INFORMATION BROCHURE

American Society of Plant Biologists

2022 Election

This Brochure Includes:

Biographies of candidates for

- President-elect
- Secretary-elect
- Corresponding Member

Election Procedures: On the electronic ballot card, mark your choice of candidates for elected office.

President-elect

(to serve as president 2023–2024)

Leeann Thornton

ASPB has been part of my identity as a scientist since I first learned about professional societies as an undergraduate. My research mentor made it clear that presenting and discussing research at conferences was critical to a profession in the sciences. I first became a member in 1998 after winning the undergraduate research presentation award at the Mid-Atlantic Section meeting. Getting introduced to ASPB so early in my career was one of the most influential aspects of my education. It would be a privilege to serve this society as President, building connections that support the membership throughout the year.

My undergraduate work in Arabidopsis at James Madison University led me to doctoral studies at Washington University in St. Louis where I examined the regulation of Photosystem II in *Synechocystis*. I stayed in St. Louis for my postdoctoral training but switched to a lab where I could return to vascular plant genetics and environmental growth regulation. I secured USDA funding to support the analysis of Cytochrome P450 enzymes (CYPs) that regulate brassinosteroids in rice. My postdoctoral training included time in a collaborator's lab at University of Illinois Urbana-Champaign, introducing me to research at a large land grant institution.

While in college and graduate school, I developed a passion for teaching young people how to become scientists. My postdoctoral mentor helped me develop an Arabidopsis project to continue at a small Primarily Undergraduate Institution (PUI). I started at The College of New Jersey (TCNJ) in 2007 and was recently promoted to full Professor. At TCNJ, I support a team of undergraduate researchers that are learning to manipulate CYP genes to study their role in environmentally regulated plant metabolism. TCNJ is committed to supporting my research throughout the year. My work has benefited from NSF support of my sabbatical to learn corn genetics and USDA funding to continue that work at TCNJ. My scientific interests inform the courses I teach in the Biology Department and the First-Year Seminar. I have made it my mission to help each student I encounter appreciate the importance of plant science in their daily lives, which means I have learned to help them connect to plants on their own terms. For four years, I led TCNJ's First-Year Seminar Program, managing the students and faculty for more than 100

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Laura Wayne

The summer of 2005 was life changing for me: I met my husband-to-be, and I was also awarded a Summer Undergraduate Research Fellowship (SURF). Along with the SURF stipend came a 1-year membership to ASPB. ASPB has provided me with a professional community, a place to network and meet other scientists, and an edge on the latest research and technology. Recognizing how ASPB helped launch my career, I am passionate about giving back to this society and mentoring the next generation of plant scientists. To get more involved in these efforts, I joined the Women in Plant Biology committee (WiPB) in 2014. As Chair of WiPB (2017-2020), I strengthened connections to the Equity, Diversity, and Inclusion (EDI) committee as we led joint workshops on implicit bias, hosted networking events, and introduced a webinar series on Leadership.

ASPB's drive to change and adapt is impressive. Recently, we welcomed the Early Career Plant Scientists Section, and ASPB has expanded EDI from a single committee to working toward embedding EDI into every aspect of the organization. The nimbleness of response to cultural and societal events sends a clear message that everyone belongs, and everyone is heard. It is essential for us to be more than passive allies; we all need to be activists and accomplices in driving toward a more equitable and inclusive society.

Currently, I am the Oils Discovery Leader at Corteva Agriscience (merger of Dow AgroSciences and DuPont Pioneer) and lead a small discovery team operating at the interface between basic and applied plant science. My overall research interest is in studying the underlying mechanisms of plant metabolism to produce sustainable bioproducts. I majored in Biotechnology at the State University of New York College of Environmental Science and Forestry (SUNY-ESF). The SURF research project developed into a senior thesis on characterizing guard-cell-specific genes in Arabidopsis. During my PhD at Washington State University, I investigated the electron supply to fatty acid desaturases and hydroxylase with the long-term goal of improving production of industrial oils. Through the NIH Protein Biotechnology traineeship, I did an internship at Metabolix (now Yield10 Bioscience) to produce biodegradable bioplastics. In 2012, I joined Dow AgroSciences where my research focus is on discovering

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sections each year. My responsibilities included training instructors in inclusive teaching and other strategies for improving classroom learning.

Over the years, I engaged in leadership activities that ASPB offered. I was invited to become the first postdoc ambassador and member of the Membership Committee in 2005. The ASPB executive committee had begun investing in leadership activities for early career scientists. That investment has grown into a thriving Ambassador program and the Early Career Plant Scientists section that both contribute energy and ideas to all aspects of the ASPB mission. Later, I spent two additional terms on the Membership Committee and helped establish the PUI section of ASPB. I led the effort in securing external funding for the PUI faculty participation in ASPB and expanding networking opportunities for PUI faculty and those interested in a career at a PUI. As the section grew, we expanded our interactions to support each other throughout the year, as well as at the annual conference.

I highly value the effort that ASPB puts into facilitating networking at the annual conferences and throughout the year. I want to enhance opportunities for meaningful connections among all members of the plant biology community. ASPB meetings helped me develop collaborations with scientists at The Boyce Thompson Institute and receive training in plant metabolite analysis in Japan. Each step of my career has benefitted from working alongside scientists from other institutions in the US and internationally. One of the strengths of a large society is connecting those that have something useful with those that need it, such as jobs, workshops, protocols, and scientific findings. As President, I will work to improve opportunities for scientists seeking training to connect with those who have expertise and job opportunities in academia, government, and industry in the US and internationally.

Although I value each aspect of the ASPB mission, this objective resonates with me most: "promote the interests, growth, and education of plant scientists". My term as the PUI Representative on the ASPB Council showed me how each committee and the society leaders thoughtfully support plant scientists around the world. As with any group of people, it is a challenge for an organization to be everything to everyone, but ASPB can be the conduit through which members connect to what they need in the plant biology community. To solve the challenges facing humanity in the coming years, we need collaboration that respects the wisdom and perspective not historically represented in the upper tiers of science. We also need to maintain pathways for diverse young scientists to build careers in academia, industry, science communication, and policy making. I will be a leader who is willing to recognize my biases and seek out voices different from my own. I will listen to new ideas and help continue our shift towards efforts that improve access and support more equitable collaboration. I aim to help ASPB recognize whose voices need to be amplified in our on-going efforts to engage diverse plant scientists. ASPB is a strong society because it respects the varying perspectives of our members, and I want to support our membership by advocating for resources plant scientists need to thrive.

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traits for creating healthier oils and improving overall seed composition. Additionally, I lead the R&D EDI Recruiting Taskforce for Corteva.

In 2018, I was asked to run for President of ASPB. Honestly, it was unnerving to compete against a renowned R1 full professor, but I felt compelled to show especially young women that we should not underestimate ourselves. Regardless of the election outcome, I resolved to continue my initiatives for ASPB. Although I did not win, I was asked to be a "provocateur" at the summer council meeting, where I proposed three items: (1) We include early career representatives on each committee with full voting participation. (2) We develop mentoring programs. (3) We better engage with the public through communicating our personal story (e.g., Story Collider).

We now have early career representatives on all committees, including Council and nominations committee. Through WiPB, I helped develop the Plantae Mentoring Center. When it launched in 2019, I hosted a webinar on How to be an Effective Mentor with a focus on mentoring underrepresented minorities. I mentor one or two students/postdocs at any given time and have hosted five student interns at Corteva.

Transparency is a path toward equity. In 2019, I advocated for increased transparency with the nomination process. This provocation led to an ad-hoc committee, which updated the nominations process and inspired Judy Callis' Transparency Project. Speaking out on this issue may have helped me get elected to represent the Council on the Board of Directors in 2020. One of the most difficult decisions ASPB has made, was to discontinue self-publishing. Ultimately, we chose Oxford University Press as the publisher for *The Plant Cell* and *Plant Physiology* (see FAQ). When it became evident that the Washington DC Plant Biology gathering needed to be canceled, we decided to host a completely virtual Plant Biology Worldwide Summit. While not ideal, virtual options have allowed many more people to participate.

I am currently on the Centennial Challenge committee, where we are fundraising to ensure programs like SURF continue. I believe I have a lot more to give to this society, especially to the next generation of ASPB leaders. I hope to continue increasing mentoring opportunities, such as expanding/upgrading the Plantae Mentoring Center and developing a conference buddy program so new attendees feel welcomed. We as scientists need to do a better job of sharing our stories to make our research personal and relatable to everyone, especially as we seek public support for CRISPR-editing technology and research funding. Lastly, I plan to listen to your ideas, advocate on your behalf, and create a collaborative environment that values all contributions, regardless of level or institution.

Secretary-elect

(to serve as secretary 2023–2025)

Phil Taylor

Phil Taylor, PhD, currently serves as the Director of Open Innovation and Outreach for Crop Science R&D at Bayer, based in St. Louis, MO. He plays a central role in fostering strategic relationships around the globe and developing programs to enable novel ways of accelerating plant science in support of Bayer's R&D pipeline and to grow external innovation ecosystems.

Phil has built his career around the opportunities created by bringing diverse groups of people together around a common scientific goal, and this is the approach he will bring to this role. Although the main function of the ASPB Secretary is to oversee the Program Committee in its planning of the annual meeting, Phil's vision for this role goes beyond that. As the society approaches its centennial, the Secretary's role is now about setting the vision for how we gather and interact as a community. Key to this is developing a transparent and holistic approach to the content the society generates (be it in-person, online, hybrid, or asynchronous). There have been many stresses on our community in recent years, and it has never been more important to understand what we need to do to enable an equitable and diverse gathering place that creates the greatest value for all attendees. At its core, this means tapping into ASPB's unique culture to experiment with different formats and structures to create the right balance of exciting science independent of career level, inclusive professional development opportunities, collaboration and co-creation spaces, networking, and social interactions.

An additional aspect to the Secretary position is, as a member of its Board of Directors, to provide formal advice, oversight, and approval regarding activities of ASPB. In this capacity, Phil's objective would be to position the meeting as both a significant content opportunity for the ASPB community and the premier gathering space for plant scientists of all disciplines, globally.

Before joining industry, Phil trained as a plant cell biologist, receiving his PhD from the John Innes Centre in Norwich, U.K. He subsequently held postdoctoral positions at The University of Leeds and The University of North Carolina – Chapel Hill, as well as a British Council Fellowship at the University of Heidelberg, Germany. He has been an ASPB member since 2004 and a member of the Program Committee since 2013. A native of the UK, Phil now lives in St. Charles, Missouri, with his wife Amanda and their four children, Jack, Hugh, Owen and Meredith.

Ian Wallace

I am an Associate Professor in the Department of Biochemistry and Molecular Biology at the University of Nevada, Reno. I received my BS and PhD degrees in Biochemistry from the University of Tennessee, Knoxville where I worked under the supervision of Dr. Daniel Roberts and investigated the structure, function, and regulation of plant Major Intrinsic Proteins (MIPs). During this time, I became fascinated with plant cell wall polysaccharide biosynthesis and pursued a postdoctoral experience in Dr. Chris Somerville's lab at the University of California, Berkeley. My lab at the University of Nevada, Reno continues to be broadly interested in cell wall polysaccharide biosynthetic enzymes and understanding how these proteins are regulated at the post-translational level, particularly under abiotic stress conditions. Specifically, my lab seeks to understand the post-translational regulation of the Cellulose Synthase Complex, identify new glycosyltransferases that participate in cell wall pectic polysaccharide synthesis, and identify rationally designed inhibitors of cell wall glycosyltransferases. My group makes use of a diverse array of approaches, including advanced proteomics, chemical biology, and traditional biochemistry, to address these questions.

I attended my first ASPB Plant Biology meeting in 2003 as an undergraduate student supported by an ASPB Summer Undergraduate Research Fellowship. This experience foundationally impacted my decision to pursue graduate education, plant science, and ultimately leading an independent research group. That first meeting (and many subsequent Plant Biology meetings) taught me a lot about what I believe is important and unique about these meetings. I believe that ASPB meetings should allow attendees to be exposed to incredible breadth and depth across a wide variety of topics in plant science. As a young scientist, I found it incredibly impactful to meet my scientific heroes at Plant Biology meetings and realize that they were interested in and supportive of what I was doing. And lastly, I felt an incredible sense of community that is quite rare to experience at such a large conference. As ASPB secretary, I would strive to uphold these goals by providing high quality major and focused symposia, increasing opportunities for networking and professional development among junior and established scientists, and maintaining a diverse and inclusive environment that is open to all plant biologists. ASPB and the scientists that make it have given me an incredible amount of support during my career, and it would be an honor to serve in this position to give back to this community.

Enid MacRobbie Corresponding Membership Award

Tzyy-Jen Chiou

Academia Sinica, Taiwan

Tzyy-Jen Chiou is a Distinguished Research Fellow and full professor at the Agricultural Biotechnology Research Center of the Academia Sinica, Taipei. She has made groundbreaking contributions in plant physiology, particularly to our understanding of phosphate nutri-tion. Tzyy-Jen made the seminal discovery that microRNAs play a central role in maintaining plant phosphate homeostasis by acting as long-distance signals for phosphate starvation. She has also ad-vanced our understanding of phosphate transport through her dis-covery of tonoplast transporters. In addition to establishing herself as a leading expert in molecular plant nutrition and as an excellent mentor, Tzyy-Jen has been a dedicated member of ASPB since 2000 and has served the plant biology community in many ways. She was Monitoring Editor of *Plant Physiology* (2009-2014), co-edited a focus issue on *Plant Phosphorus Nutrition* (2011), and has presented symposium talks at ASPB Plant Biology meetings.

Andreas Schaller

University of Hohenheim, Germany

Andreas Schaller is been a full professor of plant physiology and bio-technology at the University of Hohenheim since 2002. He has made seminal contributions to the field of peptide hormone biogenesis and signaling. For many years, Andreas worked on the large family of subtilases as candidate proteases for the maturation of signaling peptides, which are involved in the biogenesis and activation of plant peptide hormones. In addition, Andreas significantly contributed to our understanding of dirigent proteins, which are responsible for the stereochemical control of metabolic reactions in biosynthetic pathways. Andreas joined ASPB as a PhD student, and he has been an active member ever since. He has served the plant community in many ways, publishing regularly in *Plant Physiology* and *he Plant Cell*, frequently serving as a reviewer for these journals, and contrib-uting to Plant Biology meetings whenever possible.

Nicholas Smirnoff

University of Exeter, United Kingdom

Nicholas (Nick) Smirmoff has been a full professor of plant bio-chemistry at the University of Exeter since 2006, and he served as the Director of Research for Exeter Biosciences from 2015-2021. Nick is best known for his seminal work on the ascorbate biosyn-thesis pathway, named the Smirnoff-Wheeler pathway in his honor; and he has made important contributions across multiple areas in the fields of plant biochemistry and physiology. Nick has studied the function of reactive oxygen species and antioxidants in various plant processes. He excels in teaching plant metabolism and stress biology, and he has inspired numerous scientists to pursue careers in plant biology. Nick has served our community in many ways; and he is a passionate supporter of ASPB activities, most notably as a Monitoring Editor for *Plant Physiology* starting 2018, followed by his promotion to Associate Editor this year.

VOTE! Help select the leaders of ASPB!

Deadline for voting is July 20, 2022.