INFORMATION BROCHURE

American Society of Plant Biologists

2021 Election

This Brochure Includes:

Biographies of candidates for

- President-elect
- Elected Member, Board of Directors
- Corresponding Member

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

President-elect

(to serve as president 2022–2023)

Hong Ma

For nearly 100 years, the missions of ASPB have been to promote plant biology research and education, to disseminate research results through publications and conferences, and to support the community of plant biologists. ASPB has had numerous accomplishments, while also having faced many challenges, as our greater society makes great progresses with punctuated setbacks. Today, ASPB and our plant biology colleagues, along with other members of the human society, once again have global challenges of food shortages, destruction of ecosystems, climate change, economic upheavals, and world-wide health crises. Furthermore, even though decades of great efforts to achieve diversity, equity, and inclusion in the plant sciences and society more generally have made significant progress, so many recent tragic events have sharply focused our minds more than ever on the need to fight even harder against biases and bigotry. Nevertheless, the broad participation in recent demonstrations and the conviction of Derek Chauvin provide a ray of hope that sustained efforts can lead to greater change.

As a first generation immigrant and naturalized US citizen, I have benefited from the support of many friends and colleagues, while also having experienced and witnessed some of these biases and bigotry and sharing in the pain and anger they provoke. Throughout my career, I have worked hard to promote diversity, equity, and inclusion through mutual respect and understanding and supported the training of women and minority students and postdoctoral scientists. In addition to serving as advisors to students and postdocs, I was also previously the Director of the Cell and Developmental Biology Graduate Program at Penn State, and worked to expand the numbers of both faculty and students, including plant biologists and their trainees. If I am elected as president, a top priority will be to support and train plant biologists toward becoming a community with greater diversity, to amplify the voices of diverse members of our community, and to promote diversity in society leadership and society activities.

Currently I am a Professor of Biology and Huck Distinguished Research Professor of Plant Molecular Biology at The Pennsylvania State University. My lab has studied the molecular genetic basis of plant reproductive development, particularly anther/pollen development and meiosis; we are also interested in understanding phylogenetic relationships and evolution of angiosperms, particular for members of families

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Gustavo MacIntosh

For the vast majority of my career, I have been a member of ASPB and working in the US, but the story of how I became a plant scientist began in Argentina. At Universidad Nacional de Mar del Plata, I obtained my *Licenciatura* in Biology (equivalent to a BS/MS degree) while researching the regulation of a human parasitic protozoan. My research shifted permanently to plants during my PhD in Chemical Biology at the Universidad de Buenos Aires, where I investigated protein phosphorylation in potato tuberization and published my first first-author paper in *Plant Physiology*. In 1997, right after my PhD defense—with my wife, our newborn daughter, and two pieces of luggage—we moved to East Lansing, MI for my postdoc training at the DOE-Plant Research Laboratory at Michigan State University. There, immersed in molecular biology of Arabidopsis and yeast, I started working on ribonucleases, which remain my main research interest. Later, I helped the lab move from MSU to Delaware, where I became an Associate Scientist at the Delaware Biotechnology Institute, expanding my work to functional characterization of Arabidopsis noncoding RNAs. In 2003, I obtained an Assistant Professor position at Iowa State University, where I have built a laboratory investigating the functional characterization of plant RNases and the mechanisms and regulation of RNA salvage and cellular homeostasis, funded primarily by the National Science Foundation and the Roy J. Carver Charitable Trust. A few years after moving to Iowa, I expanded the laboratory's focus to include defense mechanisms that protect soybean plants against the soybean aphid—and the counter-strategies employed by aphids. This project, funded primarily by the Iowa Soybean Association and the USDA, was recognized for its value to Iowa through the 2017 Distinguished Scientist Award from the Iowa Academy of Science.

In ASPB, I have served in all elected positions for the Midwest section and in many committees (EDIC, Science Policy, Membership, Council). I am currently an elected member of the Board of Directors for a few more months, and now seek to serve the Society as President.

Professional societies are having an identity crisis, and ASPB is no exception. The old model, centered around annual meetings and specialty journals, provided value but placed a limit on ASPB's growth. To keep ASPB relevant, we must acknowledge and adapt to the changing realities of our profession. These realities include society's increasing

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with species that are important for agriculture and horticulture, including soybean and other legumes, cucumber and other Cucurbitaceae members, as well as apple, pear, peach, strawberry and other Rosaceae.

My interests in plants started when I was in elementary school with exposure to major crops such as rice and soybean and many other cultivated or wild plants. After starting my undergraduate studies at the University of Science and Technology of China, I transferred to Temple University and completed my BA in Biology and Biochemistry, with undergraduate research in biochemistry and organic chemistry. My training in molecular genetic analyses was obtained through Ph.D. studies of gene regulation in yeast at MIT. During my Ph.D., the advances in plant molecular biology, especially the emergence of Arabidopsis as a model system for plant biology, attracted me to seek postdoctoral training under the guidance of Elliot Meyerowitz, through research on floral homeotic and heterotrimeric G protein genes.

In 1990, I started my first independent scientist position at Cold Spring Harbor Laboratory, continuing molecular genetic studies of floral and G protein genes. Eight years later, I moved to Penn State and became an associate professor, joining a much larger group of plant biologists at Penn State. This environment has provided many opportunities for collaboration and fostered my research in a new area, molecular evolution. Furthermore, the opportunities to work with and train students and postdocs, including women and minority students, made the professional experience at Penn State highly satisfying. From 2008 to 2016, I was Professor and Dean of the School of Life Sciences at Fudan University, Shanghai, focusing on increasing research quality, strengthening graduate student careers, and facilitating international exchange. In early 2017, I returned to Penn State as full-time Professor of Biology and the Huck Distinguished Research Professor of Plant Molecular Biology. In 2018, I was appointed as Associate Dean for Research and Innovation of the Eberly College of Science at Penn State for a term that will conclude at the end of 2021.

I have been a member of ASPB since 2000 and have served as a member of the ASPB Publications Committee since 2017. I have also served previously as an Associate Editor for *Plant Physiology*. In addition, I have been an author on a number of papers published in *Plant Physiology* or *The Plant Cell*, and I have also served as a reviewer for manuscripts submitted to these two journals. I consider these as valuable experiences that can be beneficial for responsibility of the president to support the society journals, as they navigate through the current time of great changes in scientific publishing under the leadership of the Editors-in-Chief.

During my career, I have been honored with the John Simon Guggenheim Memorial Foundation Fellowship (2004-2005), the Faculty Scholar Medal in Life and Health Sciences at Penn State (2005), Distinguished Professor in Biology at Penn State (2008), and elected as a AAAS Fellow in 2010. These serve as reminders that I should do more to give back to the profession that has supported my career.

All my life, I have believed strongly in hard work and dedication to the common good. If I am elected, I will work hard for ASPB, for its members and the greater plant biology community, and to promote diversity, equity, and inclusion. Let's work together to achieve a more perfect society for all!

Gustavo MacIntosh *continued from page 1*

expectations of equity, diversity, and inclusion; the need for flexible and accessible ways to communicate and network; and the fact that many recent graduates are building careers outside the traditional academic path. As President, I would aim to facilitate ASPB's evolution and continued growth in alignment with these changing realities.

Successful growth means building on solid foundations while dismantling and rebuilding structures when necessary. This is a worthwhile process the Equity, Diversity and Inclusion Committee (formerly the Minority Affairs Committee) has already begun. As a Committee member from 2012 to 2020 and Chair the last three years, and with help from many people in and outside the committee, we were able to reinvigorate the Society with EDI values. While we are still far from achieving true representation and inclusiveness, the foundation has been laid, and now is our opportunity to harness the momentum we have gathered to fuel further growth.

How might we increase the diversity of our members–and consequently, our leadership structure? We must renew what we offer to members. In other words, if we want marginalized groups to join us, we need to make sure we have something of value to offer. One way I propose we add value to our Society is involving and integrating industry partners. Looking at the current realities of plant biology, the most common career target for students is the private sector; our Society will only become stronger by inviting more industry plant biologists into the conversation.

At the same time, we need to conserve and build on what's already working. For example, the Early Career Plant Scientist section has already strengthened the society through the inclusion of early career (EC) representatives on committees. EC members have contributed novel ideas, different perspectives, and enthusiasm as ASPB participants. Continuing to provide EC members a community and mode for input ensures robust and productive membership for years to come. Our expanded virtual presence, necessitated by the pandemic, has also fortified membership by increasing participation and extending the Society's international reach—both positive outcomes I propose we capitalize on by continuing to develop and refine more flexible, accessible modes of communication.

Here, I've laid out my proposed focus on evolving and expanding EDI efforts, communications, and membership. I recognize that one person cannot achieve all these goals alone, and would welcome the opportunity to work with the Society's leadership team and all its members. As President, I would aim to function as a catalyst for member-driven, growth-oriented changes; as a steward for what's already working; and as a plant sciences advocate to policy makers and the public at large.

Elected Member, Board of Directors

(to serve 2021–2025)

Paula Casati

Paula Casati is Professor of Biochemistry at the University of Rosario in Argentina. She is also a Principal Researcher of the Centro de Estudios Fotosintéticos y Bioquímicos (CEFOBI) also in Argentina. Paula obtained her BSc in Biotechnology and then her PhD in Plant Biochemistry from the University of Rosario. She then conducted postdoctoral research at the Biology Department at Stanford University. Her research interests focus on understanding how plants respond to ultraviolet exposure. Paula's lab has investigated how chromatin structure, the cell cycle, and growth regulators modulate different responses in plants exposed to UV-B – in particular, plant growth, production of protective metabolites, and DNA damage and repair. In addition, Paula has had a long standing interest in plant specialized metabolism, particularly flavonoids. Her work has focused on biochemical and genetic approaches to characterize the flavonoid pathway in maize and Arabidopsis. Her lab has also pursued questions on the link between flavonoid production and salicylic acid metabolism, in particular during microbial pathogen attacks.

Paula has been acknowledged with a number of awards, including the Angel Cabrera award in Biological Sciences, given by the Argentinian Academy of Sciences (2011); the Bernardo Houssay award in Biological Sciences, given by the Argentinian Ministry of Sciences and Technology (2016); and the L'Oreal-UNESCO "Women in Science" award (Argentina 2017).

Paula has been a member of ASPB intermittently since she started her lab in Argentina, and she looks forward to the opportunity to more actively participate in the society. She appreciates all the opportunities the ASPB has created with and for minorities, not only from the US, but also from different parts of the Word. Paula considers the ASPB to be a leading worldwide organization for the plant science community, one that promotes science-based policy and public communication. She also thinks that the publication of the society's journals has an important impact in its overall contribution to the plant science community.

Elena Monte

Elena Monte is a CSIC (Spanish National Research Council) researcher at the CRAG-Centre for Research in Agricultural Genomics in Barcelona (Spain). She obtained her B.Sc. in Biology and her Ph.D. in Biochemistry from the Autonomous University of Barcelona (UAB). She conducted postdoctoral research at the Plant Gene Expression Center (PGEC)-USDA/U.C. Berkeley, and was a Ramon y Cajal fellow at the Institute of Molecular Biology of Barcelona (IBMB-CSIC).

Elena's research interests focus on how the light environment shapes the growth and responses of photosynthetic organisms, exploring the mechanistic interplay of light signaling with endogenous and ambient cues. Her objectives address how plants adapt to changing environments. Using Arabidopsis, rice, and the microalgae Chlamydomonas, research in Elena's lab explores the fundamental cellular processes that lead from photoreception to photoprotection and adaptation, with the objective of contributing to building resilient crops.

For a better future for our planet and its inhabitants, Elena recognizes the interdependence of all living organisms and systems, and the leading role that the plant science community represented by ASPB needs to play. She supports the objectives outlined by the decadal vision 'Reimagining the Potential of Plants for a Healthy and Sustainable Future'; and, as we are starting the 2020 decade, Elena would like to inspire and emphasize the importance of supporting women and diversity in plant science, as well as improving engagement with minority communities. She envisions a future where collaborative and transdisciplinary science is more widely encouraged and incentivized, with direct support for early career scientists. She also has an interest in advancing the dialogue between arts and plant science by promoting collaborative projects to foster public engagement.

Enid MacRobbie Corresponding Membership Award

Naomi Or

Hebrew University of Jerusalem

Naomi Ori is a professor at The Robert H. Smith Institute of Plant Sciences and Genetics in the Agriculture Faculty of the Hebrew University of Jerusalem in Israel. Ori investigates the mechanisms underlying the plasticity of plant development and patterning, and how plasticity is balanced with developmental stability. Most of her research is dedicated to leaf development and morphogenesis in plants. Naomi's research contributed some of the first examples of the cross talk among transcription factors and hormones in plant development. Her group identified several factors that affect the balance between morphogenesis and differentiation and showed that transcription factors and hormones such as auxin, cytokinin and gibberellin interact in coordinating development in both processes. In this regard, Naomi has made a substantial contribution to the unravelling of the role of different hormones in shaping leaf morphology.

Naomi's elegant work uncovered that TCP- and MYB-type transcription factors, along with the plant hormone gibberellin, promote differentiation, whereas KNOX transcription factors and the hormone cytokinin promote morphogenesis and delay differentiation. More recently, the Ori group has been engaged in the investigation of how similar principles are involved in the regulation of fruit development and fruit set. Naomi has been an ASPB member for a long period of years and she has attended many ASPB meetings. She contributed significantly as a Reviewing Editor and performed an impressive service to the international research community, doing a massive amount of editorial board work and manuscript reviewing. She served as Senior Editor of the ASPB journal *The Plant Cell*, and she is currently a guest editor for that journal. In addition, Naomi has authored insightful review articles for the ASPB journals.

Shu-Hsing Wu

Academia Sinica

Shu-Hsing Wu is Director and Distinguished Research Fellow/ Professor at the Institute of Plant and Microbial Biology, Academia Sinica, Taipei in Taiwan. Shu-Hsing has been performing important and innovative research in the areas of transcriptional and posttranscriptional regulation of plant gene expression, photomorphogenesis, circadian clock, and systems biology. She has also assumed a leadership role in the field of plant mi-RNAs. Shu-Hsing has been well respected in the international plant communities having served as President, Asia and Oceania Society for Photobiology (AOSP) (2015-2017), and she remains a sought after speaker at international conferences on plant development and photobiology. Among the awards she has received, she was the Thompson Citation Laureate in 2006 for papers she had published. It's important to note that Shu-Hsing established her independent research career strictly in Taiwan after receiving her basic training in the US. She has been a loyal and dedicated ASPB member, having attended more than 25 annual meetings. In addition, she has reviewed numerous manuscripts for the ASPB journals. Shu-Hsing is extremely influential in promoting plant biology in Taiwan. She has served in important positions that allow her to enhance the visibility of plant biology, as well as to secure valuable resources for research and education in plants. She has also been a champion in promoting gender balance in the plant biology community in Taiwan and elsewhere. Overall, Shu-Hsing has established a prominent research program in a country outside the US, yet remains a dedicated ASPB member actively participating in society activities.

VOTE! Help select the leaders of ASPB!

Deadline for voting is June 18, 2021.