

# ASPB News



THE NEWSLETTER OF THE AMERICAN SOCIETY OF PLANT BIOLOGISTS

Volume 38, Number 2  
March/April 2011

## President's Letter

### Inside This Issue

Plant Biology 2011—See You in Minneapolis!

Join ASPB's Online Communities!

AAAS Fellows Class of 2010

## Making the Most of Your ASPB Membership

In a reflective lecture to the American Society of Plant Physiologists (ASPP) on its 30th anniversary, Charles A. Shull, the Society's first president and the first editor-in-chief of *Plant Physiology*, intimated glibly that the tipping point for a new society may have been that physiologists never had their own dinner at the annual meeting of the Botanical Society of America (BSA). Shull commented

that "Societies have dinners, sections of societies do not" (1). Beyond the desire for a good dinner together, growing dissatisfaction with the inability of the Physiological Section of BSA to further the field of physiology in accordance with their



Nick Carpita

precepts prompted three prominent plant physiologists—Burton Livingston, the permanent secretary of the American Association for the Advancement of Science (AAAS); R. B. Harvey, from the University of Minnesota; and Shull, from the University of Chicago—to ask members of the Physiological Section of BSA if they would rather be a member of a new society at a cost of \$1 for annual dues (about \$12.50 in today's money) or

continue sectional membership in BSA for 50 cents. The ballots cast in December 1923 by the 80-plus members showed overwhelming support for establishing a new society.

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## Plant Biology 2011

Minneapolis  
August 6-10



## Time to Vote!

In the January/February issue of the *ASPB News*, members of ASPB were encouraged to nominate individuals to elected leadership positions in the Society, namely the next president-elect, secretary, and elected member of the Executive Committee. My commentary in this newsletter is intended to be not so much about contributions the Society makes to plant biology and the benefits it brings to its members, but rather about how dedicated members of this Society

have stepped up into leadership roles to help promote our mission and create new ways to serve ASPB members and our profession.

### It is now time for you to vote for ASPB's next leaders!

The individuals you select will help oversee all activities of the Society, with emphasis on maintaining the high standards and visibility of our two journals, planning the annual meeting, and providing service through ASPB's public

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The *ASPB News* is delivered online as well as in print. Members will be alerted by e-mail when a new issue is posted. The *ASPB News* welcomes member feedback. Contact the editor at [nancyw@aspb.org](mailto:nancyw@aspb.org).

## ASPB Executive Committee & Staff

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*ASPB News*: June 5, 2011

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## Voting continued from page 1

affairs initiatives. The new leaders will get involved in the annual budget process and in discussions that will determine long-term directions and objectives for the Society. They will advance our outreach efforts in education, support activities aimed at further improving the diversity

of our community, and help promote our science in a vibrant and robust international community.

It will be a difficult choice to make because each candidate on the slate brings recognized scientific stature along with a willingness to devote valuable time to promoting the science and vision of the broad community of plant biologists.

Please take a few minutes to show your support for the Society—and your respect for the candidates—by voting for the candidate of your choice for each elected position. It's simple. Just point your browser to <http://www.aspbo.org/voting>. Voting opens April 19th and closes June 10th.

Nick Carpita

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## President's Letter continued from page 1

The launching of a new journal to publish Society members' work was the first order of business. But Shull couldn't depend on dues to sustain production of a journal, and thus the Society's first endowment of \$20,000 underwrote *Plant Physiology*'s start in 1926. It isn't completely clear where the money came from, but it appears that Mrs. Shull was the source of the funds (1). By 1930, membership had quadrupled from the 104 charter members, the 86 library subscriptions obtained in the year of the journal's charter had grown to 264, and there was a growing international readership. By the time of Shull's 30th anniversary lecture in 1954, membership exceeded 1,000, with even more journal subscriptions—70% of them international.

The Society would grow to near its present level over the succeeding 30 years, but not without disturbing declines in membership along the way. Far too often, success breeds complacency. The growth of ASPP matched the growth of faculty ranks at home and abroad, but the Society leadership failed to address the changing demographic—more graduate students and young professionals were entering the Society—and ASPP needed to open its arms to women and minorities, who made up ever-increasing proportions of the scientific community. A journal and an annual meeting would not

suffice, and the leadership responded. In today's American Society of Plant Biologists (ASPB)<sup>1</sup>, postdoctorals, graduate students, and undergraduates make up a little more than 25% of the membership, and they represent more than 50% of the attendees at the annual meeting. They and the entire membership benefit by a virtual network of nearly 5,000 members worldwide, free electronic access to *Plant Physiology* and *The Plant Cell*, discounts on page charges that are greater than the cost of membership, and free open access publishing in *Plant Physiology*. Discounts for students and young scientists extend to the annual meeting registrations, with many additional opportunities for travel awards.

What is not so visible is what our members have done for ASPB through the years to give the Society prominence, adapt to the changing climate of science, and assure our sustainability. In 1986, ASPP unanimously endorsed the formation of Women in Plant Physiology as an official committee. At the 1985 annual meeting, Ellen Weaver reported on the status of women in the Society, noting that in ASPP's entire 60-year history, only two women had served on its Executive Committee, with Beth Gantt, University of Maryland, as secretary being the committee's only current female member. (Mary Stiller of Purdue University was the first; she served as ASPP secretary

from 1973 to 1975.) Despite the growth of female membership to 16% at that time, only one woman, Birgit Vennesland, had won a Society award, and no woman had served as a symposium chair in the previous five years. The 1985 meeting was the first time the need for child care at the annual meeting was raised as an issue to be solved. Although representation of women has now reached 38% of the overall membership, the proportion of regular members who are women is considerably lower. ASPB continues to work to deliver career-building and networking opportunities designed to support women as they move past the postdoctoral and into professorial and industry positions.

A monumental year for Society action was 1993. Women in Plant Physiology had become a standing committee of the Executive Committee. But when Sheila Fennoy, UC Riverside, reported to the Executive Committee on how we might further strengthen diversity in ASPP, her comments immediately resulted in the formation of the Minority Affairs Committee (MAC), with Bill Gordon of Howard University as chair. With strong support from President Russell Jones, UC Berkeley, and President-elect Jim Siedow, Duke University, MAC expressly sought extramural support for minority student and faculty attendance at annual meetings and began featuring luncheons honoring minority speakers.

These two committees are even more active today and are looking for young members to step up to help. Indeed, through MAC's efforts, ASPB was awarded a grant in 2009 by the National Science Foundation that has allowed the Society to significantly bolster its own support for projects aimed at increasing

diversity while also developing stand-alone symposia at minority-serving institutions. The first of these was held last March at Bowie State University in Maryland in conjunction with the spring meeting of the Mid-Atlantic

Section; the second will be held in early April in Pomona, California.

In 1985, the Education Committee was formed through the inspiration of Ellen Weaver (emeritus, San Jose State University) to promote the teaching and public awareness of plant biology as an ever-expanding science. Thanks to the efforts of immediate past chair Jane Ellis (Presbyterian College), current chair Erin Dolan (Virginia Tech), and the dynamic support of committee members such as Jeffrey Coker (Elon University), Chad Jordan (North Carolina State University), John Cushman (University of Nevada, Reno), and many others, the Education Committee has been one of the more active of ASPB's committees. The committee has direct contact with thousands of teachers each year and disseminates free multimedia resources, classroom materials, and even inquiry-based science fair tips for K-12 students. The committee has also contributed to national and international policy discussions on education-related topics and worked to promote the scholarship and application of discipline-based education standards at all levels. In 1993, Board of Trustees member Hans Kende, Michigan State University, proposed that the Society establish a foundation to raise money from

corporate and private donors to support worthy activities, such as promoting knowledge about plants in schools and the global community. Presidents Jones and Siedow made it their top priority in 1994, and Jim saw through the 1995 establishment of the ASPB Education Foundation by vote of the full membership.



Mark Brodl



Wendy Boss



Mel Oliver

annual meeting for faculty from primarily undergraduate institutions (PUIs) with the goals of fostering informal interactions and highlighting individual members' successes in sustaining active research programs at PUIs. He brought forward the Undergraduate Poster Session as a meet-and-greet for

undergraduates at the annual meeting, helping in the process to build a pipeline of younger scientists into the world of plant biology research. With Jon Monroe, from James Madison University, Mark promoted the ASPB-SURF program, first as

an annual Good Works effort funded by our endowment and then as a permanent part of the operating budget. Mark is now a distinguished professor of biology at Trinity University in San Antonio, Texas, and is currently serving ASPB as a member of the Education Foundation Board.

In fact, he continues to contribute in multiple ways. Along with former Women in Plant Biology Committee chair Laura Olsen (University of Michigan), current Board of Trustees member Mary Tierney, ASPB Executive Director Crispin Taylor, and others on our staff, he is organizing our second Laboratory Leadership Workshop (<http://my.aspb.org/event/LabLeadership2011>). Modeled after recent workshops held by the Howard Hughes Medical Institute and the Burroughs Wellcome Fund—and ASPB's initial offering in this area in 2007—the workshop's objective is to provide detailed practical information (and plenty of networking opportunities) to pre-tenure faculty and postdoctorals in the job market to give them a firm foundation for a successful career as a principal investigator.

Wendy Boss considers herself a late bloomer. A trained chemist, she took a three-year hiatus from academia during her

*continued on page 6*

husband's military service before returning with him to Indiana University. Wendy got hooked on plant physiology after reading *The Living Plant* by Peter Ray and taking Al Ruesink's course in plant physiology, but she credits the mentoring of Carlos Miller and Bob Togasaki as her major influences. Like Mark, it was her experiences meeting enthusiastic colleagues and students full of new ideas at the Midwestern Section meetings that guided her career choice. That shared enthusiasm and excitement about plant biology is what Wendy continues to strive for through teaching and research at North Carolina State University. With the encouragement from Jim Siedow to become more involved with ASPB at the national level, Wendy was elected to the Executive Committee, where she pioneered international outreach as a major Society effort, writing a proposal to use ASPB Good Works funding to support international workshops. ASPB supported workshops in Argentina, China, and Greece thanks to Wendy's drive. Wendy describes her greatest reward as seeing former undergraduates at the ASPB meetings presenting their work for the first time and following former lab members as they develop their own careers and present their research.

Mel Oliver first joined ASPP as an assistant professor of biology at New Mexico State University in 1986. He believes strongly that building a career in plant sciences is rooted in increasing his connection with a network of colleagues to stay abreast of developments. For nearly a decade, Mel's only activity in ASPP was to participate in the annual meetings. In the spring of 1995, he was invited to talk at the annual meeting of the Southern Section of ASPP by Cindy Galloway, who was then vice chair. Cindy encouraged him to run for the upcoming secretary/treasurer position, to which he was elected in 1996. Mel continued on as vice chair, chair, Executive Board member, and finally Southern Section representative to the Executive Committee of ASPB. In 2005, Mel took the position of chair of the Membership Committee because of his long-felt desire to get more input and participation from graduate students and postdoctorals in the governance of the Society. In 2006, he proposed and won a permanent place for the Membership Committee on the Executive Committee, simultaneously establishing inclusion of postdoctoral and graduate student members on the Membership Committee. Mel then worked to establish the Graduate Student Ambassador program and later a Postdoctoral Ambassador program that gives greater voice to early career scientists. These programs serve as the spearhead of

our efforts to involve graduate students and postdoctorals in ASPB and to offer them a voice in how the Society positions itself for the future.

Mel's interests in supporting the professional development of plant scientists and in demonstrating the vital importance of plant biology research in addressing many of the pressing global problems that we face today are not limited to ASPB. In 2009, Mel led ASPB's efforts to bring together a critical mass of the world's plant science societies at a meeting that convened in Honolulu, Hawaii, just before ASPB's annual meeting. The society presidents that were present for the meeting agreed to continue working together, and the Global Plant Council (GPC; <http://globalplantcouncil.org>) was formally established in Montréal last summer. Mel is serving as the GPC's first executive director, and he is working with the GPC leadership to develop a constitution and bylaws for the organization, to establish its legal identity, and to set up its second meeting, which is planned for Qingdao, China, in late June.

Since Livingston, Harvey, and Shull tipped the balance toward a freestanding society for plant physiology in 1924, our dinners, those hallmarks of independent societies, have undergone an evolution from dinner, to banquet, to full-scale party. Always, though, our Society has prepared a feast of plant biology and a celebration of the vibrancy of our community. What are you waiting for? It is time for you to think about how you can make the most of your membership.



**Nick Carpita**  
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## Recruiting ASPB Plant Science Policy Fellow

ASPB is recruiting a **Plant Science Policy Fellow** to help support the Plant Science Research Summit, which will bring together key stakeholders from across the plant science community to develop a consensus plan to invigorate and guide plant science research over the next decade. This is a temporary, six-month appointment to begin early summer 2011 and based at ASPB's Rockville, Maryland, office.

Applicants should have graduate training in plant science or a related discipline, demonstrated interest in science policy, and excellent communication and organizational skills. ASPB will provide \$20,000 in total compensation.

Additional details about the position and how to apply are available at <http://my.aspb.org/networking/opening.asp?id=95155>.

<sup>1</sup>In a move to be more inclusive of the breadth plant sciences had achieved, the American Society of Plant Physiologists, with overwhelming member support, changed its name to the American Society of Plant Biologists in 2001.

## Reference

1. Hanson, J. B. (1989). *The History of the American Society of Plant Physiologists*. Rockville, MD: American Society of Plant Physiologists. <http://aspb.org/aboutus/history.cfm>.

# Plant Biology 2011

Minneapolis  
August 6-10

*Save the dates—  
and we will meet you in  
Minneapolis soon!*



## Meet Minneapolis!

*The “City of Lakes” and the  
Host of Plant Biology 2011*

Did you know that the state of Minnesota has more shorelines than California, Florida, and Hawaii combined? Minneapolis is the “City of Lakes” for good reason. With more than 20 lakes in the metropolitan area alone, visitors and residents can easily walk, bike, or hike at a nearby lake. At least 20 of these lakes are within minutes of the site of Plant Biology 2011.

It is not just the lakes that make Minneapolis one of the most attractive and welcoming cities in the United States. Minneapolis is a plant lover’s dream with the University of Minnesota’s Landscape Arboretum, which serves as a national resource for horticultural and environmental information, research, and public education. The arboretum has 1,137 acres, 28 gardens, 17 displays and model landscapes, 45 plant collections, and more than 5,000 plant species and varieties. It is one of the premier horticultural field laboratories and public display areas in the country, reaching out as an extension of the university.

Just the lakes and the arboretum alone could make you want to extend your stay at the Plant Biology meeting, but Minneapolis offers even more. The city has the most theater seats per capita after New York, great museums (one within walking distance of our hotels), great neighborhoods, great sporting events, and even tax-free shopping.

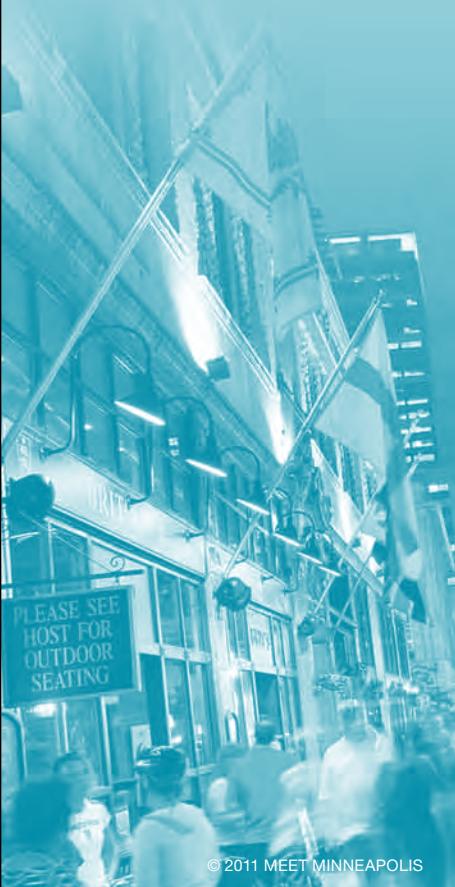
Combine all of the above with an outstanding program of symposia and workshops at Plant Biology 2011 ([http://my.aspb.org/?page=Meetings\\_pbschedule](http://my.aspb.org/?page=Meetings_pbschedule)), and this is one meeting you’ll want to attend. Remember, early-bird registration ends May 13!

Minneapolis is a big city experience with midwestern prices. Look for travel tips, city highlights (hotel and restaurant tips), and meeting events you won’t want to miss in our news and blogs on the Plant Biology 2011 homepage (<http://www.aspb.org/plantbiology2011>), or follow us on Twitter (<http://twitter.com/plantbiologymtg>) and Facebook (<http://www.facebook.com/myaspb>).

<http://www.aspb.org/plantbiology2011>

# Plant Biology 2011

Minneapolis  
August 6-10



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## Don't Miss These Sessions and Speakers at Plant Biology 2011!

### *Symposium I: Harvesting Bio- ("Biological and Biochemical") Diversity*

**Organizer:** Tom Brutnell, Boyce Thompson Institute and Cornell University

**Speakers:** Arthur Grossman, Carnegie Institution for Science; Sanwen Huang, Key Laboratory of Horticultural Crops Genetic Improvement of Ministry of Agriculture, Sino-Dutch Joint Lab of Horticultural Genomics Technology, Institute of Vegetables and Flowers, Chinese Academy of Agricultural Sciences, Beijing; Tom Brutnell, Boyce Thompson Institute and Cornell University; David E. Salt, University of Aberdeen

### *Symposium II: The Regulatory World of RNA*

**Organizer:** Pam Green, University of Delaware

**Speakers:** Jim Carrington, Donald Danforth Plant Science Center; Tom Okita, Washington State University; Pam Green, University of Delaware; Leslie Sieburth, University of Utah; Philip Benfey, Duke University

### *Symposium III: Vegetative Development: Dynamism and Plasticity*

**Organizer:** Ottoline Leyser, York University

**Speakers:** Jocelyn Malamy, University of Chicago; Tobias Baskin, University of Massachusetts Amherst; Jill Harrison, University of Cambridge, England; Marcus Heisler, European Molecular Biology Laboratory; Ottoline Leyser, York University

### *Symposium IV: Organelle Responses and Adaptations to Environmental and Developmental Signals*

**Organizer:** Danny Schnell, University of Massachusetts

**Speakers:** Danny Schnell, University of Massachusetts; Roger Hangarter, Indiana University; Natasha Raikhel, University of California, Riverside; Bonnie Bartel, Rice University; Christoph Benning, Michigan State University

### *Symposium V: Plant Carbon Cycling*

**Organizer:** Donald R. Ort, USDA-ARS and University of Illinois

**Speakers:** Graham Farquhar, Australian National University; Evan DeLucia, University of Illinois; Paul Falkowski, Rutgers University; Chris Field, Carnegie Institution for Science

### *Symposium VI: ASPB President's Symposium: Plants & BioEnergy*

**Organizer:** Nick Carpita, Purdue University

**Speakers:** Maureen McCann, Purdue University; Richard Sayre, Donald Danforth Plant Science Center; Robert Blankenship, Washington University

### *ASPB Award Speakers*

**Charles Albert Shull Award Speaker:** Dominique Bergmann, Stanford University

**Stephen Hales Prize Speaker:** Athanasios (Sakis) Theologis, USDA-ARS, University of California

**Leadership in Science Public Service Award Speaker:** Deborah Delmer, University of California, Davis (emeritus)

<http://www.aspb.org/plantbiology2011>

# On-site Child Care Available at Plant Biology 2011

The new attendee benefit created to assist parental participation that was inaugurated at Plant Biology 2010 is returning in 2011. On-site child care for children from infants through 13 years will have subsidized rates for the first 20 children in each time slot. This subsidy is provided by ASPB's Women in Plant Biology Committee.

Kimberlee Care, a bonded, fully accredited child care service with 25 years' experience in providing services for corporations and meetings, will be returning as the provider of this year's child care.

Here is what a few parents had to say about last year's service:

*"This is a very useful service and should be continued next year. Best idea of the whole meeting."*

*"My daughter had a lot of fun."*

*"I think it was a great initiative. The ASPB meetings always fall in the school holidays. Most people want to stay home during that period because their kids are at home. This was an excellent opportunity to attend the meetings and have the family around and attach a vacation to it. The children liked it very much, and if it were up to them, they would have stayed there every single time slot available."*

Kimberlee Care's staff members are certified child care specialists, and the company is fully insured. Kimberlee Care will set up a facility in the Minneapolis Convention Center in rooms adjacent to those that will be used for the annual meeting. They will bring supplies for fun, engaging activities for your children while you attend scientific sessions and networking events.

Kimberlee Care will provide arts, crafts, puzzles, and other games, as well as a rest area with pillows and blankets. For older children, there will be a wide selection of board games, magazines, and other age-appropriate activities. Kimberlee Care will be open during the opening awards session, the opening mixer, all major and minisymposia sessions, and selected poster sessions. Kimberlee Care will not be open during the events where children are allowed, including the evening poster session and the final party.

You must preregister for this service (<http://my.aspb.org/event/PB11Childcare>). Sign up for one or multiple time slots. Visit the website for specific information and rates.

The Women in Plant Biology Committee thanks the estate of Eli Romanoff for providing funds to support this on-site child care center.

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## PI Training, ASPB Style

Are you a postdoc on the hunt for a tenure-track position? A newly appointed faculty member wondering how best to balance the demands of research, teaching, and service? Or are you a PI looking for a robust way to bolster your postdoc's professional development plan?

Don't panic! This summer, in conjunction with Plant Biology 2011, ASPB is holding a two-day Laboratory Leadership Workshop targeted toward senior postdocs and junior faculty.

Visit <http://my.aspb.org/event/LabLeadership2011> to register, peruse the draft program, and join the Lab Leadership Group.

# Leaf Area Measurements



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## Measuring Insect Damage: Using the LI-3100C to Assess Lost Leaf Area

When Dr. Wyatt Hoback, associate professor of biology, began studying the effects of insect defoliation on crop yields, he needed an instrument that could quickly and accurately measure leaf area. Now that he has a LI-COR leaf area meter in his lab, he knows he made the right choice. "We have found the LI-3100C generates rapid and very precise measurements of leaf area for both large-scale crop applications and small-scale feeding studies," he says.



Dr. Hoback uses the area meter to measure defoliation of potato plants by chewing insects. During the growing season, his field crew collects samples of leaflets on a daily basis. The LI-3100C Leaf Area Meter proves itself time and time again by providing accurate leaf area measurements for large numbers of samples.



On a finer scale, Dr. Hoback also uses the area meter to assess consumption of individual leaves by single insects. Starting with a baseline measurement, Dr. Hoback and his students determine the area consumed by an insect after a feeding period. He adds, "The LI-3100C has been used extensively in my laboratory. It's great for determining overall leaf area and to quickly and precisely quantify defoliation by chewing insects."

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# Let's Connect Online at [my.aspb.org/communities!](http://my.aspb.org/communities)

ASPB's new website contains a suite of online networking tools dedicated to supporting the diverse interests of ASPB members like yourself at all stages of their careers. These tools are designed to enhance your ability to come together with your colleagues to share information and collaborate on research as well as stay up-to-date on your broader interests in and around plant biology. Information regarding funding opportunities, education, the ASPB journals, careers, events, and public policy will be shared with and through ASPB's burgeoning online community. You've taken the first step by joining ASPB; now check out these new communities to further enrich your plant biology networks. Here's a synopsis of the tools that are available and how you can use them:

You can participate online through blogging, posting photos, connecting to others, messaging, creating a links library, posting a résumé/CV, chatting in real-time, posting to forums and on walls, and even connecting your ASPB profile to profiles on social networking platforms such as Facebook and Twitter. If you're interested in learning more about these features and keeping up-to-date with enhancements to the new ASPB website, please follow the web feature focus blog (<http://my.aspb.org/WebFeatureBlog>).

You can join a community group to read and share the information you're most interested in. There are several categories to choose from, and you can join as many groups as you like!

## Interest Groups

Special interest groups publicly available to anyone with a profile. Select from

- Broadening Participation in Plant Biology
- Education
- Laboratory Leadership Workshop
- Women in Plant Biology
- Primarily Undergraduate Institutions
- Public Affairs
- Plant Biology Annual Meeting

## Member-Only Groups

The primary Membership group is open only to current members of ASPB. All members are automatically added by default.

## Sections

Each of the five geographic sections of ASPB has its own group page on which information about section events and other activities is posted. ASPB members may pay dues to join a section after paying their annual dues to ASPB.

## ASPB Publications

These public groups are for ASPB publications. Select from:

- *ASPB News*
- *Plant Physiology*
- *The Plant Cell*
- *Teaching Tools in Plant Biology*
- *The Arabidopsis Book*

## My ASPB

These audience-specific public groups include news and information specifically of interest to a particular audience. Select from

- Undergraduates
- Graduate students
- Postdocs
- Faculty
- Government scientists
- Industry scientists
- Government representatives
- K-12 teachers
- Librarians
- Press/media
- Public

Please take a minute to log on to the new site at <http://my.aspb.org>. Settle in and make yourself comfortable. Explore the site, get to know one another, and contribute to or start a conversation. Share your expertise. Learn from others. And feel free to stay awhile.

We listen! Feedback and comments help us provide members with better value and improved services. Please share your thoughts via <http://my.aspb.org/feedback>.

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## Call for applications for an Editor-in-Chief for the *Journal of Experimental Botany*

The Society for Experimental Biology is seeking to appoint an Editor-in-Chief to take effect from January 2012. The *Journal of Experimental Botany* is an established and innovative international journal publishing high quality primary research papers and reviews since 1950 and now includes extra publications such as *The Flowering Newsletter*. It is wholly owned by the Society for Experimental Biology and published by Oxford University Press. The journal has a novel open access policy and currently an impact factor of 4.27. Under the two previous editors-in-chief the journal has seen a steady growth in submissions and an increase in the impact factor. Please see <http://jxb.oxfordjournals.org/>

The Society is seeking in the Editor-in-Chief, a scientist of international standing with a good track record of publishing in high quality international journals, a person with excellent leadership skills and the ambition and vision to drive this innovative journal forward. Funding is available for journal development.

The term is for 5 years and is an honorary post that carries an honorarium (expenses associated with the role will be covered). The position is supported by a managing editor and editorial office currently with three staff. The post may be held by a scientist resident within or outside the UK.

Further information can be obtained in the first instance from Professor M. M. Burrell [m.burrell@sheffield.ac.uk](mailto:m.burrell@sheffield.ac.uk).

**The Research Coordination Network (RCN) on Integrative Pollen Biology announces two upcoming events open for public participation:**



**1. June 8 to 12, 2011, Brown University, Providence, RI.**

### **A course on Basic Methods in Pollen Research.**

The course will introduce basic pollen research methodology to investigators new to the field. The course content will include at least ten essential skills for pollen research, plus lectures on various aspects of pollen research.

**Contact:** [mark\\_johnson\\_1@brown.edu](mailto:mark_johnson_1@brown.edu).

**2. August 5 (12:00 pm) to 6 (12:00pm), 2011, Hilton Minneapolis, MN.**

**A Pollen Workshop with an emphasis on modeling the polarized pollen tube growth process.** The meeting will feature several talks by experienced modelers, a round table discussion and short talks by participants  
**Contact:** [acheung@biochem.umass.edu](mailto:acheung@biochem.umass.edu); [jharper@unr.edu](mailto:jharper@unr.edu).

*For application information and other details, please visit the RCN website:*

<http://www.pollennetwork.org/>



## ASPB Members Elected to the 2010 Class of AAAS Fellows

Twenty-eight members of ASPB were among the 503 individuals in all fields of science elected to the 2010 class of Fellows of the American Association for the Advancement of Science (AAAS). Fellows were recognized for their contributions to science and technology at the Fellows Forum, which was held during the 2011 AAAS Annual Meeting in Washington, D.C. They received a certificate and blue and gold rosette as a symbol of their distinguished accomplishments. ASPB extends well-deserved congratulations to its members who were honored in three different AAAS disciplinary sections:

### Section on Agriculture, Food, and Renewable Resources

**Kenneth J. Boote***University of Florida*

For distinguished contributions in crop physiology and agro-ecosystems modeling, particularly for measuring and modeling crop responses to climate change factors of temperature and carbon dioxide

**Stanton B. Gelvin***Purdue University*

For contributions to scientific understanding of *Agrobacterium*-mediated transformation of plant cells

**Scott A. Jackson***Purdue University*

For the development of genomic tools for economically important plant genomes, including soybean and other legumes important to the developing world, and for evolutionary analysis of the genus *Oryza* (rice) and the paleopolyploid soybean

**Jiming Jiang***University of Wisconsin-Madison*

For contributions to our understanding of crop plant genomes, especially centromeres, through the development, application, and integration of advanced cytogenetic and genomic technologies

### Section on Biological Sciences

**Eduardo Blumwald***University of California, Davis*

For distinguished contributions to the field of plant ion transport and the application of those discoveries to the development of salt- and drought-tolerant crops

**Jörg Bohlmann***University of British Columbia*

For distinguished contributions to the field of plant biology, particularly for genomics and biochemistry of plant defense against insects

**Donald A. Bryant***Pennsylvania State University*

For distinguished contributions to microbiology, particularly for ecological, biochemical, metabolic, genetic, and genomic analyses of chlorophototrophic bacteria and their light-harvesting systems and type-1 reaction centers

**Alan G. Darvill***University of Georgia*

For his pioneering work in elucidating the biochemistry of the plant cell wall, particularly as it relates to plant defense against pathogens

*continued on page 14*

## People

### AAAS Fellows Section on Biological Sciences continued from page 13



#### Carl J. Douglas

*University of British Columbia*

For his distinguished contributions to the field of plant cell wall biosynthesis, forest tree genomics, and development of *Populus* as a model woody plant system



#### Roger Hangarter\*

*Indiana University*

For important contributions to the study of processes that drive plants' responses to environmental stimuli, particularly light, and for ongoing public outreach



#### Gary N. Drews

*University of Utah*

For distinguished contributions to the study of plant reproduction through pioneering work on the development of embryo sacs and endosperm



#### Paul M. Hasegawa

*Purdue University*

For distinguished contributions to the field of plant abiotic stress, particularly to the understanding of signaling and effector determinants of salt, osmotic, and low-temperature stress tolerance



#### Nina V. Fedoroff

*Pennsylvania State University and King Abdullah University of Science and Technology*

For contributions in plant genetics, stress response, and hormone signaling along with significant professional service with positive impact on science policy and public communication related to the intersection of science and society



#### Roger Innes

*Indiana University*

For distinguished contributions to the field of plant immunology, particularly to the understanding of pathogen recognition mechanisms and activation of programmed cell death



#### William Friedman\*

*University of Colorado at Boulder*

For important contributions to the study of angiosperm evolutionary development biology



#### Hong Ma

*Pennsylvania State University*

For contributions in the area of plant reproductive development, including flower development and its evolution; anther development and meiosis, particularly using molecular genetics; and genomics with the model plant *Arabidopsis thaliana*



#### Jiří Friml

*Ghent University*

For defining the field of polar auxin transport and making seminal contributions to elucidation of the fundamental processes controlling programmed and plastic polar growth



#### Yasunori Machida

*Nagoya University*

For distinguished contributions on signaling systems that control cell division and proliferation of plant cells and promoting the greater understanding of these controlling factors

**C. Robertson McClung***Dartmouth College*

For distinguished contributions to the field of plant circadian rhythms and for academic leadership at Dartmouth College and the American Society of Plant Biologists

**Michael Thomashow***Michigan State University*

For his contributions to the field of plant biology, focusing on the identification of stress response pathways involved in freezing and drought tolerance

**Naoko K. Nishizawa***The University of Tokyo, Japan*

For contributions in the area of uptake and translocation of minerals in rice plants

**Detlef Weigel***Max Planck Institute for Developmental Biology*

For distinguished contributions to the fields of plant development and genetic variation, particularly for discoveries of flower-inducing molecules and genetic barriers to reproduction

**Katherine W. Osteryoung***Michigan State University*

For distinguished contributions to the area of chloroplast division in plants

**Rod A. Wing***University of Arizona*

For distinguished contributions to the fields of comparative and evolutionary genomics, particularly for leadership in the rice, maize, and *Oryza* genome sequencing projects

**Patrick S. Schnable***Iowa State University*

For distinguished contributions to our understanding of the structure, function, and dynamics of the maize genome and the development of genomic tools and resources

**Patricia Claire Zambryski\****University of California, Berkeley*

For distinguished contributions to the field of plant biology that focus on the genetic transformation of plant cells by *Agrobacterium* and on plant cell communication via plasmodesmata

**Heven Sze***University of Maryland, College Park*

For foundational and distinguished contributions to the field of membrane biology, particularly for biochemical and molecular studies on H<sup>+</sup>-pumping ATPases, Ca<sup>2+</sup> pumps, and H<sup>+</sup>-coupled cation transporters in plants

**Section on Education****Terry S. Woodin***National Science Foundation*

For distinguished service and leadership in the improvement of STEM education

\*ASPB member at time of nomination

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## Members in the News

**Ian Baldwin** was profiled in the December 15, 2010, issue of *Nature* (<http://bit.ly/hkl7Ww>). Ian, who is founding director of the Max Planck Institute for Chemical Ecology (Jena, Germany) and currently directs its Department of Molecular Ecology, studies the chemical signals by which plants interact with other organisms in their environment, focusing on *Nicotiana attenuata*. He recently found that plants sometimes change their flowering time in response to infestation by the larvae of the hawk-moth herbivore. His work has potential application in developing environmentally friendly analogues to herbicides that mimic natural signals.



Ian Baldwin



Xinnian Dong



June Medford



Toni Kutchan



Mary Rumpho-Kennedy

*The New York Times* reported on a new paper from **Xinnian Dong** and colleagues in its February 2 Observatory column (<http://nyti.ms/equu71>). The article describes how 22 *Arabidopsis* defense genes were controlled by the circadian clock, expressing in the evening and peaking at dawn—when the pathogen that causes downy mildew disease is most likely to infect. Xinnian is a professor of biology at Duke University. She also serves as coeditor for *The Plant Cell* and was a former monitoring editor for *Plant Physiology*.

**Toni Kutchan** received a Fellows Award for outstanding achievement in science from the Academy of Science of St. Louis. Her laboratory studies the biosynthetic pathways of medicinal compounds in plants—including morphine from the opium poppy—and works to develop improved sources of these compounds. Toni is the Oliver M. Langenberg Distinguished Investigator and principal investigator at the Donald Danforth Plant Science Center.

Research conducted by **June Medford** about the possibility of bomb-sniffing plants has been making the news, including a January 26 article in *The New York Times* (<http://bit.ly/gpCmnP>), a blog post in *Wired* (<http://bit.ly/i0zr3O>), and a January 27 article in *The Denver Post* (<http://bit.ly/hhK7f9>). With funding from agencies including the Defense

Advanced Research Projects Agency (DARPA) and the Office of Naval Research, a team led by June published research about plants that subtly change their color when exposed to minute amounts of the explosive TNT in the air. Although practical application of this technology is likely several years off, the

*Times* asked if the future of security might be in planting “a defensive line of bomb-sniffing tulips.” June’s lab has produced a YouTube video (<http://bit.ly/haMqvq>) that provides a simple explanation of the promise and mechanism of these plant sentinels, and there’s additional information about the research from Colorado State University (<http://bit.ly/ibQXsB>), where June is professor of biology.

**Mary Rumpho-Kennedy** is one of the people highlighted in a December 13, 2010, article in *New Scientist* about photosynthetic animals that ingest chloroplasts (<http://bit.ly/he5ec0>). Her laboratory studies the sea slug *Elysia chlorotica*, which retains functional chloroplasts from the alga *Vaucheria liorea* for several months, and the possibility that the stolen plastids are partially supported through horizontal gene transfer from the

algae to the sea slug. Mary is a professor of biochemistry at the University of Maine. She is also principal investigator of the New England Invasive Plant Center’s Maine Project.

A December 21, 2010, article in *The New York Times* reported on the progress made by the grantees in the Bill & Melinda Gates Foundation’s Grand Challenges in Global Health program (<http://bit.ly/ftolTR>). Among the projects highlighted is the BioCassava Plus consortium, which was led during phase I (2005–2010) by **Richard Sayre**. The *Times* cites Richard as saying that the project is meeting interim goals in decreasing the natural cyanide in cassava;

*continued on page 18*

**Members in the News**  
*continued from page 17*

in engineering resistance to new diseases; and in increasing the amount of protein, iron, zinc, and vitamin A and E in this important staple crop. Richard is director of the Enterprise Rent-A-Car Institute for Renewable Fuels at the Donald

Danforth Plant Science Center, director of the Center for Advanced Biofuel Systems (a DOE Energy Frontier Research Center), and chair of ASPB's Public Affairs Committee.

**Sudhir Sopory** has been named as the new vice chancellor of the Jawaharlal Nehru University in New Delhi, India, which was described by the *Hindustan Times* as "one of the most coveted posts in Indian academics." He was previously group leader in plant mo-



Richard Sayre



Sudhir Sopory



Susan Wessler

lecular biology at the International Centre for Genetics Engineering and Biotechnology in New Delhi. Sudhir was elected as a corresponding member of ASPB last year; based on a vote of the ASPB membership, this honor provides life membership and Society publications to distinguished plant biologists from outside the United States.

**Susan Wessler** has been elected as the next home secretary of the National Academy of

Sciences, where she will oversee the academy's membership activities and serve as secretary of its governing council. When her four-year term begins on July 1, she will be the first woman to serve in this role. She is professor of genetics and the University of California President's Chair at the University of

California, Riverside, having recently moved from the University of Georgia. Her laboratory studies plant transposable elements and the evolution of plant genomes. Sue, who was elected to the NAS in 1998, has served on the editorial boards of both *The Plant Cell* and *Plant Physiology* and is a current member of the ASPB Education Committee.

**Compiled by Adam P. Fagen, PhD**  
ASPB Public Affairs Director



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## Amasino's Team Receives \$4.7 Million Grant from USDA for Bioenergy Education

Former ASPB President Rick Amasino has received a nearly \$4.7 million grant from the U.S. Department of Agriculture's National Institute of Food and Agriculture (NIFA) to strengthen K–16 education related to sustainable bioenergy production.

Rick and co-principal investigator Hedi Baxter Lauffer, who are both at the University of Wisconsin–Madison (UW), will develop a partnership involving UW researchers, students and faculty at the College of Menominee Nation (CMN), and K–12 educators in northern Wisconsin to prepare rural youth for bioenergy- and sustainability-related careers. The project, which is known as POSOH—meaning *hello* in the Menominee language—will also connect researchers at UW and CMN (<http://posoh.fastplants.org>).

The multicultural education model of POSOH will embrace learning both *traditional* (from Native American collaborators) and *scientific* ways of understanding sustainability; this includes recent developments from the Great Lakes Bioenergy Research Center (GLBRC) housed at UW and the Sustainable Development Institute based at CMN. The educational aspect of this project will emphasize what being carbon-neutral means and the fundamental concepts related to what is typically called the carbon cycle.

"We have a unique opportunity with this grant to bring together a combination of educators, keepers of traditional knowledge, and scientists to learn collectively about sustainability from multiple perspectives," explained Hedi. "Through this collaboration, we will develop learning resources that integrate scientific approaches with traditional ways of knowing so that students can recognize the value and relevance of culturally learned knowledge in the scientific context."

Rick is distinguished professor of biochemistry at UW and recently served as a Howard Hughes Medical Institute professor, recognizing his long-standing commitment to undergraduate education. He is also education and outreach coordinator for GLBRC. Rick is an elected member of the National Academy of Sciences and a fellow of ASPB.

Hedi is director of the Wisconsin Fast Plants program, a science education program established by ASPB member Paul Williams that uses easy-to-grow rapid-cycling plants related to cabbage and broccoli as model organisms for research and educational use.

**Adam P. Fagen, PhD**  
ASPB Public Affairs Director



Rick Amasino



Hedi Baxter Lauffer

Do you have news to share with the ASPB community?

Please let us know by e-mailing [afagen@aspb.org](mailto:afagen@aspb.org).

### Check Out Our New Look

The ASPB journals, *Plant Physiology* and *The Plant Cell*, have migrated to HighWire Press's new online platform, "H2O." Read about the many advantages and benefits H2O offers at <http://my.aspb.org/news/60275/ASPB-Journals-Migrate-to-HighWire-H2O.htm>. And check out our new home pages at [www.plantphysiol.org](http://www.plantphysiol.org) and [www.plantcell.org](http://www.plantcell.org).



## Membership Corner

ASPB members share a common goal of promoting the growth, development, and outreach of plant biology as a pure and applied science. This column features some of the dedicated and innovative members of ASPB who believe that membership in our Society is crucial to the future of plant biology. If you are interested in contributing to this feature, please contact ASPB Membership at [info@aspb.org](mailto:info@aspb.org).



**Name:** Tracey Ann Cuin

**Title:** Marie-Curie Research Fellow

**Place of Work or School:** Biochimie et Physiologie Moléculaire des Plantes, Institut de Biologie Intégrative des Plantes, Montpellier, France

**Research Area:** Electrical signaling, electrophysiology, ion transport, and abiotic stress

**Member since:** 2003

**1. Has being a member of ASPB helped you in your career? If so, how?**

I applied for my previous position in Tasmania, where I spent a very happy and productive six years, after finding the job through ASPB's job bank.

**2. Why has being a member of ASPB been important to you?**

It gives me a connection to the rest of the plant science community, and the networking opportunities are great. Tasmania often felt far from anywhere, and I don't (yet) understand any French! It also gives me access to *Plant Cell* and *Plant Physiology*.

**3. Was someone instrumental in getting you to join ASPB?**

No.

**4. What would you tell nonmembers to encourage them to join?**

I would tell them that ASPB is important for networking and interacting with a wide range of other plant scientists, and they get access to good journals and the Membership Directory.

**5. Have you found a job or hired anyone using ASPB job postings or networking at the annual meeting?**

I went to Tasmania after applying for a job through the job bank.

**6. Do you still read print journals? If so, where do you usually read them: work, home, library, in the car, on the bus, or somewhere else?**

I tend to print out papers and take them home to read on my very comfortable sofa.

**7. Have there been any issues in plant biology in which you thought ASPB should be involved or that led you to consider becoming active in the governance of the Society, and if so, what were they?**

I think ASPB should be as active as possible in stressing the importance of plant science research and in educating the general public about genetic modification—that it is not scary and is likely to be of huge benefit.

**8. What could ASPB do better?**

I know ASPB is a U.S.-based organization, but it does seem a little too U.S.-centric at times, given that many members are from elsewhere in the world. But really, continue as you are.

**9. What do you see as the most important role for scientific societies such as ASPB?**

I think an important role is to stress the critical importance of plant

science research from an agricultural, social, and general interest point of view, particularly toward governments and funding bodies, and to show that what scientists do is useful and of relevance to everyone.

**10. What advice would you give to a plant scientist just starting out?**

Enjoy it.

**11. What do you think is the most important discovery in plant biology over the past year and why?**

I'm not too sure. There have been so many small developments that will go to make up the whole.

**12. What do you think is the next "big thing" in plant biology?**

The acceptance and development of genuinely useful genetically modified crops. I believe there is huge potential in this area to develop crop species that can withstand the numerous environmental stresses that crop plants face as well as to improve the nutritional content of food, particularly for developing countries.

**13. What are you reading these days?**

I enjoy popular history and science books. I have never been into fiction. Related to my current location, I have just finished Stephen Clarke's *1,000 Years of Annoying the French* and am currently reading *A History of Christianity* by Diarmaid MacCulloch, a very interesting book for an atheist. I'm also reading *The Action Plant* by Paul Simons, an out-of-print book I finally located.

**14. What do you still have left to learn?**

Almost everything.



## PCAST Meeting Focuses on USDA R&D

The President's Council of Advisors on Science and Technology (PCAST) devoted significant discussion to research and development (R&D) at the U.S. Department of Agriculture (USDA) during its January 7 meeting. PCAST is an advisory group of the nation's leading scientists and engineers who directly advise President Obama.

The meeting featured a presentation (available at <http://bit.ly/emtnVB>) and discussion with Catherine Woteki, chief scientist and undersecretary for Research, Education, and Economics at USDA, and Roger Beachy, director of USDA's National Institute of Food and Agriculture (NIFA).

In her presentation titled "Why Science Matters to Agriculture," Woteki cited 21st-century challenges in food security, food

safety, nutrition and health, bioenergy, and climate change. Among USDA initiatives is the training of more plant scientists as we seek to understand and develop new crops. Woteki mentioned that agriculture contributes \$121 billion to the U.S. gross domestic product (GDP), provides 2.1 million jobs, and contributes \$20 billion in net exports; food manufacturing adds another \$165 billion to GDP and 1.6 million jobs. Woteki cited that every dollar invested in agricultural research contributes \$20 to the economy.

In his comments, Beachy noted that the NIFA reorganization had taken place, with the programs divided into four new institutes (see October 21, 2010, issue of the *ASPB Washington Report* at <http://www.aspbo.org/publicaffairs/washington.cfm> for more information); NIFA is recruiting principal scientists who will colead each institute along

with a senior administrator. One take-home message from Beachy's presentation is that there is much more demand for NIFA funding than the available resources will support; for example, the climate change challenge area received \$815 million in requests but had only \$58 million to allocate in fiscal year 2010. Beachy mentioned a desire to broaden the base of institutions interested in Agriculture and Food Research Initiative (AFRI) funding. Of nearly \$4 billion in total grant requests this past fiscal year, \$574 million in applications were from *non*-land grant institutions,

including some of the nation's most prestigious private universities and institutions. In fact, over 500 different institutions applied for AFRI funding in fiscal year 2010, well beyond the 107 land grant colleges and universities.

During the discussion that followed, PCAST cochair John P. Holdren, who is assistant to the president for science and technology and director of the White House Office of Science and Technology Policy, said that there's "a whole new world for research at USDA" and called the initiatives as "impressive as could be."

In addition to the participation of Woteki and Beachy, nearly all of the 13 public comments offered during the meeting were made in support of research investments at USDA and NSF. In its comments (<http://bit.ly/hqgspk>), ASPB noted that "one of the most effective ways to invest in the future and address urgent needs in food, health, energy, and environment is by increasing support for competitive grants and especially those at USDA." 

**Adam P. Fagen, PhD**  
ASPB Public Affairs Director

## Public Affairs Workshop

### Becoming an Effective Advocate for Plant Biology

Help ASPB stand up for plant biology! The ASPB Public Affairs Committee is sponsoring a workshop at Plant Biology 2011 in Minneapolis that will provide an introduction to the U.S. policy making process and engage participants in learning how to become more active and effective advocates for plant biology—and for science in general—at the national and state levels.

You will join a growing number of members helping ASPB amplify its voice as it promotes policies and robust federal support for plant biology research and education. We invite those interested in public policy, those willing to help ASPB in advocating for plant biology, and anyone who wants to learn more about how things work in Washington and your state capital. Participants at all career stages are welcome and encouraged to attend—including undergraduate and graduate students, postdocs, faculty, administrators, research staff, and others.

The workshop is scheduled for 7:00–9:00 p.m. on Sunday, August 7.

Although there is no cost to participate, attendance will be limited and advance registration is requested. Sign up for the workshop as part of your registration for Plant Biology 2011 on the ASPB website. We hope to see you there. 



*This column provides just a small sample of the content in the ASPB Washington Report and the Plant Biology Policy Blog. The ASPB Washington Report, available at <http://www.aspb.org/publicaffairs/washington.cfm>, is published approximately twice per month by the ASPB Public Affairs Department and includes material provided by ASPB's legislative affairs consultants, Lewis-Burke Associates, LLC. The policy blog may be found on the ASPB website at <http://www.aspb.org/policyblog>.*

## ASPB Meets with USDA Leadership

ASPB Public Affairs Director Adam Fagen was part of a small group from the AFRI Coalition that met with Catherine Woteki, undersecretary for Research, Education, and Economics (REE) at the U.S. Department of Agriculture (USDA), on December 10, 2010. The meeting helped introduce Woteki to some of the issues of importance to ASPB and the rest of the coalition.

In addition, ASPB Executive Director Crispin Taylor and Fagen also spoke with Woteki at a welcome event at USDA headquarters on December 3, 2010, which featured remarks by Secretary of Agriculture Tom Vilsack. At the event, Woteki called for a “new compact” between the federal government, states, and academic institutions, while Vilsack noted that science is an integral and strategic part of the plan for USDA, saying that “science is really, really important.”

As undersecretary, Woteki oversees the REE Mission Area, which includes the National Institute of Food and Agriculture, Agricultural Research Service, Economic Research Service, and National Agricultural Statistics Service.

## Congress Passes America COMPETES Reauthorization

The America COMPETES Reauthorization Act of 2010 was passed in the final days of the 111th Congress. The new COMPETES Act reauthorizes the National Science Foundation, Department of Energy’s Office of Science, and the National Institute of Standards and Technology. It also provides authorization for the Advanced Research Projects Agency—Energy (ARPA-E); enables each government department and agency to conduct prize competitions; and contains provisions to bolster science, technology, engineering, and mathematics education.

COMPETES passed the Senate under a unanimous consent resolution on December 17, 2010, and was passed by the House on December 21, 2010, on a vote of 228–130, with 16 Republicans joining all voting Democrats in support of the bill.

Thanks to those ASPB members who contacted their representatives to urge support of the bill.

## State of the Union Focuses on Research and Education

Calling this “our generation’s Sputnik moment,” President Obama emphasized the national need for continued robust support of research and development in his State of the Union address on January 25: “We’ll invest in biomedical research, information technology, and especially clean energy technology—an investment that will strengthen our security, protect our planet, and create countless new jobs for our people.” President Obama specifically cited the need for research and incentives as a way to “break our dependence on oil with biofuels.”

In a statement issued in response to the State of the Union (<http://bit.ly/dVezi8>), ASPB President Nick Carpita said, “Even in a time of budgetary concerns, we are gratified to see President Obama’s commitment to investment in scientific innovation, discovery, and education. These investments are vital to our nation’s food, energy, and environmental security and will help drive the country’s economic success. ASPB stands ready to work with the White House and members of Congress from both parties to sustain our national investment in science and innovation.”

## White House Issues Guidance on Scientific Integrity

The White House has issued new guidance on scientific integrity to Executive Branch

To keep up-to-date on ASPB's public affairs activities, please join the Public Affairs group (<http://my.aspb.org/members/group.asp?id=68890>) on the ASPB website and look for us on Facebook and Twitter. To receive an e-mail copy of the ASPB Washington Report, e-mail [afagen@aspb.org](mailto:afagen@aspb.org) and ask to be added to the distribution list.

departments and agencies. The memorandum from John Holdren (<http://bit.ly/gptIt7>), assistant to the president for science and technology and director of the White House Office of Science and Technology Policy, describes the minimum standards expected as departments and agencies craft scientific integrity rules appropriate for their particular missions and cultures, including a clear prohibition on political interference in scientific processes and expanded assurances of transparency.

The memorandum addresses several issues that will help agencies in establishing their own policies: (1) ensuring a culture of scientific integrity within the government and facilitating the free flow of scientific information; (2) public communications that maximize openness and transparency, including a prohibition on public affairs officers asking federal scientists to alter scientific findings; (3) transparent processes for recruiting federal advisory committee members, including selection based on expertise and knowledge; and (4) professional development of government scientists and engineers, including encouragement to publish and present research findings and allowing government scientists to serve as journal editors, participate fully in professional or scholarly societies, and receive honors and awards for their research.

This latest guidance follows from President Obama’s March 2009 Presidential Memorandum on Scientific Integrity (<http://bit.ly/hxshAE>) emphasizing the importance of

science in guiding administration decisions and the importance of ensuring that the public trusts the science behind those decisions.

### **Executive Order Offers Regulation and Regulatory Review Improvements**

On January 18, President Obama issued an Executive Order (EO) on “Improving Regulation and Regulatory Review” (<http://bit.ly/eleCfg>). In a White House blog posting, Jack Lew, director of the Office of Management and Budget, described the basic tenets of the EO as follows: “to consider costs and how best to reduce burdens for American businesses and consumers; to expand opportunities for public participation and stakeholder involvement; to seek the most flexible, least burdensome approaches; to ensure that regulations are scientifically driven; and to review old regulations so that rules that are no longer needed can be modified or withdrawn.”

The EO says that public comment periods on proposed regulations should generally be at least 60 days, and there should be timely access to the rulemaking docket on <http://www.regulations.gov>, including relevant scientific and technical findings. Agencies are also directed to seek the view of those who are likely to be affected by proposed regulations.

### **New Congressional Leadership**

Now that the 112th Congress is getting down to business, we can update you on the chairs (majority party) and ranking members (minority party) of the congressional committees and subcommittees that are especially relevant to the plant biology community.

#### *U.S. Senate (Democrats in majority)*

- Agriculture, Nutrition, and Forestry: Debbie Stabenow (D-MI), Saxby Chambliss (R-GA)
- Appropriations: Daniel Inouye (D-HI), Thad Cochran (R-MS)
  - Agriculture: Herb Kohl (D-WI), Roy Blunt (R-MO)
  - Commerce/Justice/Science: Barbara Mikulski (D-MD), Kay Bailey Hutchison (R-TX)
- Energy and Water: Dianne Feinstein (D-CA), Lamar Alexander (R-TN)
- Labor/HHS/Education: Tom Harkin (D-IA), Richard Shelby (R-AL)
- Commerce, Science, Transportation: Jay Rockefeller (D-WV), Kay Bailey Hutchison (R-TX)
- Energy and Natural Resources: Jeff Bingaman (D-NM), Lisa Murkowski (R-AK)
- Health, Labor, Education, and Pensions: Tom Harkin (D-IN), Mike Enzi (R-WY)

#### *U.S. House (Republicans in majority)*

- Agriculture: Frank Lucas (R-OK), Collin Peterson (D-MN)
- Appropriations: Hal Rogers (R-KY), Norm Dicks (D-WA)
  - Agriculture: Jack Kingston (R-GA), Sam Farr (D-CA)
  - Commerce/Justice/Science: Frank Wolf (R-VA), Chaka Fattah (D-PA)
  - Energy and Water: Rodney Frelinghuysen (R-NJ), Pete Visclosky (D-IN)
  - Labor/HHS: Denny Rehberg (R-MT), Rosa DeLauro (D-CT)
- Energy and Commerce: Fred Upton (R-MI), Henry Waxman (D-CA)
- Science, Space, and Technology: Ralph Hall (R-TX), Eddie Bernice Johnson (D-TX)

We especially invite ASPB members living in any of these states to volunteer to help the Public Affairs Committee amplify its voice on Capitol Hill. E-mail [afagen@aspb.org](mailto:afagen@aspb.org) to get plugged in.

### **NRC Report on National Needs for Research Personnel**

The National Research Council (NRC) has issued the 13th and latest in a series of

congressionally mandated studies on the national needs for research personnel: *Research Training in the Biomedical, Behavioral, and Clinical Research Sciences* (<http://bit.ly/gz5ZRp>). The report advises the National Institutes of Health (NIH) on personnel needs as they relate to the National Research Service Awards (NRSA) program, which incorporates NIH predoctoral and postdoctoral fellowships and training grants as well as programs in nursing, oral health, and clinical and health services research. Training grants support a broad range of grad students and postdocs, including those in plant biology, and have become the de facto national standard for graduate and postdoctoral training.

Based upon analysis of employment, education, demographic, and other trends, the report recommends that the number of NRSA positions in the biomedical and clinical sciences should be maintained and linked to the level of total extramural research funding. The report also calls on NIH to reinstitute its 2001 commitment to raise stipends. The report acknowledges the role that training grants have had on graduate and postdoctoral training overall and recommends that grad students and postdocs supported on research grants “should be required to incorporate certain additional ‘training grant-like’ components into their regular academic training program,” including responsible conduct of research training, exposure to quantitative biology, and career guidance and advising. The report says that the training programs that educate and train those funded by research grants “should be subject to the same expectations for diversity of trainees that are expected of training grants.” Recognizing the range of careers pursued by NRSA trainees, the report recommends that NIH peer-review panels should broaden their concept of “successful” training to “recognize nontraditional outcomes that meet important national priorities and needs.”

**Adam P. Fagen, PhD**  
ASPB Public Affairs Director



## My Salsa Has Genes?

### Using Heirloom Tomatoes to Teach Plant Biology

As plant biologists, we'd all like to see more children interested in and excited by science, particularly the unique beauty and agricultural importance of plants. But what is the best approach for educational outreach? Bringing our research to classrooms is challenging: kids often don't have the background to understand the science, and none of us as individuals has the time to influence many students. We approached these problems by incorporating two features into our educational outreach program. First, we took advantage of the fact that one of the research organisms in our lab, the tomato, is not only a popular food, but it also has amazing genetic diversity. Second, we recruited undergraduate students enrolled in a biology course as teachers and thus were able to expand the number of K-12 students who benefited from our curriculum as well as provide a unique learning experience for our undergraduates. Our program was funded by an ASPB Education Foundation grant to Gloria Muday and Carole Browne, professors of biology; Hanya Chrispeels, postdoctoral researcher; and Michelle Klosterman, assistant professor of education, all of Wake Forest University (WFU).

#### Program Overview

At the foundation of the curriculum was the idea that tomatoes, a common food consumed by almost all Americans in one form or another (Do you want ketchup with your fries?), are a good model for introducing concepts of plant biology to children. Using tomato fruits and seedlings, and a few other plant species, we designed a set of hands-on activities to correlate with the North Carolina standard course of study for third, seventh, and high school grades. For this program, the tomatoes came from the WFU Campus Garden, where Muday lab members and other WFU students grow research tomatoes and over 50 varieties of heirloom tomatoes.



Gloria Muday explains concepts of inheritance to seventh-grade students. PHOTO BY J. SCOTT.

These provided teaching and tasting materials used in the curriculum. By using a popular food, but one that comes in a diverse range of colors, shapes, and sizes, we hoped to capture the children's interest.

To reach the maximum number of K-12 students with our program, we involved WFU undergraduate students in teaching the curriculum. The WFU biology department's nonmajors course, *Biology and the Human Condition*, has a service-learning component to its course requirements. We took advantage of this requirement and the class's relatively large size to provide a corps of people to teach the curriculum. We used WFU student lab periods to teach the students the background material and the exercises and to visit schools. During September 2010, a team of four faculty, 40 undergraduates, and four graduate student TAs visited four different schools to teach the program. The team visited one elementary school, one middle school, and two high schools, teaching simultaneous and back-to-back classes to third-, seventh-, and ninth- through 12th-grade students. We visited the elementary and middle schools

twice, two weeks apart; the high schools each received one visit. Over 500 students were served by this approach.

A display of heirloom tomatoes and a tomato tasting were included in the activities for each classroom. We started each class period with a five-minute introduction to the phenotypic variation of tomatoes. Even many high school students had a hard time guessing that the Plum Lemon heirloom variety was, in fact, a tomato and not a lemon. Students were also reluctant at first to try the rainbow assortment of heirlooms chopped up for the tasting—a reluctance that increased with age. Surprisingly, the group of students least willing to try the heirloom tomatoes were the Wake Forest undergraduates who were helping teach the curriculum! When students began tasting, however, the range of flavors that accompanied the rainbow of colors surprised them, and most of them agreed that the heirlooms tasted better than the "supermarket" tomato provided for comparison.

For each grade level, the curriculum was organized into stations. Each station had a

different activity and was led by two undergrads, a graduate student TA, or a faculty member. Each class broke into groups of six to 10 students, and the groups rotated through the stations during the class period. The third-grade activities included observing and drawing tomatoes. The seventh-grade and high school activities included genetics exercises and DNA extraction. (A complete list of activities is included below.)

### Did It Work?

The goals of the program were (1) to convince our audience that plants, especially tomatoes, were interesting and (2) to complement and supplement the North Carolina science curriculum for our chosen grade levels. Based on participant feedback, we achieved those goals. We solicited teacher feedback through written surveys and a follow-up meeting.

The teachers praised the hands-on nature of the activities and the fit with the curriculum. A few weeks after our visit to Paisley IB Magnet, the seventh-grade science classes started a unit on genetics. One of the science teachers reported to us that his students recalled doing Punnett squares during the tomato program, so they were able to more quickly grasp the concepts he was currently teaching. Having heard some of the vocabu-

*continued on page 28*

## Curriculum Exercises

### Third Grade

#### First Visit

- Draw a picture of and write a sentence about an heirloom tomato
- Plant tomato seeds in a small pot
- Taste heirloom tomatoes

#### Second Visit

- Use seedlings (from seeds planted in first visit) to learn parts of a plant
- Draw pictures of seedling and label parts of plant
- Identify parts of plant in common vegetables and fruits
- Make salsa from heirloom and store-bought tomatoes; do a comparison taste test

### Seventh Grade

#### First Visit

- Fruit color genetics exercise
- Whole plant and fruit anatomy
- Heirloom tomato tasting

#### Second Visit

- Leaf shape genetics exercise
- DNA extraction from strawberries
- Plant adaptations to environment exercise

### High School

- Fruit color genetics exercise
- DNA extraction from strawberries
- Plant adaptations to environment exercise
- Heirloom tomato tasting
- Heirloom and store-bought tomato salsa comparison as an after-school activity



Eleventh- and 12th-grade students work through a genetics exercise with Hanya Chrispeels. PHOTO BY B. STAPPERFENNE.



WFU student Meaghan McCarthy encourages seventh graders to taste heirloom tomatoes. PHOTO BY J. SCOTT.

If you have questions, comments, or feedback about our program, or would like a copy of the exercises, please contact us at [muday@wfu.edu](mailto:muday@wfu.edu) or [chrisphe@wfu.edu](mailto:chrisphe@wfu.edu).

## Focus on Education at Plant Biology 2011

### *Vision & Change in Undergraduate Biology Education*

**Monday, August 8, 2011, 12:00–1:30 p.m.**

The National Science Foundation and other partners—including the Howard Hughes Medical Institute, National Institutes of Health, American Association for the Advancement of Science, and representatives from The National Academies—have been involved in a multiyear process to consider the future of undergraduate biology education. The Vision & Change (V&C) initiative included discussions with many stakeholders, including a well-attended session at ASPB's

2007 annual meeting and a major conference that brought together 400 leaders in undergraduate biology education in July 2009.

The final report from V&C has just been released (<http://www.visionandchange.org>), and ASPB is providing a dedicated opportunity to discuss the report and how to put its recommendations into practice.

- How will the plant biology community respond to the report?

- What tools and resources do you need from ASPB, funding agencies, and others to implement the report's recommendations?

This event is free, but advance registration is requested because attendance will be limited. Sign up for the V&C session via online registration for Plant Biology 2011. 

*This session is supported by a grant ASPB has recently received from NSF.*

### Additional Education Events at Plant Biology 2011

EVENT	DESCRIPTION	ACCESS
<b>Education Workshop: Education/Outreach Grant Proposals</b> Sunday, August 7, 7:30–9:30 p.m.	Learn to prepare education and outreach grant proposals, including those offered by the ASPB Education Foundation, NSF, NIH, and HHMI. Agency reps will answer questions, and PIs will share their successful (and not so successful!) proposals, reviews, and revisions.	Free. Advance registration required. Use online registration for tickets.
<b>Education Minisymposium</b> Date and Time TBD	Experts share the impacts and implications of planning plant biology outreach. Discover the techniques used and the learning patterns noted in these diverse outreach programs.	Free. No registration required.
<b>Small Colleges/PUIs Research Networking Breakfast</b> Saturday, August 6, 9:00–10:30 a.m.	Join scientists working at or interested in primarily undergraduate institutions (PUIs) to network, discuss issues of common interest, find out about PUI-related opportunities, and provide feedback on ASPB programs for PUIs.	Pre-purchased ticket required—\$15. Purchase via online meeting registration.
<b>Undergraduate Networking Poster Session</b> Saturday, August 6, 10:30–11:30 a.m.	Welcome the next generation of plant biologists as undergraduates display their posters during this special session.	Free. No registration required to attend. Poster presenters must reserve a poster spot via online registration.
<b>Education Booth Competition for Innovative Instruction</b> Daily in the Education Booth	View the new and clever techniques, technologies, or strategies developed for teaching and learning plant science in the laboratory, classroom, or other venues. Speak with the competition winners who created them.	During Exhibit Hall hours.

## ASPB Earns an A+ at D.C. Teachers Night

On February 3, ASPB sponsored and staffed two very busy and highly interactive outreach tables at the fourth annual D.C. Teachers Night. This event took place at the lush U.S. Botanic Garden (USBG) in the shadow of the U.S. Capitol in Washington, D.C., and was cohosted by USBG and the D.C. Environmental Education Consortium (DCEEC).

D.C. Teachers Night was designed so that scientists could meet with hundreds of teachers from across the District who are interested in environmental education and plant biology. This year, DCEEC included eight organizations to provide “hands-on” activities for teachers attending the event. ASPB was pleased to be one of the eight invited for this purpose. It was a great opportunity to capture the interest of the many eager teachers and museum educators in attendance by giving them time to explore plant biology concepts and ASPB resources firsthand.

Although smaller than a typical ASPB outreach event, this evening had a big impact on expanding the classroom repertoire of so many of the city’s public, private, special interest, and charter school teachers. ASPB booth visitors gathered up ideas about plant science to cultivate as well as a harvest of free resources for teaching biology with plants in their classrooms.

Participants were impressed by the precise expertise and engaging manner of booth volunteer and ASPB member Hemayet Ullah (Howard University) as he led them through some pigment extraction and pH testing exercises from ASPB’s 12 inquiry-based activities for exploring plant biology. Hemayet observed the following:

It was a satisfying accomplishment to be able to explain and demonstrate the simple yet powerful and versatile activities to the very teachers who will benefit from using them



A capital setting for D.C. Teachers Night!

Teachers soak up the concepts and teaching tips Hemayet Ullah (left) shares about plants, pH, and pigment dyes.



Visitors funneled through the crowd to get a close-up view of how basic, affordable materials can be used to conduct quality research.

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**Salsa**  
*continued from page 25*



Display of heirloom tomatoes showing the shape, size, and color diversity. PHOTO BY G. MUDAY.



Tenth-grade students spool their extracted strawberry DNA on a coffee stirrer. PHOTO BY A. MERCER.

lary beforehand, such as *gene*, *allele*, *homozygous*, and so on, was beneficial, and having the memorable images of the genetic variation in the tomato helped the students see the effect of specific genes far better than the textbook drawings of Mendel's yellow and wrinkled peas. The most consistent comment received from teachers at all four schools regarded the benefit of having the WFU undergraduate students visit the schools. As one high school teacher commented, "They [the high school students] saw young people doing science."

The comments from students were also positive. Seventh-grade students thought the program was "really cool" and "so much fun." One high school student took home seeds of the Green Grape tomato after tasting it and deciding it was his favorite. He plans to plant the seeds in his garden this spring.

### Future Plans

We are planning to repeat the program in September 2011, focusing on third and seventh grades, going to each school once, and visiting a greater number of schools. We are currently in the process of writing a series of articles with Michelle Klosterman to be published in teacher practitioner journals to



Third-grade students examine and draw heirloom tomatoes. PHOTO BY H. CHRISPEELS.

share the activities with K-12 teachers. After the program has finished, we plan on posting the complete details of the activities on websites tailored for K-12 teachers, community garden and garden outreach organizations, and university educators.

### Questions to Consider

We hope our experience can provide ideas that help in the development of other educational outreach projects. We continue to ponder the following series of questions as we plan next year's activities:

- What part of our research could be adapted to an outreach project? Our lab is supported by the USDA Agriculture and Food Research Initiative to study

hormonal controls of root development, and we used seedlings of tomato root branching mutants and nonripening fruits from plants with ethylene signaling mutations in our exercises.

- What is the best age group to target? We determined that our curriculum as written fit best for third- and seventh-grade students. For high school students, we need to add more of our current research to enrich their curriculum and make sure the WFU students have the background to teach at that level.
- Could undergraduate or graduate students be used to augment the teaching staff? Who are the best students to participate? We recruited students from a nonmajors course because of its large size and its service-learning requirement. But are nonmajors the best ambassadors for biology? Would students from a more advanced biology course be better suited to teach principles of genetics?
- Can the teaching team come to schools during their science class times? One of our biggest challenges was to coordinate the school visits during the WFU undergraduate lab times. We quickly found out that it is not a very good idea to ask undergraduates to meet a bus at 7:15 a.m.
- How does one design hands-on activities to illustrate the principles to be taught? We tried to do as many hands-on activities as possible, but the logistics involved in preparing 200 DNA extraction kits in one day are not insubstantial.

Despite these challenges, there were many tangible rewards. One seventh-grade student, after completing the DNA extraction station, announced to his station leader that he was going to become a scientist. Hearing that was as sweet as eating a ripe Sungold tomato right off the vine.

Hanya E. Chrispeels  
 Gloria K. Muday  
 Wake Forest University

# ASPB Education Foundation Grants

## Promoting Plant Biology Education and Outreach

The ASPB Education Foundation seeks proposals from ASPB members to support education and outreach activities that advance knowledge and appreciation of plant biology. The Foundation was established in 1995 with the main goal of enhancing public awareness and understanding of the role of plants in all areas of life. To this end, the Foundation supports education and outreach projects (i.e., NOT science research projects) that enrich and promote youth, student, and general public understanding of the

- importance of plants for the sustainable production of medicine, food, fibers, and fuels
- critical role plants play in sustaining functional ecosystems in changing environments
- latest developments in plant biotechnologies, including genetic modifications that enhance the disease and stress resistance of crops
- contributions of discoveries made in plants to discoveries that improve human health and well-being
- range of careers related to plant biology or available to plant biologists.

The types of projects that fit the Foundation's goals include but are not limited to

- development and use of instructional materials in K-12 schools, undergraduate courses, science centers and museums, after-school science clubs, and other settings
- professional development about plant biology for educators (e.g., teachers, museum educators, 4-H agents)
- professional development about education and scientific communication for plant biologists and plant biologists in training
- development and implementation of educational exhibits or displays in science museums, science centers, libraries, and other public venues

- development and dissemination of multi-media educational resources such as radio or video pieces, websites, and animations
- development of and support for education and outreach collaborations between plant biologists and educators.

The Foundation especially seeks projects that will produce resources that can be widely shared and disseminated and programs or relationships that can be sustained over time. Proposals are encouraged from members both within and outside the United States, and projects may serve communities from any country. Proposals that leverage funds from the ASPB Education Foundation with support from other sources are encouraged, particularly for proposals that request a full \$30,000 budget.

Sources that may be helpful in preparing successful proposals include

- project summaries from previously funded projects, which are available at the Education Foundation section of the ASPB website at <http://www.aspb.org/educationfoundation>
- project managers from winning Education Foundation Grants who can advise future applicants who seek their consultation on developing winning proposals.

### Apply for a Grant

*Please note: The application format changed as of 2011; previous formats will not be accepted.*

Proposals must be submitted to the Education Foundation by June 3, 2011. No forms are needed. Send proposals by e-mail to the Education Foundation Coordinator at [katie@aspb.org](mailto:katie@aspb.org). Include your full name in the body of the submitted e-mail. Attach documents as PDF files or Word documents (.doc extension). Proposal reviews will begin after the closing date.

Questions? Contact [katie@aspb.org](mailto:katie@aspb.org).

**Each eight-page grant proposal should include the following:**

- 1. Cover Page**
  - project title
  - project manager's name
  - address, phone, e-mail, and fax
  - coinvestigator name(s) and institutional affiliation(s) (if any)
- 2. Project Description:** The project description is limited to **five pages**, including references, figures, and images. Text should be **single-spaced, 12-point font**, with at least **1-inch margins**.
 

The project description should be divided into six sections:

  - a. **Goals and Objectives:** For example, what is this education/outreach project trying to achieve? Why is the project important? What previous education/outreach work has been done by the investigator(s) or others that lays the groundwork for the project? In what ways do the project goals and objectives align with the goals of the ASPB Education Foundation?
  - b. **Methods and Approaches:** For example, how will the project be implemented? Who will be involved? What is the target audience(s)? What activities will take place? What is the anticipated timeline for the project? How are the proposed activities aligned with the project's goals and objectives?
  - c. **Anticipated Outcomes:** For example, what is expected to happen as a result of the project? How many participants will be involved? What should they know, appreciate, or be able to do as a result of participating in the project?
  - d. **Evaluation Plan:** For example, what evidence will be collected that will be useful for determining whether goals or objectives are achieved? How will project outcomes be documented (e.g.,

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**ASPB Grants**

*continued from page 29*

number of target audience members reached; knowledge or skill gains; changes in interests, attitudes, or intentions)? Who will be responsible for executing the evaluation plan?

- e. **Dissemination Plan:** For example, how will project products and outcomes (e.g., instructional materials, professional development materials, exhibits, evaluation results) be shared with others who may be interested in using them (e.g., conference posters or presentations, peer-reviewed publications, newsletter articles)?
  - f. **References:** Include citations for any books, journal articles, websites, or other resources cited in the project description.
- 3. Statement of Education/Outreach**
- Experience and Expertise:** This section is limited to one page.
- The investigator(s) should describe previous education and outreach experiences and expertise of those involved in the project.

- Statements should include, if appropriate, brief descriptions of previous education and outreach projects, including project outcomes and impacts.
  - If appropriate, relevant references that provide evidence for the qualifications of the investigator(s) should be included (e.g., URLs for the investigators' education/outreach websites, publications). (Background on the proposal itself should be contained within the project description.)
4. **Itemized Budget:** This section is limited to one page.
    - The budget limit is \$30,000, including salary, benefits, materials, equipment, travel, and other costs.
    - Each cost should be justified.

Awardees will be notified by e-mail.



*Other Guidelines*

1. The project manager must be a current member of ASPB.
2. No indirect costs (overhead) will be covered by the Foundation for project awards.
3. No funds may be requested for endowments or granting programs.

**Teachers Night**

*continued from page 27*

CDs with all the lab protocols, they also liked having the data sheets in the booth to review. It was a relief for many of them to know everything was fully developed for classroom use [so that] they wouldn't have to figure out when and how to create charts and handouts to teach the concepts.

I hope ASPB members will join [with] the Society as it continues in these endeavors that [help teachers] raise interest in plant science, a career choice that seems to be declining within our current student population.

**Katie Engen**  
Education Foundation Coordinator

### Comments from Enthusiastic Educators at D.C. Teachers Night

*"I can do some of these [activities] in the garden greenhouse we just opened."*

*"I want live things like this in each classroom. Our kids need that!"*

*"We need biotech activities, and I want to include plants on a regular basis."*

*"This [radish seed bioassay display] is so simple, and it shows so much!"*

*"I can use this with my preschoolers AND my after-school garden club."*

*"Inquiry-based activities are SO important. This is just perfect."*



## Erwin Latzko

Professor Erwin Latzko passed away on November 6, 2010, in Kranzberg, Germany.

Latzko was born on April 20, 1924, in Glaserhau, Czechoslovakia (now Sklené, Slovakia), a small village founded by German settlers in the Middle Ages. He attended primary and secondary school in Slovakia. At the end of World War II, he worked for two years as a farm laborer in Germany and then entered the Technical University of Munich at Weihenstephan to study agriculture, graduating with a PhD in plant nutrition in 1952.

After spending time in laboratories at the Institute of Organic Chemistry at the Technical University of Munich and at the Institute of Physiological Chemistry at the University of Marburg, he worked for four years at the Potassium Industry Agricultural Research Station in Hannover. He then returned to Weihenstephan, completed his habilitation in 1962 (with a thesis that analyzed the effect of monovalent cations on phosphorylation reactions and the redox status of yeast), and was appointed to the faculty of the Institute of Agricultural Chemistry at the Technical University. In 1965, he came to Brandeis University in Waltham, Massachusetts, where he spent two years with Martin Gibbs and began working in the area of photosynthetic carbon metabolism. In 1968, he was promoted to full professor, and in 1969, he became head of the Department of Chemical Plant Physiology in Weihenstephan. He assumed the directorships of the Botanical Institute and the Botanical Garden at the University of Münster in 1977, where he served until he retired in 1989.

Latzko's research centered on, but was not limited to, fructose bisphosphatase, the enzyme at the intersection of the Calvin cycle and starch formation in the chloroplast, and other enzymes that utilize or produce fructose bisphosphate or fructose 6-phosphate. He was a skillful, fatherly teacher and supervisor of his students, and he was involved in many productive collaborations both with the Gibbs group and with other laboratories around the

world. Among his many publications are a much-cited review with Grahame Kelly and Martin Gibbs in the *Annual Review of Plant Physiology* in 1976 and biennial reviews of photosynthetic carbon metabolism with Grahame Kelly that appeared from 1974 until 2004 in the series *Progress in Botany*. He served as editor of Volume 6 of the *Encyclopedia of Plant Physiology, New Series* with Martin Gibbs and, from 1980 to 1984, as a monitoring editor for *Plant Physiology*. In 1991, he was awarded an honorary doctorate by the University of Bayreuth in recognition of his contributions to our understanding of the biochemistry of photosynthetic CO<sub>2</sub> fixation.

Latzko was one of a group of hikers at a Gordon Conference in New Hampshire in 1982 who came up with the idea of organizing a post-Brussels Photosynthesis Congress satellite meeting for the following year. That post-Congress meeting was the first Wallenfels meeting. When the Congress in Brussels ended, 30 plant scientists traveled by bus to Wallenfels, Bavaria, where the University of Bayreuth has a small center for scientific meetings. During the long bus ride and during the following three days, the world revolved around the enzymes of photosynthetic carbon metabolism, discussion of the modulation of the activity of those enzymes, hearty Bavarian food and drink, and a terrifying raft trip on a tiny stream that passed under very low bridges. Fortunately, no one was decapitated. The meeting was so fruitful that it has been held every year since (not always with rafting), and Latzko attended until 2003.

Erwin was a good friend and colleague. He was outgoing, collegial, and generous. He enjoyed travel and showing visitors around Weihenstephan and Bavaria. He was a gracious host and a gracious guest. Grahame Kelly especially recalls Erwin's admirable philosophy: "The most important thing in life is to be nice to people!"

Latzko was buried in Kranzberg. He is survived by his wife of 53 years, Sylvia; three children, Gabriele, a physician in Berlin,



Erwin Latzko. PHOTO COURTESY OF RENATE SCHEIBE, UNIVERSITY OF OSNABRÜCK.

Stefan, a violinist with the Deutsche Kammerphilharmonie Bremen, and Reinhard, a cellist and professor of music at the University of Music and Performing Arts in Vienna; and five grandchildren (with two more expected shortly).

**Louise E. Anderson**  
University of Illinois at Chicago

**Erwin Beck**  
University of Bayreuth

# ASPB News

American Society of Plant Biologists  
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PERIODICALS  
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## Why compromise when you don't have to?

The screenshot shows a web browser displaying the 'Advanced Analytical Systems - AdvanCE Fluorescent System' website. The main content is about the 'AdvanCE™ FS96' system. On the left, there's a sidebar with links for INSTRUMENTS (Overview, Description of Technology, Applications, Technical Specifications, Buffer, Reagents and Accessories), SERVICE & SUPPORT, and DISTRIBUTORS. The main content area features a large image of the AdvanCE™ FS96 instrument and a table of its features:

FEATURES	AdvanCE™ FS96
Sample throughput for <1,000 bp fragments	96 samples in 30 minutes
Samples per run	96
Resolution	5 bp, <500 bp, and 5–10 bp, >500–1,000 bp
Sensitivity	10pg/μl
Light source power	One 700mW LED, 470nm
Emission collection device	Wide angle camera
Preset methods	YES
Electrophoretic or vacuum injection	YES
Robotic interface capable	YES
Custom gels possible	YES
Mineral oil	NOT needed
Years of CE experience	10 years

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- ✓ Robotic interface capable
- ✓ Attractive capital and operating costs

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