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# ASPBnews

A PUBLICATION OF THE AMERICAN SOCIETY OF PLANT BIOLOGISTS

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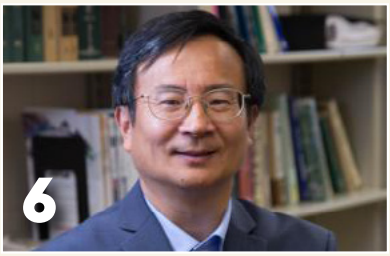









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# Many hands make light work

BY LEEANN THORNTON, ASPB PRESIDENT

Greetings! It has been many months since we had a ASPB member newsletter, but that doesn't mean nothing is going on at ASPB! Many of our activities have been posted in ASPB blogs, social media posts, and The Signal email update. It has been a pleasure to serve as President for the last year, and I hope you enjoy this edition of more in-depth reports on ASPB happenings.

One of the most interesting things about becoming ASPB President was getting to know the people that commit time and energy to serving the plant biology community. We are a diverse international group of people dedicated to advancing plant science, and it takes a lot of work to keep all of our activities in order. When I was helping build a steering committee for the Primarily Undergraduate Institution (PUI) Section of ASPB, I overused the old saying "many hands make light work." However, this approach is at the center of my philosophy of what makes a thriving community. Individually, the burden of forward progress can seem overwhelming, but if each of us does a little bit, together we can make a big difference. The ASPB mission (2024) includes: to promote the growth and development of plant biology, to encourage and publish research in plant biology, and to promote the interests, growth, and education of plant scientists in general. ASPB is the people that serve and the ones that we serve. Each person who shares their enthusiasm about plant science with another person (student, neighbor, colleague, etc.) is representing the plant biology community. We are scientists, dedicated to solving fascinating scientific questions about plants, and we are so much more than that!



Communities thrive when individuals come to know how their strengths can complement the strengths of others. No one scientist can be good at everything that our broad plant biology community needs. For example, I am a "PUI plant scientist." I completed my PhD and trained as a postdoc at large research universities where I worked with scientists from all over the world, but I developed a research program that would work well at a PUI, where my lab consists of undergraduate scientists who need to schedule their experiments around their college classes. Teaching is a very important part of my job and my professional identity. I teach classes of students how to think like biologists, and I mentor one-on-one in guiding students to conduct research in my lab. I am at an institution that gives me time and resources to conduct my research, but it still moves much more slowly than at a large institution.

As the first ASPB President from a PUI, I brought a new perspective to the leadership team. Most of us have seen that research approaches are improved when multiple perspectives are applied to a scientific problem. I have been intentional about seeking training in how to be more inclusive of diverse student experiences in my classroom and research lab. I participated in workshops (at ASPB meetings, at the Annual conference on the First Year Experience [University of South Carolina, 2024], and through a grant from the HHMI Inclusive Excellence [HHMI, 2024] program) designed to help me see what each student brings to my classroom community so I can connect their lived experience to my material and varying perspectives of other students.

I believe the ASPB community is stronger when a variety of perspectives are applied to our programs. Throughout the last two years, I visited committees, learning about the programs that are working well and the frustrations that committees face in trying to get things done. I am trying to foster more joint efforts between committees and to look for places where one committee's frustrations could be mitigated by another group's perspective. You can see the collection of standing committees on the ASPB website (ASPB, 2024a) and explore the variety of programs each group coordinates. There are also additional groups, such as the regional/topical sections, the Ambassador Alliance, and the Legacy Society Leadership Committee, whose efforts are not as broadly acknowledged, but are just as important in supporting professional engagement and education of plant scientists. Our committees are dedicated to creating opportunities for people

## ASPB Council

Council members highlighted in **blue** also serve on the Board of Directors.

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to engage in the plant sciences. Their work supports plant science education from K-12 classrooms to workshops and travel awards for graduate students and postdocs. The committees help with decisions related to the content of our conference and our publications. They also build community and support professional networking throughout the year.

I am truly impressed with the reach of ASPB's programs! And yet, I see that there are members and nonmember plant scientists who don't feel that they belong in our society. Through a program convened by the ROOT&SHOOT (2024) research coordination network, I worked with an ASPB to learn about the barriers that underrepresented scientists face at each step of their career. The ASPB team developed materials to help Council members understand these inequities and work to remove barriers to participation in ASPB programs. Indeed, I remain committed to promoting inclusivity by building it into the fabric of our society. This means regularly looking for ways that we can be more transparent in selection processes and more intentional about expanding the pool of candidates for leadership and recognition. Feeling a sense of belonging comes from both feeling welcomed in receiving the goods and feeling valued for what you have to give the group. The Board of Directors is making decisions that should keep nudging ASPB toward more inclusive practices, and I look forward to being part of that work in the coming year.

Another phrase that has been on my mind recently is that the well-being of our community is not a "zero-sum game." Feelings, such as belonging and success, are not a limited resource; we can work to broaden the sense of belonging in our plant biology community without taking that feeling away from others that already feel connected. Even so, there are limited resources in ASPB, such as funding for travel support and other budgetary requirements. Time (from staff and from volunteers) is also a precious and limited resource. That is where "many hands make light work" meets the "zero-sum game." We need more people to give a little to make sure that our limited resources are put to best use in promoting a sense of community among plant scientists. One example is that we had nearly 2,000 people who donated to the Pioneer fundraising challenge (ASPB, 2021) to raise about $1 million to support ASPB programs in the last few years. Another example is that the Ambassador Alliance is working to partner Ambassadors to work together to expand on ideas that have been tried previously and make the effort of promoting ASPB less daunting. The Education Committee also provides resources that should make it easier for people to adapt activities to promote plant science in their communities with minimal effort.

2024 is the 100th anniversary for ASPB. There are many ways that we can look back to celebrate the science that our community has accomplished and the people dedicated to promoting plant biology. *Plant Physiology* and *The Plant Cell* are each publishing a series of review articles (Eckardt, Meyers, & Zhao, 2024) in honor of our 100th anniversary. The Centennial Challenge Committee (ASPB, 2024b) worked to expand the legacy of individual donations by launching a fundraising campaign that has raised about $3 million in the past few years. There were reflections and celebrations at the 2024 conference, and we all need to consider what ASPB should do next. Can we be a leader in expanding our community to better support more diverse scientists? Can we connect American scientists to other plant biologists through collaborations with plant science societies around the

"Alone we can do so little; together we can do so much."

– HELEN KELLER

world? Can we continue to meet virtually for committee work and have virtual conference content that is universally useful and broadly accessible? What ideas do you have that might see ASPB into the next 100 years?

One of the reasons that I agreed to serve as ASPB President is that I knew I would be changed for the better by engaging with more people who are working to advance plant science and plant scientists. I have collected many stories from staff members and volunteers who agree that the work we are doing is important and that they have benefited from the effort they put into ASPB activities. I challenge each member to consider why they are a plant scientist and how they can contribute to the promotion of plant science through ASPB. Your perspective is needed when there is an election, constitutional change, or call for award nominations. You can ask a committee member about their work and thank them for the time they put into ASPB. You can participate in the national conference in person or through Plant Biology Extended as well as regional ASPB meetings. You can apply to join a committee by filling out the committee form on your ASPB profile. There are also regional and institutional opportunities to promote plant science close to home. What is your experience as a plant scientist and how can you share your perspective with the plant science community?

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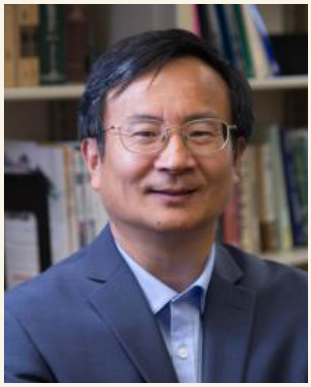
## Make deeper connections with your ASPB *community*.

There are currently nine sections of ASPB formed from geographical regions of the United States, Canada, and Mexico, as well as three interest-based sections. Each section maintains a member base and holds annual meetings or other events.

- Early Career Plant Scientists
- Environmental & Ecological Plant Physiology
- ASPB Mexico Section
- ASPB Mid-Atlantic US Section
- ASPB Midwestern US and Canada Section
- ASPB Northeast US Section
- Primarily Undergraduate Institutions
- ASPB Southern US Section
- ASPB Western US and Canada Section

**Learn more at aspb.org/membership/aspb-sections**

# Meet ASPB's New President: Hong Ma



ASPB is delighted to welcome its new President, Hong Ma, who was elected in 2023 as the President-elect and served in this role starting on October 1, 2023. He became the new President on October 1, 2024.

"A top priority is to support and train young plant biologists toward becoming members of a community with greater diversity, to amplify the voices of diverse members of our society, and to promote diversity and representation in society leadership and society activities," said Ma on his goals for the Society.

Ma is currently a Professor of Biology and the Huck Chair in Plant Reproductive Development and Evolution at the Pennsylvania State University. Ma holds a BA in Biology and Biochemistry from Temple University. He earned a PhD from the Massachusetts Institute of Technology in 1988 and received his postdoctoral training at the California Institute of Technology.

Ma has been an ASPB member since 2000. He has served as an Associate Editor for *Plant Physiology*, a member of the ASPB Publications Committee, and a reviewer for manuscripts. In addition, he has authored a number of papers published in both *Plant Physiology* and *The Plant Cell*.

Ma's interest in plants started before college in the countryside with exposure to major crops like rice and soybean and many other cultivated or wild plants. He was trained in molecular biology through PhD studies in yeast at MIT. Advances in plant molecular biology, especially the emergence of Arabidopsis as a model system for plant biology, motivated Ma to seek postdoctoral training under the guidance of Elliot Meyerowitz, with the identification and analyses of floral homeotic and heterotrimeric G protein genes.

Ma's lab at Penn State includes undergraduate students, graduate students, post-doctoral scientists, and others and studies the molecular genetic basis of plant reproductive development, particularly anther/pollen development and meiosis. Through analyses using molecular genetics in combination with transcriptomics, proteomics and bioinformatics, members of his lab have recently identified a novel regulator of proper splicing of specific exons in key floral homeotic genes. In addition, the lab aims to understand phylogenetic relationships and evolution of angiosperms, particularly for members of families with species that are important for agriculture and horticulture, including maize, rice, wheat and other grasses, soybean and other legumes, members of the Asteraceae, Orchidaceae, and Cucurbitaceae, as well as Arabidopsis and cabbage in Brassicaceae, tomato, potato, and pepper in Solanaceae, and apple, peach, and strawberry in Rosaceae. Members of his group have explored the evolutionary patterns and relevant molecular basis for crucial plant traits such nitrogen-fixing root nodulation, C4 photosynthesis, floral symmetry, and tendril formation.

"ASPB just celebrated its 100th anniversary. Having served as the president-elect for almost a year, I treasure more than ever working with ASPB members, including other ASPB leaders, to promote diversity, equity, and inclusion, to advance the career development of young members, and to further strengthen ASPB as it enters its second 100 years of supporting its members and the broader plant biology community," said Ma.

## *Do you want to get involved with ASPB?*

The best benefits of ASPB membership come with connecting with other members. Explore opportunities to get involved to meet more ASPB members and grow your network!

Visit **aspb.org/about/getting-involved**

# REGISTER NOW
# AT DISCOUNTED RATES!

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LUMINARIES

# Xuemin "Sam" Wang

University of Missouri-St Louis
and Donald Danforth Plant Science Center

BY RUTH WELTI, KANSAS STATE UNIVERSITY

Xuemin "Sam" Wang is a plant biologist, who is the Desmond Lee Endowed Professor at University of Missouri-St Louis and a Member and Principal Investigator at Donald Danforth Plant Science Center (DDSPC). Sam has made many significant contributions in plant lipid metabolism and lipid signaling. His lab was the first to clone a phospholipase D gene in any organism, and his group has biochemically and physiologically characterized the phospholipase D family and some other phospholipase families and defined many aspects of the roles of membrane lipid hydrolysis in plants. Sam's work has also led to the identification of phosphatidic acid as an important class of lipid mediators involved in plant stress responses.

In July 2024, Sam was presented the 26th Terry Galliard medal at the International Symposium on Plant Lipids (ISPL) in Lincoln, Nebraska for his career achievements as a distinguished plant lipid scientist. This award is named in honor of Terry Galliard, who established the ISPL conference in 1974, and is considered the highest honor in the area of plant lipid research.



**Sam Wang receiving the Terry Galliard medal and trophy from John Harwood of Cardiff University, a previous Galliard medal winner and friend of Terry Galliard.**

**Tell us about your early life and the genesis of your interest in plant biology.**

*When I was young, I wanted to be a scientist, but I wasn't sure what that would mean. I was growing up under the turbulent era during the Chinese Cultural Revolution, and I only caught glimpses of some of the big advances in science. One thing I remember is watching the 1969 moon landing on the tiny, shared TV in our commune and thinking both, "How are they doing this?" and "I would like to be part of that." Though my plans were vague, I kept a career in science in mind while spending three years after high school working in the countryside. At the time, I wasn't particularly interested in agriculture, but after being part of the first group to take a college entrance exam after the end of the Cultural Revolution, I was assigned to study crop science and agronomy at Huazhong Agricultural University in Wuhan. There, I got my first exposure to plant biology and later was offered the opportunity to study plant genetics at The Ohio State University. As I learned more and more about plants and crops, I became more and more interested in plant biology. I realized there is a lot unknown and lot to continue to learn about plants! But I'm still in awe of space science and maintain an interest in many areas of science.*

### How did you get from Ohio State to where you are today?

*When I joined the genetics program at OSU, I worked with Dr. Randy Scholl, a pioneer in working with Arabidopsis thaliana and the first director of the Arabidopsis Biological Resource Center. During my MS program, I became excited about genetic engineering and chose the University of Kentucky for a PhD with a plan to work in this area with Dr. Glenn Collins. I ended up pursuing a project with Dr. David Hildebrand, who introduced me to lipids and seed oil metabolism.*

*During the last year of my PhD study, I met my postdoctoral advisor, Dr. Thomas Moore, at an ASPB meeting in St. Louis, and I was off to Louisiana State to learn about membrane lipid biogenesis and lipid biosynthetic enzymes. I joined the faculty at Kansas State University in 1991 and set up my lab to study lipid turnover and phospholipases, a field that I believed was vastly understudied. After many exciting years working with talented students, postdocs, and collaborators there, I moved to my current positions in Saint Louis to help build the partnership between the University of Missouri-St. Louis and Donald Danforth Plant Science Center.*

### Tell us a little about your current position. It sounds like you have two jobs!

*The E. Desmond Lee Endowed Professorship is part of the Des Lee Collaborative Vision that links the knowledge and resources of universities with other organizations through collaboration and partnership that "can produce a synergism far exceeding the efforts of any one segment working independently (E. Desmond Lee)." I have enjoyed greatly working with the University of Missouri-St. Louis and the Donald Danforth Plant Science Center to facilitate the interactions between the institutions. Such connections have created a lot of opportunities that benefit students, researchers, and the mission of both institutions.*

### What are your thoughts on work-life balance?

*That's an important question. Work is an important part of my life that allows me to pursue my interest in scientific inquiry and discovery, but family and friends are important too and provide a lot of happiness in life. It's important to learn how to prioritize in daily life to accomplish things, but not neglect your personal life.*

### What's a normal workday and normal weekend day for you?

*On weekdays, I follow my calendar and prioritize time in the morning to work on writing projects, in concert with coffee drinking. I find it's very important to have "a good half day," if I need to get some writing done. In the afternoon, I answer emails, read and review papers, and do other things that require a bit less prolonged concentration. At the end of workday, I like to feel like I've accomplished something. I'm a bit of a deadline person, in that I work best with deadlines, but I do like to leave myself a little leeway.*

*On the weekend, I try to catch up on household and personal chores, but I also like to relax. I enjoy spending time with family and long walks. In the last couple of years, since our children have grown, we've particularly enjoyed exploring Saint Louis parks and occasionally playing a little golf.*

### What would you do if you had six months off?

*I would try to learn some computational skills. I regret not learning more about computation earlier in my career, but I'm interested in big data analysis and machine learning.*

### Tell us a little about how you were mentored and about your own mentoring style.

*The labs in which I was trained were all labs without very hands-on supervision. I was presented proposals and had to figure out details of how to carry out experiments and assemble the data. I feel like this was very helpful to me in my development as a scientist.*

*In terms of my own mentoring style, I don't really have a fixed style. I try to mentor in relation to the abilities and weaknesses of each student or postdoc, assigning projects based on strengths at the start to build confidence. I coach them a bit as they move through the stages of preliminary data to quality data to publishable data. Then later, I try to have the trainee work in more challenging areas. I hope that when students and postdocs leave my lab, they know plant lipid-related science and are able to apply their creativity to solve problems.*

### What do you see as a big challenge in plant biology?

*I think a big challenge is bridging the gap from the lab discoveries to solving real world problems, which is not limited to plant biology.*

### What do you find exciting in plant biology?

*We know so little about the intricate interplays in living systems, such as how stress cues are transduced into molecular, metabolic, and physiological responses in plants. Exploring broadly how metabolites function as modulators, such as metabolite interactions with proteins and/or nuclear machineries to modulate cellular and physiological responses, will be an exciting direction.*

### What is your advice for students and early career researchers?

*Be curious and open-minded. Expose yourself to a variety of opportunities. Have an interest in making a difference. Believe in yourself!*

### What keeps your job fresh for you?

*I love coming to the lab to work with people and make discoveries. It's an endless pursuit! I love interacting with people who eventually grow to be independent, creative thinkers and scientists on their own and making their own discoveries. I've been doing this for 40 years and there is still a lot to do. I just hope my curiosity is infectious!*



# Understanding the Appropriations Process

BY LEWIS-BURKE ASSOCIATES

Washington, DC is busy with all eyes on the upcoming election, but Congress has remained behind on the September 30 deadline for the fiscal year (FY) 2025 appropriations bills that will fund the federal government. Appropriations have direct impacts on federally funded plant biology research, but you would be forgiven for not keeping track considering all the congressional ups and downs. Lewis-Burke Associates, ASPB's government relations firm, analyzes federal actions like these for their impacts relevant to science and research in general and plant biology in particular. Below is a summary of the appropriations process and the outlook for FY 2025.

## What are Appropriations Bills?

Congressional appropriations bills are the way Congress makes sure federal agencies like the National Science Foundation (NSF) and U.S. Department of Agriculture's National Institute of Food and Agriculture (USDA NIFA) have money to fund research proposals, hire program managers, manage peer review, and many other components crucial to the success of research and development in the United States. These bills are supposed to be signed into law annually before the start of each fiscal year on October 1. However, more often than not, Congress has to employ a "Continuing Resolution," or CR, due to unresolved disagreements. The CR extends funding from the previous fiscal year for a specific period of time to keep the federal government funded beyond September 30. For example, funding for FY 2024 should have passed by September 30, 2023, but Congress did not manage to pass those spending bills until March 2024. Instead, Congress utilized a series of CRs to keep the government running. With Congress's appropriations for FY 2025 lagging again this year, it is certain that there will be another CR to provide funding until the appropriations bills are passed.

## But Why is This so Hard?

Part of this year's delay is because FY 2025 appropriations are limited by a budget deal brokered last year, the *Fiscal Responsibility Act*, which capped the total amount of spending in return for paying the nation's debt. Given the limited fiscal resources available, there is heated debate about where funding should go and what cuts need to be made. In addition, political disagreements about how funding can be spent, sometimes known as "policy riders," are also slowing things down.

And while it may appear that Congress is waiting until the last minute, this whole process of determining and voting on funding began more than 18 months ago, when federal agencies started working on the President's Budget Request. The Budget Request is an annual recommendation for appropriations from the Executive Branch that also showcases the President's priorities. Once the document is public, usually in February or March of each year, the House and Senate each begin work on twelve, topic-specific appropriations bills, with members deciding which new proposals to embrace, modify, or reject. Even once those decisions are made, the House and Senate must then reconcile the differences in their bills in "conference" before the President can sign anything into law. Only once the bills are signed into law can federal agencies enter the implementation stage of the budget process.

## FY 2025 Appropriations

**(in thousands)**

| | FY 2024 Enacted | FY 2025 House | FY 2025 Senate | FY 2025 Senate vs. House |
|---|---|---|---|---|
| **NSF, total** | 9,060,000 | 9,258,600 | 9,550,000 | 291,400 (3.1%) |
| **DOE Office of Science** | 8,240,000 | 8,390,000 | 8,600,000 | 210,000 (2.5%) |
| **ARPA-E** | 460,000 | 450,000 | 459,150 | 9,150 (2.0%) |
| **National Institute of Food and Agriculture (NIFA)** | 1,678,750 | 1,674,164 | 1,681,750 | 7,586 (0.5%) |
| **Agriculture and Food Research Initiative (AFRI)** | 445,200 | 443,200 | 445,200 | 2,000 (0.5%) |

### OK, so What Does This Mean for FY 2025?

Despite the inevitable CR at the end of September, the House and Senate each made significant progress on their FY 2025 spending bills before the August recess. So even though the bills have not yet been passed or conferenced, we can still analyze the proposed text of these House and Senate appropriations bills to see where each chamber stands on research funding for FY 2025. In the appropriations chart below, you can see that the Senate is generally more favorable to research agency funding. However, many agencies remain at relatively flat funding compared to FY 2024 appropriations even in the Senate bills.

Ultimately, final FY 2025 appropriations will likely be contingent on congressional and Presidential election outcomes in November and any resulting shifts in the balance of power among these parties. Plant biologists would be wise to prepare proposals that focus on the bipartisan priorities highlighted in the President's Budget Request and Congressional appropriations, such as emerging technologies in AI and biotechnology. Moving forward, when the appropriations bills are eventually passed, it can be useful to become familiar with the final priority areas outlined for your funding agencies.

Despite how frustratingly slow the process may appear, there are hardworking staff on Capitol Hill working to navigate the various political complexities that influence these important funding decisions. Continuously weighing in with staff in your Congressional delegation offices to inform them of your priorities can often help them become better advocates for plant science.


***You Can be a Science Advocate!***

You can make a difference in issues affecting plant science funding and legislation.

Learn how at:
**aspb.org/advocacy/become-an-advocate**




# Promoting CURIOSITY *and* APPRECIATION *of* PLANT SCIENCE at the 2024 White House Easter EGGucation Roll

BY AMY BERTA, CHRIS LUTHER, SONIA MOORE, ROBBIE PAUL, SOPHIA SHORR, AND ANDREA WADE

University of Lynchburg, Lynchburg, VA

Not even the stormy weather on April 1, 2024 could hinder dozens of ASPB staff and volunteers from exhibiting at the White House Easter EGGucation Roll on the South Lawn of the White House. ASPB Education Committee Chair Dr. Erin Friedman attended alongside her University of Lynchburg plant biology students, who were excited to participate in the event. Surrounded by various other organizations such as NASA and YouTube Kids, ASPB's booth hosted a cornucopia of activities designed to engage with children and parents in an informative and entertaining manner.

The theme of "EGGucation" was notable within the "Schoolhouse" where ASPB was stationed, wherein children were able to experience entertaining and educational STEM activities that cultivated their curiosity. All activities incorporated learning at different levels into this fun event for families and all ages. ASPB's education initiative aimed






**Above: ASPB CEO, Crispin Taylor (third from right) demonstrates one of the ASPB-hosted activities for First Lady Dr. Jill Biden.**

**Left: ASPB's morning shift volunteer crew paused for a group photo before the day's activities began.** Image credit: Winnie Nham

to engage kids and their families in activities and discussions about plant biology and to have a greater appreciation for plants. With approximately 45,000 visitors, the ASPB volunteers were able to demonstrate how numerous common activities were actually plant-powered!

To encourage interest in how plants are used in their day-to-day life, an activity was planned to allow the kids to choose between where they use plants more in their daily lives: fuel, food, or fiber. The activity was set up with large glass containers and the children were encouraged to use hominy to choose which affected their lives the most, as corn can be an example for all three options. The most popular choice for this activity was food, with fiber coming in at a close second. Children were encouraged to talk about how they use plants in their daily lives, with volunteers assisting by prompting the kids to think deeper about where plants exist in reference to themselves.

The second activity consisted of a lima bean dissection, where participants were able to dissect a rehydrated lima bean to show the inside of the seed. Volunteers pointed out the plant embryo to the children, indicating with age-appropriate terms where the radicle and hypocotyl sit inside the bean. These concepts were propagated and related to other activities (e.g. the seed cup necklace).

The final, most popular activity allowed the children to make a necklace attached to a small cup. The children filled the cups with soil and seeds of their choice. During this process, the ASPB volunteers taught them about all of the things a plant needs to grow and thrive; sunlight, water, air, and nutrients from the soil. By providing all of these things to their seed cup necklaces, the children may have real vegetable plants growing in their homes by the beginning of summer. Participants were given the choice between radish, carrot, and lettuce seeds to be put in



**Left: First Lady Jill Biden stopped by the ASPB tent early in the morning for a demonstration of our activities by ASPB CEO Crispin Taylor.**
Image credit: Mindy Findlater

their cups. When asked which seeds were most popular, one of Dr. Friedman's students running the station Amy Berta said, "Carrots, for sure. They were obsessed with the carrots." She also commented that her radish seeds "have germinated into large sprouts that are growing happily inside of a teacup on the windowsill." ASPB expects that many children who participated in this activity will achieve similar results, continuing to spark curiosity and appreciation about plants within their homes.

This was a great experience for those volunteering and attending as this was very interactive for community members to learn and enjoy festivities! As biologists, it is not only important to speak amongst peers but also to spread knowledge and general awareness to all ages and walks of life.

Special thanks to all of the ASPB volunteers and staff that made this day such an egg-cellent one:

- Amy Berta
- Janeen Braynen
- Audrey Fahey
- Melinda Findlater
- Erin Friedman
- Seyedali Hosseinirad
- Sylvia Lee
- Christopher Thomas Luther
- Sonia Marie Moore
- Winnie Nham
- Jayson Padilla
- Robbie Paul
- Sophia Schorr
- Janet Slovin
- Brayden Stagnoli
- Yvette Tamukong
- Crispin Taylor
- Andrea Wade



**Seed cups germinating after the White House Easter Egg Roll.** Image credit: Amy Berta




**ASPB's volunteers interacted with thousands of families at the White House Easter Egg Roll.**
Image credit: Jayson Padilla

FEATURE

# Teaching Tools in Plant Biology: Guiding the Next Generation

BY MARY WILLIAMS

Teaching Tools in Plant Biology, published by the American Society of Plant Biologists, combines up-to-date peer-reviewed research-based content with flexible presentation components that can be used alone or integrated into your lesson plans so that you can confidently present these exciting topics in your classroom.

There have been incredible changes in biological sciences in terms of massive data production and the skills needed to analyze this data, but little training for the researchers who require a more quantitative and computational approach to their work. ASPB's Teaching Tools aim to fill that much-needed gap between advancement in biological sciences and researcher training, with the publication of several articles focused on tools and techniques. These span from computational image analysis and molecular dynamics simulations to bioinformatic pipelines and root phenotyping. Two recent publications address computational photosynthesis and plants and python.

## Most Recent: Computational Photosynthesis (ComPhot)

*Computational Photosynthesis (ComPhot): Simulation-Based Learning Platform to Study Photosynthesis*

The most recent Teaching Tool, under the "Tools and Techniques" category, focuses on Computational Photosynthesis modeling. The interactive platform guides users in studying photosynthesis as a well-known biological process with the support of a computational model. It is user-friendly for those who have little or no experience in coding and can be used on its own or to support teachers following a syllabus.

ComPhot introduces and explains the biochemical background of our simulated system and how to translate it into mathematical terms. The comprehensive approach conveys fundamental insights into photosynthesis, photoprotection, and fluorescence measurements and empowers users to devise their own *in silico* experiments by varying light conditions or designing synthetic strains. This tool acts as a stepping stone, fostering engagement and understanding while propelling research and innovation in photosynthesis.

Although there are lots of tutorials on how to use various programming languages, few have a focus that appeals to plant scientists. This tool was released in four of the developers' languages: English, German, French, and Polish.

## Most Popular: Plants & Python

*Plants & Python: A series of lessons in coding, plant biology, computation, and bioinformatics*

This is one of our most viewed Teaching Tools. Presented in English and Spanish, this tool assumes no prior coding knowledge or plant biology base.

This series of lessons teaches coding learning objectives in Python, a general programming language, using datasets and mathematical examples inspired by plants. Whether used in a classroom or for self-directed learning, the lessons cover coding essentials in Python, how to use the UNIX command line, and bioinformatics.

Plants & Python eliminates the challenges of gatekeeping and coding literacy that researchers can face by providing a common starting point for interdisciplinary and intercultural collaboration in the plant and computational sciences.

## Ideas To Grow On

ASPB's Teaching Tools in Plant Biology provides free training resources for plant scientists developed by members of our community.

Teaching Tools in Plant Biology®
*ideas to grow on*

Categories include hormones, biotic interactions, general interest, genetics, development, physiology and tools and techniques.

See all of them at
**academic.oup.com/plcell/pages/teaching-tools-plant-biology**

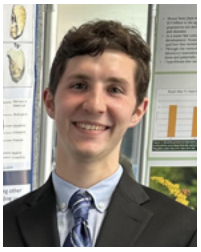
FEATURE

# Announcing the 2024 ASPB Summer Undergraduate Research Fellows (SURF)

The ASPB SURF Award funds promising undergraduate students so they can conduct research in plant biology during the early parts of their college careers.

2024 Fellows received a summer stipend and membership in ASPB. They will also receive support to travel to Plant Biology 2025, held July 26-30, 2025 in Milwaukee, WI, where they will present their research.

## Congratulations to the 2024 SURFers and their mentors!



### Charlie Colvin

**Mentor: Dr. Surinder Chopra**
Professor of Maize Genetics at
The Pennsylvania State University

*I am thrilled to be one of this year's recipients of the ASPB SURF award. The SURF application process was a great learning experience on writing a research proposal that I am sure will come in useful for graduate school applications and future grant proposals. I'm excited to use the lessons and connections I gain from the ASPB SURF program to guide my career from undergrad to grad school and beyond.*



### Laura Cox

**Mentor: Bonnie Bartel**
Ralph and Dorothy Looney
Professor of Biosciences

*I'm very grateful to have been awarded the SURF summer fellowship this year, as this opportunity allows me to dedicate my full time to research. Presenting my work and networking with other plant biologists at the ASPB conference will be integral in establishing myself in the field of plant biology, which will set me up for success as I move forward in my academic career.*



### Jade Milton

**Mentor: Magdalena Julkowska**
Assistant Professor at Cornell University and Principal Investigator at the Boyce Thompson Institute

*Applying for and receiving the ASPB fellowship fortifies my educational and professional aspirations by affording me the opportunity to advance my senior thesis alongside esteemed mentor Dr. Julkowska, furthering our impactful research initiated last summer. Additionally, through comprehensive training in Mass-spectrometry, high-throughput phenotyping, R-based data analysis, and RNA interference, I will cultivate essential skills crucial for future scientific pursuits and enhance my competitiveness for graduate school applications, aligning perfectly with my career trajectory in the realm of plant biology and scientific discovery.*



### Ella McGrath

**Mentor: Dr. Dior Kelley**
Molecular developmental biologist and Assistant Professor at Iowa State University

*The ASPB SURF grant has helped to give me a jumpstart on doing research on primary crops of developing countries, and has supported me financially for the summer. I can apply the knowledge I have gained not only to the research I will do in my college career, but to the rest of my career as well.*

## Congratulations to the 2024 SURFers and their mentors!



### Chiaki Komatsu

**Mentor: Dr. Keiko Torii**
Professor, Johnson & Johnson Centennial Chair in Plant Cell Biology Investigator, HHMI Oversea Principal Investigator, WPI-ITbM, Nagoya

*I am deeply honored and grateful to have been selected as a recipient of the ASPB SURF Award. With the invaluable support of my mentors and ASPB, I am eagerly looking forward to conducting research this summer and presenting my findings! This opportunity will not only allow me to expand my scientific knowledge but also develop skills that will be instrumental in my future career beyond undergraduate studies.*



### Alethia Regina Pratas

**Mentors: Dr. Peter Lundquist and Shannon Li Donnelly**

*My educational and professional objectives would be greatly aided by receiving the SURF award, which would allow me to further my studies in plant biology and address agricultural issues that are made worse by climate change. I became interested in this topic after seeing how the drought affected Paraguay, which inspired me to look into genetically modified crops. My goal is to study cowpea cultivars' susceptibility to heat stress at night through the fellowship, important research that will help advance sustainable agriculture. This opportunity not only supports my goal of earning a Ph.D. in Plant Biology, but it also demonstrates my dedication to using science to advance agricultural innovation and global food security.*



### Grace Delpit

**Mentor: Dr. Arif Ashraf**

*Applying for and receiving the ASPB SURF not only offers expanded and rewarding experiences but also provides individualized instructions crucial for my growth in this field! I am looking forward to gaining insight into my future career goals and the opportunity to further develop my undergraduate research thesis based on data collection in the Ashraf Lab.*



### Celia Buete

**Mentor: Robert Augustine**
Assistant Professor of Biology

*Thanks to the ASPB SURF award, I am able to continue research that I am passionate about and learn skills that will be valuable in future projects. I am also looking forward to making connections in the field of plant science to learn about other people's research and possible career opportunities.*



### Zoe Smutko

**Mentor: Michael Grillo**
Department of Biology Assistant Professor

*I am honored and excited to continue my research this summer with the support of the ASPB SURF and my mentor. This opportunity will allow me to work on my first large-scale independent project, which I know will prove invaluable as I apply to graduate schools in the future. I am incredibly grateful to have received this opportunity to learn more about this plant-fungal symbiosis and to share my findings with others.*

"My future goal is to secure the food supply and flourish my country's agriculture, and this fellowship would allow me to study advanced plant science and put it into practice when I return home."

– RAHNUMA NURAIN TAHSIN, 2024 ASPB SURF WINNER

## Congratulations to the 2024 SURFers and their mentors!



### Will Thives

**Mentor: Craig Schenck**
Assistant Professor, Division of Biochemistry, University of Missouri - Columbia

*I am honored to be selected as one of the ASPB SURF recipients this year. This summer I will be able to execute a research project I have been conceptualizing with my mentor for months and learn new techniques along the way that will expand my abilities as a plant biologist. This fellowship will allow me to dedicate my summer diving deep into a research topic I'm fascinated about and present my findings to fellow scientists at the next year's national meeting. I cannot wait for SURF to begin and the outcomes of this experience!*



### Alice W. Villwock

**Mentor: Joe Ogas**
Head of the Department of Biochemistry and Professor of Biochemistry at Purdue University

*Receiving the ASPB SURF Award provides me with the opportunity to get significant full-time research experience to help prepare me for a career as a research scientist in the future, where I will be able to help develop new technologies and innovations to improve the field of agriculture and beyond.*



### Helen Winters

**Mentor: Dr. Loretta Johnson**
Professor of Biology at Kansas State University

*I am honored to be selected by the American Society of Plant Biologists to receive the 2024 Summer Undergraduate Research Fellowship. This award will support my summer research over climate-adaptation in a dominant prairie grass, allowing me to build valuable skills and experiences that will greatly benefit my education and research as an undergraduate and graduate student, and benefit my future career in prairie ecology.*



### Kyler Kromer

**Mentor: Dr. Tomo Kawashima**

*Applying for and receiving the SURF award will allow me a strong foundation to conduct research and will also allow me to develop a strong network of connections through ASPB.*



### Jamari Taylor

**Mentor: Dr. Nicole Gauthier**
Extension Plant Pathologist

*I am honored to represent my school as an ASPB SURF awardee this year. To have the opportunity to join a society full of trailblazers in plant biology, and the opportunity to network and share my findings on the causal agent of poor stand establishment in hemp is truly humbling.*



### Rahnuma Nurain Tahsin

**Mentor: Professor Abidur Rahman**

*As an undergraduate student, applying for and being awarded the ASPB grant is a great accomplishment. My future goal is to secure the food supply and flourish my country's agriculture, and this fellowship would allow me to study advanced plant science and put it into practice when I return home. This fellowship is a step toward my career and future objectives, and with it, I want to be able to climb every step that comes up after this.*


*We're Listening!*

Share your feedback on the Society and ideas to help ASPB better meet members' needs at qrco.de/bdXxEM or by scanning the QR code.

FEATURE

# Updates from the ROOT & SHOOT Research Coordination Network

The NSF-funded ROOT & SHOOT Research Coordination Network (RCN) brings together seven plant science organizations, including ASPB, to leverage the influence of professional societies to effect cultural change in plant science. Specifically, we seek to advance diversity, equity, and inclusion in the plant sciences, and to remove barriers for individuals historically excluded from science based on gender, gender identity, disability status, sexual orientation, ethnicity, or race.

The project's many volunteers have made good progress over the past two years. Additional information about all their activities can be found on the ROOT & SHOOT website (rootandshoot.org). As described below, our work so far has focused on educating leaders of the societies, developing a set of recommendations for more inclusive conferences and implementing some of those recommendations, and providing travel awards for students to attend plant science conferences. We are halfway through the funding period and would be happy to hear your feedback; please email the Program Facilitator, Marcia Puig-Lluch, at marcia@rootandshoot.org with your comments and suggestions.

**Leader training and capstone project led by Movement Consulting.** The grant provided funds for a year-long training program for the leaders of the plant science organizations that included readings and discussions. Each organization conducted a "capstone project" in which each identified a topic, timeline, and strategy to address a specific challenge. You can read about these projects here: rootandshoot.org/capstone-projects. As its project, ASPB established an onboarding plan for newly appointed members of the ASPB Council that is aimed at cultivating inclusive leadership for the Society. The plan launched in 2023.

**Inclusive Conferences Project.** One of the goals of the ROOT & SHOOT project is to promote policies that will help to ensure that the conferences hosted by the RCN participating organizations are inclusive and welcoming to all. To this end, a group of 23 volunteers comprised of members from across the RCN organizations worked together to develop a guide and set of recommendations for conference organizers and participants. Two of the priority areas have been implemented in 2023 and 2024, including a Bystander Intervention training for the organizations' leaders and volunteers, and the presence of conference Ombuds and Advocates onsite for five conferences. Ongoing projects include the development of a common reporting and response system and a discussion about the practices of restorative justice.




**From left to right: Mohit Mahey (Michigan State University), Carolina Ballen-Tarborda (Clemson University), and Marcia Puig-Lluch (ROOT & SHOOT) at the ROOT & SHOOT booth during the MANRRS 2024 conference.**

**MANRRS/SACNAS travel awards to plant conferences.** Each year, the NSF grant provides funding for members of MANRRS (Minorities in Agriculture, Natural Resources, and Related Sciences) and SACNAS (Society for Advancement of Chicanos/Hispanics & Native Americans in Science) to attend one of the plant science conferences convened by the RCN member organizations. One of the unique aspects of this travel award program is that the award is given to a student–mentor pair, and the selection process is weighted towards pairs that show evidence of a strongly supportive connection. By the end of the 2024 conference season, ROOT & SHOOT will have funded 26 pairs of travel awardees to attend plant science conferences, including ASPB's Plant Biology conferences. Applications for 2025 conference travel will open later this year.

**Promoting plant science at SACNAS and MANRRS conferences.** With the goal of introducing students from underrepresented backgrounds to opportunities in plant science, ROOT & SHOOT has hosted a booth at MANRRS conferences (April 2023 and March 2024), and the SACNAS NDiSTEM conferences (Oct 2022 and Oct 2023), including a Careers in Plant Biotechnology workshop. The award also provides travel expenses for one or two early-career researchers to cohost the booth (see picture). This outreach will continue for the duration of the grant period.

**Culturally Competent Mentorship project.** Many studies point to good mentorship as one of the most important determinants of success, but also that good mentorship requires an understanding of and respect for the mentees' cultural and social identities. We have assembled a diverse team of 22 volunteers from across the RCN who, in partnership with experts in this space, are creating a mentorship curriculum for plant scientists. We will be recruiting cohort beta-testers to enroll in the fall of 2024.

**Want to get involved or be among the first to hear about opportunities available through ROOT & SHOOT?** Please sign up for our mailing list to be alerted to future progress and opportunities.



SOCIETY NEWS

# Nominations for ASPB Leaders Coming Soon!

BY HONG MA AND KENT CHAPMAN

Every year, ASPB members elect new leaders, and the ballots are based on members' nominations. This is crucial for the operation and success of ASPB, and all members can and should take part in this process. Nomination for the 2025 ballot will open in early January and run through the end of February 2025; they will be for two positions, the president-elect and an elected member of the ASPB Board of Directors (BoD), who is also a member of the ASPB Council.

The BoD is the governing body of ASPB and includes the president, the president-elect, the secretary, the treasurer, and three elected members, as well as the CEO, who is a non-voting member. The Council is the ASPB's deliberating body, with representatives from each of nine sections and seven committees, ECRs, and three elected members. One current elected BoD and Council member, Elena Monte, who is from Spain, will conclude her term in 2025. Because ASPB has many members who reside outside the USA and in accordance with the Society's constitution, Elena's successor will also need to be from a country other than the US. Please keep this in mind when nominating a candidate for the elected BoD/Council member.

The ASPB Nomination Committee (NC) is responsible for preparing an inclusive and diverse ballot. The current (2023-2024) NC is chaired by the President-Elect (Hong Ma) and includes the President (Leeann Thornton), a representative elected by the ASPB Council (Erin Friedman), a representative of (and elected by) the Equity, Diversity, and Inclusion Committee (Danielle Ignace), and a representative elected by the Early Career Plant Scientists' (ECPS) Section (Taylor Scroggs). For the 2024-2025 governance year, which starts in October 2024, the new NC chair will be Kent Chapman, who was recently elected as the new President-Elect. The other NC members are Hong Ma (President), Lisa Ainsworth (elected by the Council), Danielle Ignace (EDIC representative), and Taylor Scroggs (representative of ECPS).

The goal of ASPB and the NC is that the nomination process be transparent and representative. All ASPB members are encouraged to nominate candidates and are invited to visit the ASPB website to find information on the duties of the president-elect, president, and the immediate past president, the BoD, and the council. The nominee(s) can be nominated by multiple members and those with the most nominations will be contacted and, if they are willing to serve when elected, they will be on the ballot. Additional nominees will be invited until two nominees for each open position agree to be on the ballot. Before the election, the candidates for the president-elect will submit a statement and meet ASPB members via a webinar with questions and answers. Statements and webinars of past elections are available online.

The election is expected to run from May through part of June, and the candidate for each position with the most votes will be elected. The election results will be determined by ASPB staff and certified by the Nomination Committee.

## Contact Us!

The Nomination Committee welcomes inquiries about nominations and looks forward to hearing from you with your nominations.

Hong Ma: hxm16@psu.edu
Kent Chapman: chapman@unt.edu

# Kent Chapman Elected ASPB President-Elect



October 1 ushers in leadership changes across ASPB: Leeann Thornton moves into the Past President position, Hong Ma begins his term as ASPB President, and a new President-elect begins their term. ASPB's newest President-elect, chosen by a vote of ASPB members, is Kent Chapman.

Chapman's vision for ASPB is one that "relies on the strength of its foundation and embraces the future with the collective inspiration and efforts of its members," as he wrote in his candidate statement.

"ASPB has been my professional home since my first year of graduate school," Chapman wrote. "It is where I have found mentors, resources, collaborators, and friends. It is where I was taught to serve when asked and I am honored to have been elected to serve as ASPB President."

Chapman first presented his graduate school work at ASPB's annual meeting in St. Louis, and has been a member of the Society ever since. He has served in several leadership positions, including on the ASPB Council and Board of Trustees, as well as a Reviewing Editor of *The Plant Cell* journal since 2015.

Chapman is currently Regents Professor of Biochemistry at the University of North Texas. He has served for six years as Director of the BioDiscovery Institute, one of four Institutes of Research Excellence at UNT. Chapman's lab focuses on plant lipid metabolism, especially in the areas of signaling enzymes, organelle biogenesis, metabolic pathway engineering, and lipid imaging technologies.

Chapman was named an ASPB Fellow in 2021.

"I believe it is important to give back to the society that has done so much to support my own professional development. I am eager to work with my colleagues to grow the membership of ASPB into the society's next 100 years, where it will continue to be the leading professional society that supports the plant science community," he wrote.

Chapman will serve as ASPB President-elect starting October 1, 2024, and begins his term as ASPB President on October 1, 2025.

> "I am eager to work with my colleagues to grow the membership of ASPB into the society's next 100 years."
>
> – KENT CHAPMAN

## *Get Acquainted* with ASPB Committees!

Discover the ASPB members who serve on the Society's Committees, and learn how to get involved at aspb.org/about/committees

# Primarily PUIs

The Primarily Undergraduate Institution (PUI) Section is a section of ASPB dedicated to expanding PUI-associated activities and resources and creating a community of PUI-affiliated faculty, undergraduate students, graduate students, post-docs and more.

The goal is to establish a community of PUI-affiliated members that encourages conversation and access to insight and resources. Those involved may be employed by, considering a career in, or affiliated with research or education at a PUI institution. This section establishes wide-ranging connections for year-round support.

**So, why PUI? Hear from some of our members!**



"Working at a PUI, I get to know all my students, and some of my students very well, because I see them in class, in lab, in research, in the hallways, for advising, etc. The focus at PUIs is typically on the students — less on your performance as a biologist. I also love working in a small department where teaching is our focus, so rather than have plant conversations in the hallway, we have conversations about teaching best practices, or how to build in DEI in your classes & exams. Plus, I enjoy the work/family balance!"

**SUSAN BUSH TRIPP** • *Metropolitan State University in St. Paul, MN; 3 years*



"Prior to Spelman College, I worked at the University of Arizona, first as a Postdoc, then as a Research Scientist. During this time, I worked with some amazing undergrads in the lab, so I intentionally looked for positions at PUI when I was ready to move forward. I didn't have a lot of teaching experience before landing my current job. Spelman saw my potential and gave me a chance. I've learned that research can progress at a slower pace at a PUI, but I also have the freedom to pursue research directions that interest me without being overly concerned about the larger funding environment. For me, a position at PUI has the right mix of research, mentoring, and teaching responsibilities."

**DONGFANG WANG** • *Spelman College, Biology Department; 11 years*

**Ready to join? Sign up here.**

**If you're interested in learning more about ASPB's PUI section, visit bit.ly/ASPB-PUI**



"If you're undecided in a career path, remember that it is normal to forget what it's like to be an undergraduate if you spend a lot of time in a research-intensive environment. That is why I highly encourage working with undergraduates of all ages from diverse backgrounds and groups to help in deciding a career while refining your people and time management skills. Another activity that has always proven helpful is networking and/or attending events that provide support for prospective PUI faculties, like the virtual networking event sponsored by the PUI Section of American Society of Plant Biologists."

**ANSUL LOKDARSHI** • *Valdosta State University; 2 years*



"I didn't start my education journey necessarily intending to work in academics, much less a PUI specifically. That interest developed slowly through the years. PUI positions are not a "consolation prize" if you can't get a job at an R1. We are just a different type of faculty position and require individuals who are just as dedicated and highly developed in their relevant skillsets as anyone at an R1. The most rewarding part of my job is seeing my students go on to exciting careers that will contribute to society."

**DEREK GINGERICH** • *University of Wisconsin-Eau Claire; 16 years*

# ASPB's 2024 Women's Young Investigator Travel Award Winners Announced

Each year, ASPB grants travel awards to early career women to attend the Plant Biology Conference, held this year in Honolulu, HI from June 22-26. This travel award aims to increase attendance of early-career female investigators as well as set them up for success in the plant biology field, and encourage those within the first five years of their careers to engage with the community.

The competitive selection process is based on the quality of the abstract submitted (relative to the applicant's time as an investigator), a personal statement, and financial need.

## Congratulations to our 2024 Women's Young Investigator Travel Award Winners!



**MARIA JULIANA**

Abstract: The Target of Rapamycin (TOR) pathway integrates carbon and nitrogen metabolism in Arabidopsis by controlling 2-oxoglutarate levels

*"I am working to become a University Professor, and the WYITA to attend the Plant Biology 2024 meeting will support the development of the abilities needed for my career progression. This is a great opportunity to communicate and discuss scientific findings, get updated, and connect with colleagues around the globe. The little representativeness the Latin scientific community often has in international congresses greatly motivated me to be one of the awardees from underrepresented countries. Moreover, the WYITA is an interesting initiative to fight against the "scissor effect" in academia. As a Latin woman and a recent mother, I want to see more people like me in the scientific field and achieve awards!"*



**LOREDANA MOFFA**

Abstract: Advancing Grapevine Cultivation through the Implementation of New Plant Breeding Techniques (NPBTs)

*"Thanks to this award, I will be able to participate in the conference and present my work. This is a very stimulating opportunity for me because I might have the opportunity to meet experienced scientists as well as other young researchers facing the same topic of mine. The possibility of having a confrontation with a specialized group of scientists will enable new interactions among the ASPB partner and will allow me to find some new ideas and different points of view. This congress would also enable me to meet prominent leaders in the field from all over the world, who could represent potential contacts for future postdoc positions, networking and collaborations."*

## Congratulations to our 2024 Women's Young Investigator Travel Award Winners!



**TINA SCHREIER**

Abstract: Cell-to-cell connectivity is crucial for C4 photosynthesis

*"I'm extremely grateful to be one of this year's WYITA Awardees allowing me to attend the Plant Biology 2024 conference. I'm very much looking forward to connecting with fellow plant scientists (especially other female scientists), broadening my scientific network, and getting inspiration for cross-disciplinary ideas and collaborations."*



**RACHEL SHAHAN**

Abstract: Age-related cell state changes in Arabidopsis roots

*"The friends and colleagues I've met through ASPB have had a major impact on my career as a graduate student and postdoc. Now that I'm starting my own lab at UCLA, the Women's Young Investigator Travel Award will allow me to connect with my community in person at Plant Biology 2024. I am excited to hear the latest science, interact with fellow early career faculty, ask for advice from established faculty, and pay it forward by sharing my experiences with the next generation of scientists."*



**CHAMINDIKA SIRIWARDANA**

Abstract: Analysis of gene duplication within the Arabidopsis NUCLEAR FACTOR Y, subunit B (NF-YB) protein family reveals domains under both purifying and diversifying selection.

*"The WYITA will allow me to travel to PB2024 and network with my peers in the plant biology community."*



**SARATHI WERADUWAGE**

Abstract: Isoprene: New Insights into the Physiological Effects and Mode of Action

*"Since I was a graduate student, the ASPB Plant Biology meetings have provided me with an arena to share my research, gain training, and network. This year, as a new faculty member at Bishop's University, QC, Canada, I will be attending the 2024 Plant Biology meeting with my own students for the first time. The ASPB 2024 WYITA helps me celebrate this significant milestone in my journey as a woman in science. Thanks to the WYITA, I will be able to attend the 2024 Plant Biology meeting not only to share my research findings, but also my experience as a woman in science with the hope of motivating the next generation of women scientists."*



**Heejin Yoo**

Abstract: The role of amino acids in plant programmed cell death during plant immunity

*"This award holds significant value for me as it supports women scientists in attending conferences, making it possible for me to participate in ASPB 2024. Through this opportunity, I can engage with diverse scientific communities, learn about various fields of research and new techniques, and share our lab's findings."*

## *The Plant Cell* Editor-in-Chief Blake Meyers' Term is Coming to a Close



While 2024 marks the final year of Blake Meyers' five-year term as Editor-in-Chief of *The Plant Cell,* it draws to a close Blake's significant history with and invaluable service to the journal. In a relationship with *The Plant Cell* that has spanned more than 17 years, Blake has held multiple roles on the editorial board.

Though even before Blake gave so much of his time to *The Plant Cell,* he was an author, too. In fact, he published the bulk of his dissertation research in back-to-back articles in *The Plant Cell*.

Blake is and remains an advocate for ASPB's journals and the Society as a whole, bringing his very best to his role as Editor-in-Chief. Under his editorship, post-acceptance science editing was expanded to include in-depth figure-forensics reviews prior to publication while international and targeted author recruitment saw notable growth in submissions of papers from authors in countries with increasing plant science research funding. Blake was also a vocal advocate for bringing journal-sponsored ASPB memberships to *The Plant Cell* editorial board members—an initiative that was approved for the 2025 budget year.

Blake's dedication and enthusiasm for *The Plant Cell* that will be missed, in addition to his passionate leadership. Thank you, Blake, for your many years of service to ASPB and *The Plant Cell.*

## Changes Coming to ASPB Journals

*Plant Physiology* | THE PLANT CELL

Beginning January 1, 2025, *Plant Physiology* and *The Plant Cell* have some exciting changes for readers, authors, editors, and reviewers interacting with the publications.

First, the journals will be changing the current manuscript management system from eJournalPress to Editorial Manager. The primary driver behind this changes is a need for more integrations with software and tools—particularly AI tools, as they become available—as well as the ability to use and navigate reporting tools. This change is anticipated to yield a significant cost savings for the Society, as well.

Second, both journals will be moving to a continuous publication model, in which articles are accepted on a rolling basis and corrected proofs are published online immediately upon completion. The benefit to authors is that the corrected version of record will be available much sooner and no longer needs to wait for other articles in an issue to be complete. This allows authors to have a volume and issue number as soon as the article is published online, and will result in faster time-to-publication in some instances. Focus issues will still be compiled and published as one issue and related collection, and each monthly edition will still have its signature cover.

## *Plant Physiology* and *The Plant Cell* Editorial Boards Convene in Honolulu, HI

Just prior to Plant Biology 2024 this past July, the editorial boards of both *Plant Physiology* and *The Plant Cell* convened for all-important discussions about their respective journals; upcoming changes to the scientific, publishing, and technology landscapes affecting journal editors; and to generate ideas and feedback for their respective journals. Representatives from ASPB's publishing partner, Oxford University Press, attended to present on journal performance and trends, while Peridot Scientific provided a behind-the-scenes look at how potential image manipulation is analyzed and treated. Both editorial boards were highly engaged in the discussions and focused on forward momentum.



## Strengthening Women in Plant Biology: A WiPB Committee Update

The Women in Plant Biology (WiPB) Committee continues to be a driving force in supporting women in the field of plant biology. We strive to foster an inclusive environment that promotes gender equity, mentorship, and professional development. Here's a look at some of our recent activities and plans for the future.

## Honoring Burcu Alptekin's Contributions

We would like to extend our heartfelt gratitude to Burcu Alptekin, an early career member whose leadership and dedication have left a lasting impact on the WiPB Committee. Burcu played a pivotal role in interviewing female plant biologists for *Plantae*, helping to amplify their voices and providing them with a platform to inspire others. She also created an invaluable guide for conducting these interviews, which will serve as a resource for future committee members.

Burcu's final interview will be published in *Plantae* this September, and we eagerly anticipate reading it. Her contributions have been instrumental in furthering our mission, and we wish her the best in her future endeavors.

## Celebrating the Achievements of Women in Plant Biology

Our efforts to identify and nominate deserving women plant biologists for the American Society of Plant Biologists (ASPB) Awards are ongoing. We are actively seeking testimonials to support these nominations, ensuring that the hard work and accomplishments of women in our field are recognized and celebrated.

## Reflections and Action Items from PB2024

Plant Biology 2024 | HONOLULU, HAWAII JUNE 22–26

The recent Plant Biology 2024 (PB2024) meeting was a success by many metrics, and we received positive and constructive feedback on our efforts. Among the highlights were our childcare services, workshops, and networking opportunities, which were all well-received by attendees.

Our key takeaways and action items from Plant Biology 2024 include:

- **Childcare:** The childcare services provided at the conference were praised by attendees with families. We continue to explore the value of offering more flexible options with those unable to attend. While the addition of a family space was of interest to attendees, we recognize that it needs to be managed differently to be useful.
- **Imposter Syndrome Workshop:** This workshop received overwhelmingly positive feedback, with attendees reporting increased awareness and skills. We also gathered useful suggestions for next year, which will help us refine the content and delivery of the workshop.
- **Overcoming Barriers to Inclusion Workshop:** Attendees were deeply moved by Dr. Ebony McGee's call to the mission to broaden inclusion in plant biology and STEM. We believe that competing activities may have limited attendance, and we are now exploring alternative strategies to increase the reach of this important workshop, including press releases and posts on *Plantae*.
- **Networking:** Our networking tables, particularly those focused on "meet women in plant biology" and "parenting," were well-attended and buzzing with meaningful conversations. We were thrilled to connect with so many colleagues and inspired by our discussions regarding the life journeys of women scientists.

## Looking Ahead

As we move forward, the WiPB Committee remains committed to advancing initiatives that promote gender equity, mentorship, and professional development for women in plant biology. We are already planning for Plant Biology 2025 and will continue to engage with the community through *Plantae* and our interactions with ASPB leadership.

One exciting upcoming event is the Women's Young Investigator Travel Award (WYITA), with the application deadline set for November 1st. This $1000 award provides valuable opportunities for young women scientists to advance their careers and gain recognition in the field by attending Plant Biology 2025.

We are always exploring new ways to address the unique challenges faced by women in the plant science community, and we look forward to sharing further updates on our progress in future communications. Stay tuned for more news and developments from the WiPB Committee!

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