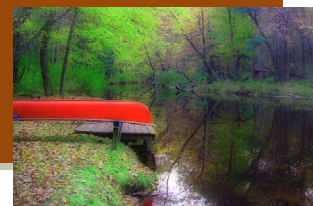


# ASPB MIDWESTERN SECTION NEWSLETTER



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

Publication's Manager note: I apologize for the tardiness of this newsletter. Several unavoidable and unexpected items occurred for me during August and September that resulted in this month delay of publication. The next issue will be on time in mid-January of 2019.

## Meet your 2018–2019 MW Section Officers!

**Chair:** Kathrin Schrick, Associate Professor at Kansas State University. Kathrin's lab is interested in plant sterols, specifically the roles sterols play in plant growth and development. Another focus of her lab's research is on homeodomain transcription factors that contain putative lipid/sterol-binding domains. Kathrin has served as Secretary/Treasurer of the Midwest Section in 2015 – 2017 and Vice Chair in 2017–2018.

**Vice Chair:** Harkamal Walia, Associate Professor at University of Nebraska–Lincoln. Harkamal's lab is interested in drought-regulated gene expression during reproductive development.

**Secretary/Treasurer:** Senthil (Sen) Subramanian, Associate Professor at South Dakota State University, Brookings, SD. Sen's lab is interested in plant-microbe interactions, in particular the roles of plant hormones and small RNAs in soybean nodule development. Another focus area of his lab is to evaluate and identify plant factors and mechanisms that determine rhizosphere microbiome composition and activity. Sen organized the 2016 Midwest sectional meeting at Brookings, SD and has served as treasurer since 2017.

### INSIDE THIS ISSUE

|                               |   |
|-------------------------------|---|
| Meet your MW Section Officers | 1 |
| Five questions with...        | 2 |
| Section Meeting Announcement  | 2 |
| Plant Biology 2018, Montreal  | 3 |
| TEPB Grant                    | 4 |
| Announcements                 | 5 |

**Executive Committee Representative:** Gustavo MacIntosh, Associate Professor of Biochemistry, Biophysics and Molecular Biology at Iowa State University. Gustavo's research focuses on how plants respond to insect attacks and the mechanisms used by insects to avoid plant defenses, as well as rRNA degradation through vacuolar mechanisms. Gustavo is also a member of the ASPB Minority Affairs Committee and previously served as Secretary/Treasurer from 2014–2015 and Vice Chair for the ASPB Midwest Section in 2015–2016.

**Annual Meeting Organizer:** Michael Gutensohm, Assistant Professor at West Virginia University. His research focuses on biosynthesis, function, and application of plant volatiles to improve crop taste and protection from pests.

**Publications Manager:** Jennifer Robison, Visiting Assistant Professor at Manchester University. She has served as Network Champion for the ASPB Plant Biology meetings since 2017. She has served as Publications Manager for the Midwest Section since 2016.

## Five Questions with Midwest Section member...

**Allison Barnes:** Allison is a PhD Candidate at the University of Nebraska-Lincoln. Her research focuses on how plants sense they are being frozen and how their membranes adapt to survive the stress.

**1) What is your favorite thing about living and working in the Midwest?** I love how friendly and welcoming everyone is. I am a life-long Midwesterner, and I like that it is easy to forge connections, both personal and professional.

**2) What has been the benefit to you of belonging to the Midwest section of ASPB?** Being able to meet people from other universities that are nearby and study related topics has been the best part.

**3) What projects are you excited about working on in the future?** I am looking forward to wrapping up my dissertation. I am excited about the prospect of understanding how the protein I study (sfr-2) functions in Arabidopsis, so that we can compare it to other species, and get a better understanding of how all plants sense severe-low temperature stresses.

**4) What's your favorite non-science activity and why?** I am an aspiring yogi! I just attended my first weekend-

long yoga retreat last month. It allows me to leave the science behind for short chunks of time, and come back with a renewed energy and better problem-solving skills.

**5) What advice do you have for budding scientists?** Use connections and other people around you to help you find the answers you need and solve problems, regardless of their field of study. Sometimes I explain my lab or experiment problems to a friend who works in a completely different field, and they can often point out holes in logic or additional information that you need!



*“Use connections and other people around you to help you find the answers you need and solve problems, regardless of their field of study.”*

## Save the Date! Midwest Meeting March 16–17, 2019

- The upcoming ASPB Midwest Section meeting will take place at West Virginia University on March 16 - 17, 2019.
- Organizing committee hopes to welcome all of you in Morgantown, West Virginia in March 2019 and look forward to exciting scientific contributions from undergraduate and graduate students, postdocs and faculty.
- As details are available they will be added to <https://midwest.aspb.org/meeting/>

West Virginia University  
Morgantown, West Virginia

March 16 – 17, 2019



## Plant Biology 2018, Montreal Recap

By Jennifer Robison  
Visiting Assistant Professor  
Manchester University

In July #TeamAutotroph were on center stage in Montreal for the joint American Society of Plant Biologists and Canadian Society of Plant Biologists. There were 1,629 attendees from 52 different countries who gathered together to enjoy over 150 talks and almost 1,000 posters! The hardest part of the entire meeting was deciding which amazingly awesome thing to attend and which you had to miss.

The first morning of the first day was already full of hard choices! There were 4 fantastic workshops overlapping with each other, all of which required early registration so at least this choice had been made in advance. Personally, I attended the PUI Workshop and found it to be extremely valuable. The discussion covered best practices for lab management and building your lab culture. The Undergraduate Poster session was bright and early on Sunday, July 15. Presentations. It was truly inspiring to speak to the rising generation of plant scientists. They did spectacular explaining their science and answering questions.

Days were full of concurrent sessions, workshops, Conversation Circles, and Roundtable Discussions to choose between. Concurrent sessions included sessions ranging from biochemistry to education to abiotic stress. These make me want to clone myself so that I can attend all of the talks! While cloning has not reached that point, Twitter has made it a lot easier. With a dozen or so live-tweeters the coverage from the sessions was good. I was able

to attend the ones I was most interested in but still read the highlights of other talks. The power of Twitter for the win.

Major symposia included medicinal crops, pod shattering, flood resistance, insect resistance crops, high-resolution phenotyping, genome editing, improving photosynthesis to maximize productivity, examining carbon dioxide changes across paleobotany, and regional and global controls and quantification of photosynthesis. Conversation Circles and Roundtable discussions were ongoing in the main hall opening up discussions on many different topics including PlantingScience, Women in Plant Biology, and journal publications.

Sunday and Monday ended with poster session and reception. With almost 1,000 posters being presented there was no lack of interesting science to hear about! The ASPB business meeting discussed the future of the society. Right now ASPB is looking for ways to improve the conference and society, please write in and let your voice be heard. You can also take to Twitter and make suggestions using #ASPBForward. After the business meeting came the always a great time Closing Party! This year it was on the roof of the convention center, giving everyone stunning vistas of downtown Montreal. Good food, music, and fun for all! Next stop for Plant Biology is San Jose California, August 3-7, 2019.

### PlantBio19 Network Champion's Sneak Peek of San Jose, California

- Home of the world's largest Monopoly board
- Peregrine Falcons nest in City Hall
- Rose garden featuring 189 varieties of roses
- Taco Tuesday exists
- Starting 100 days before PlantBio19, something to do in San Jose will be posted daily until the start of the meeting on Plantae. Be sure to join the conversation!

## Transforming Education in Plant Biology (TEPB) – Request for Proposals 2019

Applications accepted September 15, 2018- October 31, 2018 (11:59 p.m. ET)

In the United States, the American Association for the Advancement of Science (AAAS), the National Science Foundation (NSF), and other stakeholders have called for transformation in undergraduate biology education via the [Vision and Change report](#). The core message of the Vision and Change initiative is a focus on student-centered learning with students as active participants. Some of the key features of this initiative are: i) ensuring that courses are outcome oriented, inquiry driven, and relevant; ii) providing research experiences for all students; iii) using multiple forms of instruction; and iv) giving students ongoing, frequent, and diverse types of feedback.

The American Society of Plant Biologists (ASPB) has developed the *Transforming Education in Plant Biology* (TEPB) program to help put these recommendations into practice via development of new instructional materials in plant biology aligned with the ASPB [core concepts in plant biology](#). **TEPB is particularly well suited to faculty who are planning to build or revise courses or curricula in order to incorporate evidence-based methods of teaching and learning.**

TEPB has three parts.

First, the program provides financial support for the awardee to participate in focused, substantive, and practical professional development. Applicants select either from one of the multi-day professional development opportunities listed below or propose a different program that fits with the recommendations of *Vision and Change*.

- [National Center for Case Study Teaching in Science](#)
- [National Academies Summer Institutes on Undergraduate Education](#)
- [Problem-Based Learning workshop at the University of Delaware](#)

Second, following the professional development experience, the awardee submits a report describing the instructional materials they plan to create. Information required in the post-training report is provided below. The instructional materials must be directly related to plant biology.

Third, within the following year, the awardee develops the educational materials and then submits these materials to the ASPB Education Committee. By accepting TEPB funds, the awardee agrees to allow dissemination of their educational materials using *Plantae* or other channels. Awardees should include funds in their budget to defray costs associated with attending the annual ASPB meeting to present their work product. Awardees may be invited to participate in the Education Booth.

**Financial support:** TEPB awardees will receive up to \$4500 (reimbursable or direct-pay to professional development program) for registration and travel to the professional development program and to the ASPB annual meeting. View the full RFP and apply by October 31, 2018: <http://tepb.aspb.org>

## Announcements

### Plantae Job Board!

The Plantae job board is helping plant biologists worldwide with job searches. Prominent employers are placing ads today for all levels of scientists in both academic and industry. Sign in today for free and see what opportunities are out there: <https://jobs.plantae.org/>

### New season of The Taproot with hosts Liz Haswell and Ivan Baxter coming soon!

Taproot, the award winning podcast, will be back for season 3 soon! Season 3's topic will be "myth-busting." Subscribe to The Taproot podcast on iTunes or Stitcher. Questions, comments, or interested in sharing your story? Email [taproot@plantae.org](mailto:taproot@plantae.org). We'd love to hear from you!

### Phenome 2019

The third annual Phenome conference, Phenome 2019: Connecting Biology, Systems, and Tools, will be held February 6 - 10, 2019, at the Tucson El Conquistador in Tucson, AZ. Abstracts will be accepted until October 29. To learn more: <http://phenome2019.org/>

### PhD Position in Xiao Lab Available

A PhD student position funded by NSF is open in the Xiao Lab in the Department of Biology at Saint Louis University (<https://www.slu.edu/arts-and-sciences/biology/faculty/xiao-wenyan.php>).

The candidate is going to work on an NSF-funded project - using molecular, genetic and genomic approaches to study mechanisms of DNA methylation and demethylation in plant reproduction. If anyone is interested, please feel free to contact Dr. Xiao at [wenyan.xiao@slu.edu](mailto:wenyan.xiao@slu.edu) or 314-977-2547.

### New Teaching Kits from ABRC

The Arabidopsis Biological Resource Center is developing education kits to complement many of the Teaching Tools in Plant Biology

modules. The first of these new kits, Genetics of Floral Development, is available now with others to be released in the coming months. Visit <https://abrcoutreach.osu.edu/> to learn more about all of ABRC's education resources.

### OSU TPSGP Now Accepting Applications

The Translational Plant Sciences Graduate Program (TPSGP) at The Ohio State University is accepting applications for the 2018-2019 academic year. This five-year Ph.D. program offers full remission of tuition and fees, as well as a competitive stipend and additional support funds. TPSGP differs from traditional graduate programs in that there are no prescribed courses required by the program. Instead, a compact and rigorous academic plan is tailored to the needs to each individual. In addition to an in-depth research experience, TPS fellows gain practical experience outside of academia through internships in settings tailored to their individual career goals. Internship opportunities include biotechnology industry, international research, science policy, science writing, agricultural extension, and teaching enhancement. Another unique aspect of the TPSGP is the opportunity it provides for fellows to gain international experience while pursuing a dual-degree with our partner institution, the University of São Paulo, Brazil.

This program is designed for highly motivated students from a variety of undergraduate and masters level programs including chemistry, engineering, entomology, molecular genetics, microbiology, ecology, evolution, crop sciences and plant pathology. The application deadline for domestic students is December 1st, 2018. For additional information visit our website at <https://tpsgp.osu.edu/home>

**Want to advertise a position, announce some big news, share a lab or teaching technique, or be featured in 5 questions with a Midwest Member in our next newsletter?**

Please send items to Jennifer Robison no later than January 1, 2019: [JDRobison@manchester.edu](mailto:JDRobison@manchester.edu)