

# 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:** February 4 – 5, 2017

**Where:** Purdue University, West Lafayette Indiana

#### Abstract Deadlines

Jan 20 for consideration for a talk

Jan 27 for poster inclusion in program

**Official Hashtag** #ASPBW17

The 2017 Midwestern ASPB Meeting continues our tradition of presenting, discussing, and celebrating research pursuits from all areas of plant biology at Purdue University. 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.

We pride ourselves on promoting the work of rising plant biologists. This meeting serves as a superb networking opportunity for undergraduate

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This year features keynote speaker Craig Pikaard from Indiana University, as well as, featured speakers Chris Staiger from Purdue University, Sarah Wyatt from Ohio University, and Steve Evans from Dow AgroSciences.

Abstract submission is currently open! Abstracts are limited to 350 words. If you are interested in being considered for an oral presentation, please submit your abstract by January 20, 2017. All abstracts submitted by January 27, 2017 will be accepted for poster presentations and included in the program book. For submission and registration visit: <http://midwest.aspb.org/>

Registration costs are \$85 faculty, \$70 post-docs & grad students, \$40 undergraduates. Graduate student travel grants (up to \$250) are available. Travel grant deadline is Jan 13. Visit the Midwest section group on Plantae for more information.

[https://community.plantae.org/groups/discussions/viewtopic/32/40/462?post\\_id=966#p966](https://community.plantae.org/groups/discussions/viewtopic/32/40/462?post_id=966#p966)

Connect with us on social media using the meeting's official hashtag #ASPBW17

## Five Questions with Midwest Section member...

**Beronda Montgomery:** Beronda is MSU Foundation Professor at Michigan State University in East Lansing Michigan.

**1) What is your favorite thing about living and working in the Midwest?** Surprisingly this was one of the more difficult questions to answer! I've never thought about living and working in the Midwest in that regard. I could live almost anywhere. Ultimately, I currently consider the Midwest my "home base", as my work and living frequently take me around the nation and sometimes to different parts of the world.

**2) What has been the benefit to you of belonging to the Midwest section of ASPB?** The section meetings are a great place for undergraduate and graduate students alike to have a platform for presenting their work and connecting with other scientists.

**3) What projects are you excited about working on in the future?** We have numerous projects ongoing in the lab – ones that started at different stages of my career and ones that were initiated by students or in collaboration. Over the course of the years I've worked as a researcher, I've learned that



*".....section meetings are a great place for undergraduate and graduate students alike to have a platform for presenting their work..."*

I can get excited about a range of projects or topics. Cultivating my own curiosity and the curiosity of the colleagues (undergraduate to postdoctoral) that work with me is what truly gets me excited, rather than any specific topic in and of itself.

**4) What is your favorite/most unique part about your job?** Two parts of my job that I love most are writing and mentoring.

**5) What's your favorite non-science activity and why?** My favorite non-science activity is traveling. I love exploring different cultures and different locations.

*Featured Member Photo by Jennifer Robison, PhD Candidate Indianapolis, Indiana.*

*To have your favorite plant photo featured, email it to [jenrobis@iupui.edu](mailto:jenrobis@iupui.edu) for future newsletters!*





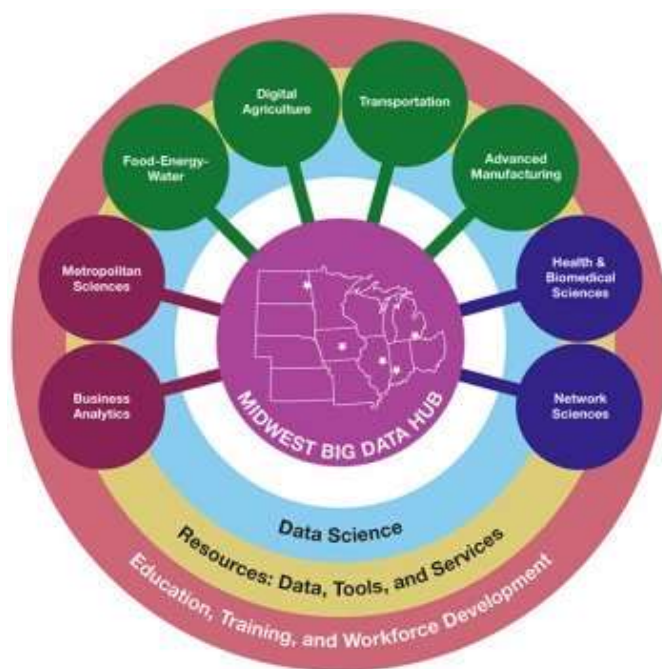
## NSF Midwest Big Data Hub supports Big Data science and partnerships in Agriculture and Plant Sciences

By Jennifer Clarke, PhD  
Associate Professor  
University of Nebraska-Lincoln

In March 2016 the Division of Computer and Information Systems and Engineering (CISE) of the National Science Foundation established four national Big Data Hubs as part of its investment in the 2015 NSF Big Data Research and Development Initiative. The Hubs and related investments are intended to accelerate and strengthen the data ecosystem, and to develop effective cross-sector networks ready to utilize data science to solve problems of regional and societal interest. Each regional Hub – Midwest, Northeast, South, and West – will initiate research and partnerships in specific areas, ranging from precision agriculture to smart cities to personalized education.

The Midwest Big Data Hub (MBDH) – led by the University of Illinois at Urbana-Champaign, the University of Michigan, Iowa State University, Indiana University, and the University of North Dakota – in partnership with members from the 12 Midwest states has identified Digital Agriculture as a primary focal area. “The MBDH is a growing organization of public and private partners investing in scientific discovery and improved data-to-decision systems,” said Melissa Cragin, Executive Director of the MBDH. “I look forward to working with regional and national partners in developing new collaborations that support training, education and workforce development, and facilitate access to data infrastructure, tools and services for constituents in Digital Agriculture across the region,” she added.

The NSF recently awarded a Midwest “Big Data Spoke” project award to investigators from the University of North Dakota, Iowa State University, the University of Nebraska-Lincoln, and Kansas State University to initiate activities and outreach in specific areas relevant to Digital Agriculture, namely, Unmanned Aircraft Systems (UAS) and plant phenomics and genomics. This grant aims to foster collaborative relationships among various agricultural and Big Data constituencies through workshops, on-line training opportunities and web resources, seed grants, and partnerships with regional and national organizations.



Examples of events in which the MBDH Digital Agriculture spoke has played a role include the inaugural meeting of the North American Plant Phenotyping Network at Purdue University in August 2016, the USDA NIFA Big Data Summit in October 2016, and the ASPB Phenome 2017 meeting.

"The BD Spokes advance the goals and regional priorities of each BD Hub, fusing the strengths of a range of institutions and investigators and applying them to problems that affect the communities and populations within their regions," said Jim Kurose, assistant director of NSF's Computer and Information Science and Engineering Directorate. "We are pleased to be making this substantial investment today to accelerate the nation's big data R&D innovation ecosystem."

To learn more and become a partner, visit:  
<http://midwestbigdatahub.org/>

## Announcements

### NSF Awards \$24 Million to Launch the Center for Engineering Mechanobiology

A \$24 million grant over five years from NSF will establish the Center for Engineering Mechanobiology (CEMB). This center is one of four new Science and Technology Centers supported by NSF. CEMB will investigate how mechanical forces affect the morphology and function of plant and animal cells and use this information to develop new technologies for better crop management and therapeutics. The center will also include an educational program to recruit students from minority-serving institutions and provide multidisciplinary training for the next generation of scientists.

The plant biology component of this center will be spearheaded by Ram Dixit, Guy Genin, Liz Haswell, Barbara Pickard, Lucia Strader, Marcus Foston and Anders Carlsson from Washington University in St. Louis. Other partners of CEMB include the University of Pennsylvania, Boston University, New Jersey Institute of Technology, Bryn Mawr College, Alabama State University and University of Maryland.

For more information visit  
[http://www.nsf.gov/news/news\\_summ.jsp?cntn\\_id=189782](http://www.nsf.gov/news/news_summ.jsp?cntn_id=189782)

### 34<sup>th</sup> Annual Symposium on “Root Biology”

The Interdisciplinary Plant Group (IPG) at the University of Missouri will hold its 34<sup>th</sup> Annual Symposium on “Root Biology”, the fourth in this series, June 7 - 9, 2017. This symposium will bring together an interdisciplinary group of researchers from across the globe to address recent advances in studies of root growth, development, and function as well as root-rhizosphere interactions. For more information and to sign up to be notified of updates regarding the symposium, please visit:  
<http://www.ipg.missouri.edu/symposium>.

### World Soybean Research Conference 10 & 17<sup>th</sup> Biennial Conference on Molecular and Cellular Biology of Soybean.

For the first time these two meetings about all things *Glycine max* will be held concurrently! The meeting will take place September 10 - 15, 2017 in Savannah GA. Abstract submissions are open! For more information visit <http://wsrc10.net/>.

### Sharon Gray Memorial Scholarship

In 2016 tragedy struck the plant biology community with the passing of Dr. Sharon Gray. A memorial scholarship to mentor young women in science is being established in her honor. To learn more or to donate visit  
<https://www.gofundme.com/sharonbethgray>

## Plant Biology 2017

The annual ASPB meeting will take place June 24 -28, 2017 in Honolulu, Hawaii. Registration and abstract submissions are open now! To be considered for a concurrent session abstracts are due January 30, 2017 by 9 pm eastern. To be included in the online program abstracts must be received by May 24, 2017 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, 2017 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 Hawaiian shirt and connect online with hashtag #plantbio17



Want to advertise a position, share some exciting news, or be featured in our next newsletter?

We would also love to hear about your best lab tips and techniques in plant biology!

Please send items to Jennifer Robison no later than May 1, 2017: [jenrobis@iupui.edu](mailto:jenrobis@iupui.edu)