information and to apply visit: <https://aspb-surf.secure-platform.com/a/>

PlantingScience is looking for more scientists mentors to help bring plant scientists into classrooms

By Jennifer Robison, PhD
Indiana University Purdue University Indianapolis
PhD Candidate

Did you know less than half (46%) of science teachers have taken a botany course? Have you ever heard someone say “plants are boring”? Or how about “who cares, they don’t do anything, they just sit there”? Have you ever wondered if there was something YOU could do to help introduce plants and their awesomeness (go #TeamAutotroph!) to the next generation? One way to get involved is by joining PlantingScience as a scientist mentor!

PlantingScience is a free online program for teachers which provides resources, inquiry-based activities, and scientist mentors for their classrooms. Scientist mentors work with small groups of junior high and high school students to help the students design and perform an experiment related to some plant biology concept, from germination to photosynthesis. For many students this is their first time designing and performing their own experiments. Last fall there were over 1,000 student teams performing their own plant science experiments.

I’ve been an online scientist mentor for PlantingScience for two years now, and I can tell you it is a fantastic program. I have worked with nine different student groups. These students are excited, and sometimes nervous, about doing their own research. Each module provided to the teacher includes background material to ensure students come to their scientist mentors with a vague understanding of the concepts. Students can have wild and crazy ideas about how to test these concepts, some of which are impossible for a variety of reasons (lack of material, time, equipment, etc.), but it is still fun to hear their early research ideas.

As this is the first time many of these students will be conducting scientific research, they do not always understand the importance of controls or replication. I have noticed the majority of my student’s early drafts of their experimental layout lacks a control group. Or they lack replication, such as thinking they can plant a single seed in each condition to measure germination. This is why the scientist mentors are there, to gently guide them through the scientific process and answer their questions. Often this is the first time students have ever had contact with a scientist and are shocked to



find out we are not all the crazy haired, white lab coat wearing, mad scientists that you see on television.

In the spring of 2017, I had a particularly engaged student group. They were participating in “The Wonder of Seeds” module. At the very start of our interactions they decided they wanted to see how different stresses affect germination rates on soybean. Since my PhD research is investigating cold stress in soybean, I was excited. Originally, this group wanted to combine multiple stressors (frost, water availability, salinity) which I have learned is a common mistake of student groups. They think too large! Since I research cold, they decided to go with water availability. They were a very inquisitive group, even requesting to read a copy of the paper I had just submitted! Their hard work paid off as they were awarded a Star Project for the semester! You can see their research predictions, experiment, and conclusions for their Star Project here: <https://plantingscience.org/projects/mhsschelling1/info>

I mentioned earlier that last fall there were over 1,000 student teams, and the program continues to grow. To keep up with all of these teams requires many scientist mentors. Your interactions are completely online, it takes about an hour out of your week (ideally three 20 minute check-ins), and it makes a real difference in the student’s lives. All scientists are welcome to volunteer, from undergraduate to emeritus, and you control how many groups you have any given semester. I have found this to be a very valuable use of my time. The spring session will run February 19 – April 27, 2018. To volunteer as a mentor visit this site: <https://plantingscience.org/mentorjoin/mentorjoinmain>

ASPB is one of the scientific society partners supporting PlantingScience.

Announcements

ABRC Announces New Features

Coming soon: A new ABRC search and ordering database, which allows easy identification of our current Arabidopsis collection as well as our growing non-Arabidopsis resources!



Donald Danforth Plant Science Center Looking for Scientists

Several positions are open at the Donald Danforth Plant Science Center in St. Louis, MO. Multiple positions open in multiple labs for details visit: <https://www.danforthcenter.org/about/careers>

Plantae Helps Connect Plant Scientists

All ASPB members can have a Plantae account. This community is a valuable resource to meet other plant scientists. There are collections containing curated resources from the community, networks with topic groups covering a variety of interests, and the ability to connect with other plant scientists to keep up with their research and activities. Sign in today: <https://community.plantae.org/>

Additionally, Plantae has launched a job board to help connect employers with future employees. This board is separate from the main Plantae page and requires a separate login, join today at: <http://jobs.plantae.org/>

International Society of Photosynthesis Research Meeting

The ASPB annual meeting, Plant Biology 18, will be a joint meeting with the Canadian Society of Plant Biologists and, for the first time, will be coordinated with a meeting of the International Society of Photosynthesis Research. The ISPR meeting will overlap with Plant Biology 18 on July 17 and 18 (Tuesday and Wednesday) and continue through noon on July 20 (Friday). You can have the advantages of a large, international meeting (Plant Biology 18) and a small intimate meeting (along the lines of a Gordon Conference) within one week in beautiful Montreal. For details contact Tom Sharkey (tsharkey@msu.edu).

Plant Biology 2018

The annual ASPB meeting will take place July 14 – 18, 2018 in Montreal, Québec. Registration and abstract submissions are open now! To be considered for a concurrent session abstracts are due February 20, 2018 by 9 pm eastern. To be included in the online program abstracts must be received by June 1, 2018 by 9 pm eastern. Abstracts are welcome from scientists and students in all sectors, including academia, government, and industry.

Early registration closes on April 30, 2018 so be sure to mark your calendars. Full details on registration, abstract submission, hotel information, optional events and more at <http://plantbiology.aspb.org/>

Don't forget to purchase your official ASPB Plant Bio 18 shirt and connect online with other attendees with the hashtag #plantbio18

Plant Biology 2018
JULY 14-18 | MONTREAL, QUÉBEC

Want to advertise a position, share some exciting news, or be featured in our next newsletter?
Would you like to be the featured member in an upcoming newsletter?
Please send items to Jennifer Robison no later than May 1, 2017: jenrobis@iupui.edu