



NEWSLETTER

American Society of Plant Physiologists

Inside This Issue . . .

- 2
Second Level Review
- 3
New ASPP Staff
- 4
THE PLANT CELL Special Issue
- 5-6
Executive Director Report
- 7-8
Public Affairs; Legislative Alert/
Revising Research Classification
Protocol
- 8
Section News/Plant Biochemistry
Course/New ASPP Book
- 9
Teaching Corner/Obituaries
- 10
Call for Award Nominations
- 11
Gatherings
- 17
Symposia Planned for Portland
Annual Meeting
- 19
Jobs
- 30
Headquarters Phone List

Deadline for the
March/April issue
of the ASPP Newsletter
is February 15, 1994.

PRESIDENT'S LETTER

Greetings!

The end of 1993 saw a flurry of activity for us at ASPP. Ken Beam and I met on December 4 at ASPP headquarters to outline details of a new venture, the formation of the ASPP Foundation. The Foundation will be a vehicle for promoting and raising funds to support some of the Society's important goals, for example, the fostering of precollege science education.

Ken and I also attended the winter meeting of the Council of Scientific Society Presidents (CSSP), an organization to which most scientific societies in this country belong. CSSP represents about 60 scientific societies whose combined membership numbers more than one million. CSSP's goals are to provide a strong voice for science and science education and to help foster wise science policy. The meeting consisted of workshops dealing with issues ranging from international science, science and math education, and scientific priorities to ethics in science; a breakfast meeting on Capitol Hill with congressional staffers; a keynote address on undergraduate education from David Goldstein, provost at Caltech; and presentations by the new director of NSF, the president of the National Academy of Sciences (NAS), and the associate director of the White House Office of Science and Technology Policy (OSTP).

Gerson Sher, chief operating officer of Soros International Science Foundation (ISF), addressed the workshop on international science and spoke about ISF's efforts to help scientists in the Eastern Block countries, especially the countries of the former Soviet Union. Sher mentioned ASPP's contributions, and Marty Gibbs's projects in particular, as examples of the

efforts that scientific societies can mount on behalf of scientists in disadvantaged countries. ASPP is one of only a few scientific societies that have programs in place to provide direct assistance to countries in the former Soviet Union.

The workshop on ethics in science discussed the need for scientific societies to develop their own codes of ethics. Neither ASPP nor CSSP has written codes of ethics, and formalized codes are rare among scientific societies. Because science's image has become tarnished in recent years by the unethical activities of a small minority, there is a growing feeling that codes of conduct are needed, especially as they relate to issues such as fraud and falsification. It must be kept in mind, however, that codes of conduct are only effective if monitoring and discipline procedures are also in place. I would appreciate your input on this issue. Should ASPP develop a code of conduct for its members and should this be formalized in a written code of ethics? How would we enforce a code of ethics?

The Congressional staff breakfast was addressed by staffers from the various House and Senate Committees having responsibility for science and technology as well as agriculture and education. These staffers painted a bleak picture for science funding over the next few years. Their best forecast was for sustaining the current level of funding for basic science, although one staffer predicted declining funding. Several explanations were provided for this situation, from the magnitude of the federal budget deficit to a more disturbing view that science was no longer perceived as a priority and had neither influence nor sympathy among lawmakers in Washington. If correct, this latter view is likely to have long term implications for science funding. ASPP members

ABSTRACT DEADLINE IS
FEBRUARY 28, 1994

are encouraged to let their representatives know of the important contributions of science, especially the plant sciences, to America's economy and quality of life. The ASPP Newsletter will continue carrying timely alerts of upcoming votes in Congress on legislation with direct effects on plant science researchers and educators. In this issue, see page 7.

Not all aspects of funding are bleak. Sara Davis from the House Education and Labor Committee indicated that appropriations for education would increase by as much as \$1 billion next year, and she urged scientific societies to become more involved in promoting the teaching of science at the K-12 level. This theme of the importance of education came up in almost all of the sessions of the CSSP meeting. ASPP has a strong interest in promoting the teaching of plant physiology at the K-12 level as well as to university undergraduates. Our education committee has been particularly active in these areas, for example, by inviting high school teachers to workshops at our annual meeting. The proposed ASPP Foundation will have the promotion of the teaching of science at the K-12 levels as one of its goals.

Perhaps the highlight of the meeting was the summit panel on future science policy chaired by M. C. Greenwood from the White House OSTP, and including Neal Lane, new director of NSF, and Bruce Alberts, president of the NAS. The panel discussion also focused on science funding and education. Neal Lane emphasized that NSF was being asked to devote as much as 60% of its budget to strategic research, compared to 40% to basic research. Strategic research is currently a buzz word in Washington, and most scientists view it as an euphemism for applied research. Lane stressed, however, that strategic research does not necessarily mean applied research. Indeed, he mentioned the *Arabidopsis* genome project, funded in part by NSF, as an excellent example of strategic research. If this definition of strategic research prevails at NSF, then researchers at most major universities may breathe a small sigh of relief!

Bruce Alberts devoted most of his discussion to the role scientists should play in precollege science education. Alberts is one of the founders of the UCSF Science/Health Education Partnership that operates a program in the San Francisco public school system. The program consists of a small staff and a budget of \$600,000

for teacher stipends. About 300 primary and secondary school teachers as well as 400 UCSF volunteers participate in this project in San Francisco. Alberts is now transferring his expertise to the NAS where a project is underway to develop a set of national standards for K-12 science education. Alberts also has emphasized the importance of making President Clinton and his cabinet aware of the importance of science education. To those attending the CSSP meeting, Alberts emphasized the need for an army of volunteers from the scientific and engineering communities to work in the public schools to promote science education. He also asked that societies make their newsletters available to him so that he may reach members of our scientific communities. On your behalf, I have accepted Alberts's invitation and written to him offering our services in his quest to improve science education.

A gathering of officials from various plant and soil science societies was held immediately following the CSSP meeting. This meeting was attended by 20 individuals including Ken Beam, Brian Hyps, and me from ASPP, Jim Cook, chief scientist at the National Research Initiative Competitive Grants Program (NRICGP), David MacKenzie, USDA, as well as the presidents of several other societies. This meeting followed up on a similar meeting that was held at the Beckman Center of the NAS at Irvine, California, in late October of this year. The main subject of discussion was the issue of the proposed second-level review of NRICGP grants. This second-level review would focus on

the contributions of NRICGP grants to sustainable agriculture. ASPP has written a position paper on this subject, the text of which follows below. The view of ASPP and the other plant and soil societies is that a second level of review that does not deal with research quality should be opposed. Jim Cook and his staffers at NRICGP also oppose this second level of review, and it is hoped that by providing Jim and his colleagues with support the proposal will be defeated.

This meeting also discussed ways of increasing cooperation among plant and soil societies. Ken Beam and Brian Hyps have already played important roles in initiating cooperation among our various societies, and the benefits of this cooperation are beginning to be realized. Information about issues that are important to plant and soil science is now being shared among the different societies and teams of individuals are being organized to respond to issues that directly affect us nationwide. Look for more information in this and future newsletters about activities in this area!

ASPP staff and your elected officials cannot be effective without your support. I urge you to respond by writing letters to your congressional representatives, by making other efforts to help protect the collective interests of our membership, and by communicating your ideas and concerns to ASPP's staff and elected officials. ASPP is prepared to act aggressively on your behalf on various issues in 1994. Let us hear from you.

Russell L. Jones
University of California, Berkeley

Plant and Soil Sciences Forum Addresses Second Level Review

ASPP has been working with other plant and soil science organizations to address issues of common interest particularly as they relate to public affairs issues affecting our memberships. Members of the newly formed, informal plant and soil sciences forum, or discussion group, have reviewed a letter proposed by the chair of the ASPP committee on public affairs, Ralph Quatrano, concerning the peer review procedures at the National Research Initiative Competitive Grants Program.

The letter, which follows, was sent on December 22, 1993, to John Patrick Jordan, administrator of the Cooperative State Research Service; William Carlson, associate administrator of the Coopera-

tive State Research Service; and James Cook, chief scientist of the National Research Initiative Competitive Grants Program.

Dear Dr. Cook:

The organizations listed below are scientific and professional organizations that support the advancement of research through maintaining high quality standards. We wish to emphasize the importance of funds provided through the National Research Initiative Competitive Grants Program (NRICGP), administered by USDA's Cooperative State Research Service. The NRICGP funds are essential for the support of

continued on page 4

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NEW STAFF AT ASPP

Two new staff members have joined the team here at the headquarters of ASPP. In announcing the hiring of Susan K. Chambers and Thomas M. Dushney, executive director Ken Beam acknowledged the high level of experience and enthusiasm that these two individuals bring to the Society.

Susan Chambers was hired as director of finance and administration on December 7, 1993. Ms. Chambers brings a wealth of association experience to her job, having served in similar positions with the National Health Lawyers Association, the American Railway Engineering Association, and the North American Telephone Association. In addition, Susan held sales and marketing positions with General Digital Corporation. She holds a B.A. degree from Indiana University of Pennsylvania and is currently enrolled in the Master of General Administration program at the University of Maryland.

Susan will be responsible for financial reporting, membership services, personnel management, annual meetings, and administrative matters such as computers and facilities management. Her experience in meetings management will be of particular value to the Society. The marketing skills that she has shown should also produce long term benefits in the sales efforts for our membership, publications, and other ASPP goods and services.

Tom Dushney came on board on November 29 as the ASPP accountant. He is a 1989 graduate of the University of Mary-



Tom Dushney, recently hired as accountant at ASPP headquarters

land in accounting and brings impressive and relevant work experience to his position. His most immediate position was senior accountant with the Associated General Contractors of America.

It will be Tom's responsibility to keep the Society books and accounts in order and the monthly financial statements current. He is in charge of all ASPP disbursements and coordinates the cash receivable function. Currently, Tom is assisting the ASPP outside auditors in the preliminary work necessary for the 1993 annual audit.



Susan Chambers, ASPP's new director of finance and administration

ORDER ASPP'S NEWEST
BOOK TODAY

PLANT SIGNALS
IN
INTERACTIONS
WITH OTHER
ORGANISMS

ORDER FORM
ON PAGE 31 OF THIS
NEWSLETTER

continued from page 2

fundamental and mission-linked research relevant to USDA's broad responsibilities in food, agriculture, and the environment.

Areas of research and funding priorities are developed through a network of inputs from throughout the food and agriculture system. This important process of identifying public goals and fruitful areas of science into high-priority program areas is an ongoing and evolving endeavor. The entire nation's research community can submit grant proposals to these research program areas for competitive evaluation based on merit and quality of science.

Once established, priorities must be protected from a potential additional level of review imposed by special interest groups that would attempt to divert funding after the review process. Although there may not be a formal proposal before the U.S. Department of Agriculture at this time to institute an additional level of review of grant proposals beyond the peer review process, we are aware of special interests which have voiced support for an additional level of review. Since interest groups are numerous and varied, the programs and the integrity of the NRICGP review process should be protected from special interest pressures that are in conflict with the highest standards of quality science.

A major strength of the NRICGP is in the comprehensive peer review process which evaluates grant proposals on the basis of merit and scientific quality in priority program areas. This rigorous evaluation process assures that the best science projects will be awarded in the relevant priority areas. If an

additional level of review is imposed beyond the evaluation process, the peer review system will be threatened and become ineffective in evaluating research proposals.

For these reasons, we caution against the establishment of a potential additional level of review or filter beyond the panel recommendations and funding decision. Rather, we strongly endorse the established peer review process in which, based on the high priority areas and stated evaluation factors, the panel's careful and thoughtful deliberations form the basis for funding decisions.

We would like to work with USDA and the Congress as areas of research and priorities for NRICGP are considered. If you would like further information on the support of the scientific community for maintaining the highest competitive standards of peer review at NRICGP, please contact the following organizations:

American Society of Plant Physiologists

American Institute of
Biological Sciences

American Society for
Horticultural Science

American Society of Agronomy

Crop Science Society of America

Society for Range Management

Soil Science Society of America

The American Phytopathological Society

The American Society for Microbiology

NEWS FROM THE BOARD ON AGRICULTURE

Colleges of Agriculture To Be Studied

Anthony Earl, former governor of Wisconsin, chairs a committee that will conduct a three-year study to evaluate the mission of the colleges of agriculture at America's land grant universities. The study is being conducted under the auspices of the Board on Agriculture of the National Research Council. Nicole Ballenger, on loan to the Board on Agriculture from the Economic Research Service, USDA, is the study director.

The board believes that this study, conducted by a 21-member committee of experts, can assess and recommend innova-

tion that can enhance the system's colleges of agriculture, their leadership, and their continued contribution to society. The study will analyze the current state of the colleges of agriculture as well as provide a neutral forum for debate about the future directions and mission of the colleges.

Bauman Appointed Chair

The Board on Agriculture of the National Research Council will be chaired for the next three years by Dale E. Bauman, professor of nutritional biochemistry at Cornell University.

THE PLANT CELL Special Issue Makes a Splash

As those of you who are subscribers to THE PLANT CELL know, the October 1993 issue of that journal was composed entirely of invited review articles focused on the subject of plant reproduction. Response to this special issue—in the form of phone calls and letters and special orders—has been overwhelmingly positive. The issue seems to have filled a definite need, and in fact is being used as a text in classrooms around the world.

The issue consists of an overview and 31 articles, written by experts, that cover the state of the art in plant reproduction in the following areas: floral induction, flower patterning, sex determination, reproductive organ development, gametogenesis, pollination, fertilization, embryogenesis, fruit development, and reproduction in lower plants.

THE PLANT CELL is renowned for its superb production quality. This 360-page special issue continues that tradition beautifully. The articles are richly illustrated—and of nearly 90 illustrations, 57 are in color.

The issue was conceived of and the articles were solicited by Robert B. Goldberg, founding editor of THE PLANT CELL. Goldberg and Rebecca Chasan, New and Reviews editor of THE PLANT CELL, served as editors of the issue. Dr. Chasan reviewed and edited all the articles and, working closely with managing editor Judith Grollman, coordinated its production.

THE PLANT CELL special issue on plant reproduction is being sold as a single publication. The price is \$20 each for one to nine copies and \$17 each for ten or more (a \$5 fee for postage and handling is added to all orders). Copies are still available but are going fast. Order now for spring semester and to assure that you will have a supply for fall semester of 1994. To order, fax your name, address, telephone or fax number, number of copies you wish to order, and a credit card number and expiration date, to Estella Coley, fax 301-279-2996. Please be certain your faxed order includes your signature.

HAVE YOU MAILED IN YOUR
MEMBERSHIP AND
SUBSCRIPTION RENEWAL
FORM YET?

LOOKING AHEAD TO 1994: Report of the Executive Director

The staff and leadership of the Society eagerly look forward to 1994 as we continue to improve and build upon our past successes in making ASPP the best professional association possible. This new year will be my first full year as your executive director, and I am particularly excited by the potential of this strong and growing organization. In the following paragraphs, I will outline some of the more important points concerning the 1994 budget, our investments, the status of our membership, and the staff at your headquarters.

1994 Budget

The table on page 6 shows the approved budget for 1994 as well as budget figures for 1993 and 1992. Actual audited numbers for 1992 are also included and show that expenses exceeded revenues by some \$90,757. The ASPP auditor meets with and reports directly to the board of trustees and makes recommendations concerning the status of the accounts and records of the Society as well as the overall financial strength of the association. Even though 1992 could not be considered a financial success, the auditor agrees that ASPP remains in a strong overall financial position with adequate reserves to ensure financial stability.

In considering the 1994 budget, the staff and leadership of the Society looked at many factors including inflationary pressures, income trends, and the consideration of new programs. The budget that is shown here is a summary of a series of much more detailed budgets that break down each cost center into its smallest part.

The budget process begins early in the year with the staff beginning to assemble proposed budgets for presentation to the various components of the process. The editors of our journals and the responsible committees of the association have roles to play in developing this document. For example, the publications committee reviews budget figures in their area and makes recommendations to the board of trustees. The board of trustees functions as the Society's budget committee and sends to the executive committee the recommended budget for the coming year. The executive committee acts on the budget at its summer meeting held at the annual meeting site.

For 1994, the budget shows substantial

increases in both projected expenses and income. On the expense side, this budget has a full year's funding for the new public affairs effort of the Society. Also, two new budgeted items contribute substantially to the size of the increase in budgeted expenses. One is the acceptance of the fact that we must budget for depreciation expense, a needed change in our budgetary tactics. The other change is the budgeting of \$50,000 for an item labeled "fund balance adjustments." The executive committee felt these funds needed to be budgeted to begin paying back the deficit that has accumulated in the ASPP operating account. Other expenses reflect normal increases in the operations of the Society.

Income also shows substantial projected increases, and our dependence on institutional subscriptions is clearly evident. The cost of these institutional subscriptions has been raised to \$975 per year for both journals, and it was felt that this increase, while a jump from the 1993 rate of \$825, was justified and that our rates were still quite reasonable when compared with our competition. Regular member dues were also raised, from \$65 to \$75 in 1994. The allocation of income from our invested reserves is also greater in 1994, reflecting in part the increased size of our reserves. Currently, these reserves amount to approximately \$3.2 million.

The executive committee is keenly aware of the potential effect that these and future raises in subscription rates and dues could have on our members and other subscribers and has given me the directive to address this issue in future budget considerations. One solution would be to broaden the income base and thereby lessen our dependence on institutional subscriptions. The planned effort to raise funds through an ASPP foundation and/or an ASPP endowment fund is one example of a way to broaden the income base. We also plan to be much more aggressive in developing our book publishing potential and sales efforts.

The other side of this budgetary coin is the expenses, and the executive committee has directed me to examine all aspects of our operations to ensure that we are getting the most for our money. Be assured that your leaders and this staff will be diligent in assuring that your member dollars are properly spent.

Investments

The ASPP investment portfolio continues to grow and prosper, reflecting both a favorable stock market and sound management of our resources. The ASPP investments are of two types: the investment of our changing cash balances in our bank account and the investment of our reserves. The excess cash that comes in and out of our checking account is invested in a "sweep" account that invests available cash on a daily basis in U.S. government securities. This method gives us both a good rate of return and also the needed protection of insured deposits.

Our reserves are more stable funds and therefore can be invested with a longer term vision. The fund is managed by the firm of Loomis, Sayles, a local firm that has directed the investment of our reserves for a number of years. The board of trustees reviews the performance of these investment managers annually, and the board also sets guidelines and investment objectives for our portfolio. Currently, our reserves are at about \$3.2 million, and the average total return shown on investments for the past two years has been 15.9%.

Membership

Our latest figures have our total membership at 5328, the highest figures for this time ever. Student membership has grown to 750 and represents the fastest growing segment of our membership. The proportion of our membership in countries other than the United States or Canada also continues to grow. Currently, this segment represents 35% of our members. The formation of the new membership committee reflects a recognition of the need to build on the success of our growing membership. The development of a membership brochure is the first order of business, and the committee is organizing a network of members to assist at the local level.

Staff

There are currently sixteen approved staff positions at the headquarters of ASPP. During my first five months on board, we have begun a process to better define duties and responsibilities in the hope of serving you better. We have a dedicated and talented group of individuals on board, and I am proud to be a part of this good company. I urge you to contact me or any one of us to help us know how we can do our jobs better.

SUMMARY BUDGET TABLES, 1994 APPROVED BUDGET

Revenues	1992 <u>Actual</u>	1992 <u>Budget</u>	1993 <u>Budget</u>	1994 <u>Budget</u>
Membership Dues	256,259	257,000	285,000	318,000
Subscriptions: Members	361,697	391,000	350,000	396,000
Non-Members	12,864	22,000	17,000	10,000
Institutions	1,434,035	1,480,000	1,650,000	1,855,000
<i>Annual Reviews</i>	71,284	59,000	65,000	65,000
List rentals	14,050	10,000	12,000	15,000
Advertising Income	12,625	25,000	25,000	20,000
Book sales	22,562	35,000	35,000	25,000
Investment Income	12,394	20,000	20,000	15,000
Annual Meeting	131,930	125,000	125,000	142,000
Reprint sales	173,632	170,000	150,000	170,000
Handling Fees	182,200	150,000	150,000	186,000
Special Illus & Author Alters	77,701	50,000	76,000	75,000
Grants/Contributions	1,121	5,000	5,000	1,000
Other Income	15,255	0	0	0
Reserve Fund Allocations	88,603	-	103,888	155,956
Total Revenues	<u>2,868,212</u>	<u>2,799,000</u>	<u>3,068,888</u>	<u>3,448,956</u>
Expenses				
<i>Plant Physiology</i>				
Printing & Related Costs	824,099	902,000	856,500	904,000
Editors' Offices	129,954	134,000	95,500	107,000
ASPP Office	219,872	179,000	273,000	299,000
<i>The Plant Cell</i>				
Printing & Related Costs	490,771	443,000	478,500	524,000
Editors' Offices	59,923	69,000	66,500	72,500
ASPP Office	286,475	254,000	273,500	320,000
Headquarters				
Business Office	219,193	393,000	401,000	213,000
Member Services	137,141	-	-	205,000
General	124,966	113,500	140,500	124,000
Services & Utilities	37,858	40,000	47,000	52,000
Officers & Committees	38,821	39,000	40,000	45,000
Publications	5,485	16,000	16,000	18,000
<i>Annual Reviews</i>	60,583	50,000	50,000	55,000
Reprints	90,472	75,000	88,000	88,000
Annual Meeting	133,453	120,000	125,000	130,000
Awards	8,453	9,000	9,000	9,000
Other	8,701	0	0	0
Depreciation	82,749	-	-	80,000
Reserve Fund Allocations	0	0	100,000 (a)	120,000 (b)
Fund Balance Adjustment	-	-	-	50,000
Total Expenses	<u>2,958,969</u>	<u>2,836,500</u>	<u>3,060,000</u>	<u>3,415,500</u>
Net Gain/(Loss)	(90,757)	(37,500)	8,888	33,456

Reserve Fund Allocations: (a) = \$60K for Public Affairs Office, \$40 K for TPC special issue in 1993

(b) = \$120K for Public Affairs Office in 1994

PUBLIC AFFAIRS

BUDGET RESCISSION PENDING AS CONGRESS RETURNS

There is still time to contact your members of the Senate in support of the fiscal year 1994 appropriation of \$112 million for the USDA's National Research Initiative Competitive Grants Program (NRICGP). The House passed a budget rescission that would cut \$7 million from the \$112 million appropriation.

Please write your Senator at the U.S. Senate, Washington, DC 20510. You can also call your Senator through the Capitol Switchboard at 202-224-3121. When the switchboard operator connects you with your Senate office, ask for the staff person who handles appropriations for agricultural research. Following is a sample letter to your Senator:

Dear Senator _____:

Please support the National Research Initiative Competitive Grants Program (NRICGP) at the \$112-million level the Senate approved in the Fiscal Year 1994 Appropriations Act (Public Law 103-111). The House recently approved a budget rescission of \$7 million in this highly regarded competitive grants program. However, our state received \$_____ from the Competitive Grants Program in 1992 and in 1993. (Note: See listing below to insert figures for your state.)

The proposed budget rescission may have an adverse effect on essential research projects in our state. The NRICGP is responsible for funding research in areas such as plant science which lead to more effective ways for farmers to avert crop disasters; higher quality and affordable food for consumers; new methods to counter pollution in the environment and a stronger agricultural sector which helps support millions of jobs.

(Optional: Add any experience you have had with NRICGP, e.g. grant award.)

Sincerely,
-Your signature-

It is particularly important for those ASPP members who have a senator on the Appropriations Committee to act.

Senators on the Appropriations Committee are: Byrd (WV), Inouye (HI), Hollings (SC), Johnston (LA), Leahy (VT), Sasser (TN), DeConcini (AZ), Bumpers (AR), Lautenberg (NJ), Harkin (IA), Mikulski (MD) Reid (NV), Kerrey (NE), Kohl (WI), Murray (WA), Feinstein (CA), Hatfield (OR), Stevens (AK), Cochran (MS), D'Amato (NY), Specter (PA), Domenici (NM), Nickles (OK), Gramm (TX), Bond (MO), Gorton (WA), McConnell (KY), Mack (FL), and Burns (MT).

Make sure your senators know how much your state receives in NRICGP funds. Following are the totals of NRICGP grant awards in fiscal years 1992 and 1993 by state with the 1992 figure listed first:

Alaska—\$18,759 and \$149,895; Alabama—\$792,380 and \$781,022; Arkansas—\$626,252 and \$1,012,676; Arizona—\$2,826,307 and \$1,608,820; California—\$11,647,363 and \$9,597,025; Colorado—\$1,907,743 and \$1,495,065; Connecticut—\$933,088 and \$1,514,862; District of Columbia—\$314,091 and \$323,920; Delaware—\$250,000 and \$650,490; Florida—\$2,715,065 and \$2,866,834; Georgia—\$3,107,553 and \$2,980,107; Hawaii—\$516,754 and \$439,378; Iowa—\$2,259,465 and \$2,068,755; Idaho—\$494,935 and \$971,559; Illinois—\$4,802,910 and \$3,503,302; Indiana—\$2,365,470 and \$2,095,051; Kansas—\$1,280,000 and \$1,191,560; Kentucky—\$944,174 and \$1,039,558; Louisiana—\$772,880 and \$1,218,634; Massachusetts—\$1,831,505

and \$2,052,746; Maryland—\$1,506,163 and \$2,182,726; Maine—\$533,084 and \$388,940; Michigan—\$3,337,180 and \$2,549,715; Minnesota—\$1,730,350 and \$2,184,387; Missouri—\$3,003,697 and \$1,790,967; Mississippi—\$569,024 and \$700,746; Montana—\$907,287 and \$727,509; North Carolina—\$3,479,298 and \$3,101,278; North Dakota—\$472,224 and \$1,351,011; Nebraska—\$1,175,414 and \$1,337,408; New Hampshire—\$384,111 and \$557,459; New Jersey—\$1,606,900 and \$704,816; New Mexico—\$459,875 and \$404,013; New York—\$5,638,345 and \$6,692,128; Nevada—\$220,052 for 1993 only; Ohio—\$2,280,823 and \$2,094,825; Oklahoma—\$1,086,159 and \$833,159; Oregon—\$2,507,029 and \$1,439,341; Pennsylvania—\$1,820,970 and \$4,543,712; Rhode Island—\$283,896 and \$484,318; South Carolina—\$847,383 and \$851,301; South Dakota—\$656,879 and \$529,453; Tennessee—\$1,737,913 and \$874,783; Texas—\$5,369,090 and \$6,224,835; Utah—\$1,213,500 and \$460,000; Virginia—\$844,165 and \$1,192,761; Vermont—\$389,812 and \$618,070; Washington—\$1,839,200 and \$2,875,747; Wisconsin—\$5,246,535 and \$4,847,830; West Virginia—\$444,387 and \$910,502; Wyoming—\$360,963 and \$579,429.

If you have colleagues in your state who are also interested in supporting adequate funding for NRICGP, please encourage them to contact their senator. A Senate Appropriations Committee vote might occur in late January or in February, so please act now. The Senate returns from recess on January 25.

We'd appreciate receiving a copy of the letter you send to your senator at ASPP Public Affairs, 15501 Monona Drive, Rockville, MD 20855-2768.

ASPP SEEKS REVISIONS IN USDA RESEARCH CLASSIFICATION PROTOCOL

Keegstra Assists Reevaluation

A research classification protocol that emerged from a panel convened by the U.S. Department of Agriculture's Cooperative State Research Service (CSRS) and Agricultural Research Service (ARS) in July 1992 was reevaluated by a second panel December 20 and 21, 1993. Ken Keegstra served on the December panel as a representative from ASPP and the research community.

The research classification protocol un-

der review evaluates research awards based on their perceived contribution to sustainable agriculture. The protocol was used by ARS last year and has also drawn attention for its application to the National Research Initiative Competitive Grants Program (NRICGP). However, many in the research community have found the research classification protocol to be flawed. As an example, all fundamental research is scored as having zero contribution to

continued on page 8

continued from page 7

sustainable agriculture under this protocol. The Farm Bill of 1990 calls for research that contributes to sustainable agriculture.

The only non-profit, private organization represented on the panel convened in July 1992 was the Center for Rural Affairs. The Center for Rural Affairs has worked aggressively with USDA and Congress to mandate guidelines for agricultural research that fulfill the Center's interpretation of sustainable agriculture.

The Center has called for research that leads to improved management practices on farms instead of improved purchased inputs such as certified seed or pesticides. Although a number in the research community find this approach unreasonable, the Center maintains that concentrating research dollars this way will help small family farmers instead of large corporate farmers. The claim of somehow helping small family farmers has helped win some political support in Congress. Some funds which now go to biological research might be redirected to sociological and economics research under some sustainable agriculture proposals.

ASPP has questioned the protocol with its zero rating for fundamental research and has challenged proposals that would diminish the peer review process at NRICGP (see related story on page 2.) Keegstra explained problems created by giving fundamental research a zero rating in the December panel discussions. He joined with fellow panel member James Cook, NRICGP chief scientist, in pointing out the important contributions of fundamental research to sustainable agriculture. (NRICGP staff and a plant science society representative had not been included in the July 1992 panel.)

The numbering system approach of the protocol, which includes negative ratings for some projects, has also received criticism. The protocol created seven categories. Research proposals are evaluated for their contribution to sustainable agricul-

ture in each category. The categories are: integrated System of Plant and Animal Production Practices; Satisfy Human Food and Fiber Needs; Enhance Environmental Quality; Natural Resource Conservation; Biological Resource Utilization; Economic Viability; and Quality of Life (of farmers, rural communities and society as a whole).

If a research project greatly contributed to sustainable agriculture in one category, for example environmental quality, but detracted from sustainable agriculture in at least two other categories while scoring zero in the remaining categories, it would receive a net negative rating. The design of the protocol is such that it could have an eventual chilling impact on approval of fundamental research or other projects that would be rated at zero or lower.

At the December panel meeting, Keegstra and Cook cited problems with the current numbering system in the protocol. They also asked that fundamental research receive a more favorable rating. After the panel meeting, Keegstra commented that chief scientist Cook was well prepared and convincing with his arguments at the meeting.

Ralph Quatrano, chair of ASPP's committee on public affairs, commended Keegstra, a member of the committee on public affairs, for his contributions in evaluating the protocol. Quatrano noted that some interest groups that do not represent plant or other biological sciences have taken an avid interest in the guidelines for NRICGP funding of grants. He said Keegstra's work on the protocol is an important step in our effort to defend the highest principles of scientific review at NRICGP.

George Bird, who organized the December panel discussion, will write up the official report of the panel discussion. Now at Michigan State University, Bird is former manager of the Low Input Sustainable Agriculture program at CSRS.

Plant Biochemistry 1994

Planning is underway for a three-week course in plant biochemistry to be held in late June/early July at Michigan State University. This course, like the previous two, held in 1992 at UC-San Diego and in 1993 at the University of Wisconsin, will consist of lectures and discussion by a series of instructors. The course is aimed at those with a background in biochemistry, but who desire additional experience in plant-specific biochemistry. Application forms or additional details, including dates for the course, schedule of topics, list of instructors, local housing, etc., can be obtained from: Kenneth Keegstra, MSU-DOE Plant Research Laboratory, Michigan State University, East Lansing, MI 48824; telephone 517-353-2270; e-mail: keegstra@msu.edu.

SECTION NEWS

Midwest Section

The annual meeting of the Midwestern Section of the American Society of Plant Physiologists will be held April 7-9, 1994, at the Stewart Center, Purdue University, West Lafayette, Indiana. The meeting will include oral presentations by undergraduate and graduate students, a banquet, and a symposium organized by Daniel Bush entitled "Hopping and popping at the plasma membrane." Scheduled speakers for the symposium and their topics are: Sarah Assmann, "Signal transduction cascades in ion channel regulation (or do you believe in the domino effect?)," and Michael Sussman, "Snap, crackle, and pop: cell-specific expression of the plasma membrane H^+ -ATPase gene isoforms." Details for registration, housing, and the submission of abstracts will appear in the Section Newsletter in January. Those who are not members of the Section, but who wish to receive information on the annual meeting should contact the secretary/treasurer, Ray Zielinski, Department of Plant Biology, University of Illinois, 1201 W. Gregory Dr., Urbana, IL 61801-3838; e-mail r-zielinski@uiuc.edu; telephone 217-333-6785; fax 217-244-1336.

NEW ASPP PROCEEDINGS BOOK NOW AVAILABLE

See page 31 of this newsletter for an order form for the newest book in Current Topics in Plant Physiology: An American Society of Plant Physiologists Series, *Plant Signals in Interactions with Other Organisms*.

The book, published in December, is the proceedings of the 8th Annual Penn State Symposium in Plant Physiology that was

held at University Park, Pennsylvania, May 20-22, 1993. Editors are Jack C. Schultz and Ilya Raskin. The 271-page volume includes 19 major papers and 21 expanded abstracts or mini-papers.

Cost of the book is \$15 to ASPP members, \$25 to nonmembers (plus a \$2 handling fee).

Deadline for the
March/April issue of the
ASPP Newsletter is
February 15, 1994.

TEACHING CORNER

Reid Selected to National Science Education Conference

Philip D. Reid, professor of biological sciences at Smith College, was selected by the National Science Resources Center (NSRC) to participate January 24-28 in "Science Education in the Schools, A Working Conference for Scientists and Engineers." The conference will be held at the University of Alabama in Huntsville.

Reid was nominated to attend the conference by ASPP. His application was one of 35 selected in the national competition for invitation to the conference sponsored by the NSRC. The NSRC is a joint venture of the National Academy of Sciences and the Smithsonian Institution that is dedicated to the reform of K-12 science education.

The purpose of the workshop is to provide scientists and engineers with information and contacts that will enable them to become more effective advocates for quality science education and to define the roles that they may play in the science education reform process. This is

done through a series of hands-on activities and through discussions with educators, specialists in childhood development, and other participants. There will be direct inspection of exemplary teaching materials and practice. Participants will also examine the elements of a successful and sustainable reform program. Reid will present a poster on the use of tissue printing to study plant development.

Reid has been involved in many activities providing science education to students at the pre-college level for more than 20 years. From 1972-82 he was master teacher in a six-week science enrichment course for students in grades 8-11 and supervised student teachers in the Smith-Norhampton Summer School. In 1993 he was a teacher of a six-week biology component of the Northeast Science Enrichment Program for 50 high ability, 9th grade minority students. In 1990-91, Reid presented workshops for teachers of hearing impaired students using fast plants and bottle biology to teach process science. Since 1985 he has been a member and participant in the 5-College Public School Partnership, Amherst, Massachusetts, and has been involved in many other teaching programs at the pre-college level.

tological observations on organelle development, on seed respiration—including mitochondrial studies—and on light and nutrient requirements. He became very interested in the genetic basis of the variability shown by various cultivars. In all, Bob was a strong element in the development of crop physiology at Illinois. He was a leader in organizing the Midwestern Section of ASPP and was its first president. He served a term as ASPP representative to the Agricultural Research Institute.

Bob's administrative talents did not go unnoticed. In 1965 he was transferred to Beltsville to become leader of soybean investigations and chief of the USDA Oilseed and Industrial Crops Research. In 1971 he retired from the USDA and returned to the University of Illinois to head the agronomy department, which prospered under his leadership. While in these positions he was very active in the American Society of Agronomy (elected Fellow, 1969) and the Crop Science Society of America (editor of *Crop Science*, 1968-70, editor-in-chief, 1971-74; elected Fellow, 1969). He retired from the university in 1982, but remained active as a United National Food and Agriculture Organization advisory on soybean research in China.

Those of us who knew and worked with Bob will miss him not only as a level-headed colleague who could get things done, but as a wise, helpful, and considerate friend.

J. B. Hanson
University of Illinois

NSF Solicits Proposals under ARI Program

NSF is soliciting proposals for instrumentation development and facilities modernization, the two components of the Academic Research Infrastructure program. Deadline for instrumentation development is March 15, that for facilities modernization is April 5. Publications NSF 93-172 and NSF 93-166 provide qualifications and details for preparing proposals for instrumentation development and facilities modernization, respectively. To obtain copies, contact: Office of Science and Technology Infrastructure, Academic Research Infrastructure, National Science Foundation, Room 1270, 4201 Wilson Boulevard, Arlington, VA 22230; telephone 703-306-1040, e-mail (Internet) ari@nsf.gov.

OBITUARIES

J. M. Daly

The widow of ASPP member J. M. Daly notified ASPP headquarters recently of the death of her husband on August 18, 1993. Daly joined ASPP in 1945. Mrs. Daly made a generous contribution to ASPP as a memorial to Dr. Daly.

Merrill E. Deters

Dr. Merrill E. Deters, University of Idaho, an ASPP member since 1930, has died.

James E. Webster

Another member since 1930, Dr. James E. Webster, Oklahoma State University, died in 1993.

Robert W. Howell

Dr. Robert W. Howell, professor emeritus of agronomy at the University of Illinois Urbana-Champaign, and emeritus member of the American Society of Plant Physiologists (joined in 1945), died November 22, 1993, at Urbana, Illinois. He was born November 26, 1916, in Houlika, Mississippi.

Bob Howell's career in plant sciences began when he joined the U.S. Department of Agriculture in Washington, D.C. shortly after graduating from high school in 1934. Ever ambitious to learn, he took night courses at George Washington University. Subsequently, he served the USDA in clerical and administrative positions in Cheyenne, Wyoming, and Ithaca, New York. He joined the armed services in 1943, advancing from private to captain in the Army Signal Corps. After discharge in 1946, he took advantage of the GI Bill, first obtaining a B.S. in botany from Mississippi College and then a Ph.D. in plant physiology from the University of Wisconsin under Professor Folke Skoog. In 1952 he rejoined the USDA as a plant physiologist at the Regional Soybean Laboratory on the University of Illinois campus in Urbana, with a graduate faculty appointment in the university agronomy department.

His research with soybeans focused initially on seed development. He and his students described the anatomical, cytological, physiological, and biochemical changes as the seed grew and matured. This work produced some important cy-

NOMINATIONS ARE IN ORDER FOR 1994 ASPP AWARDS

April 8 Deadline Set

Ken Beam, ASPP executive director, has set April 8 as the deadline for ASPP members to nominate worthy individuals to win the Society's awards to be presented during the annual meeting in Portland, Oregon. Recognition of one's life work by one's peers is one of the highest pinnacles any practitioner of any art can attain. ASPP members are encouraged to nominate deserving colleagues so that they can enjoy the recognition they have earned.

Five awards are to be given in 1994: The Stephen Hales Prize, the Charles F. Kettering Award for Excellence in Photosynthesis, the Dennis R. Hoagland Award, the Excellence in Teaching Award, and the Charles Reid Barnes Life Membership Award. A list of all previous winners of all ASPP awards can be found on pages 253-255 of the 1993 Membership Directory.

Charles Reid Barnes Life Membership

Established in 1925, this is the oldest of ASPP's awards. It is an annual award for meritorious work in plant physiology that provides life membership for an individual who is at least 60 years of age. Membership in ASPP is not a requirement. The 1994 award may be made to an outstanding plant physiologist from outside the United States. Winner in 1993 was Frank Loewus, emeritus professor from Washington State University.

Corresponding Membership

This honor, first presented in 1932, is conferred by election on the annual ballot to distinguished plant physiologists from outside the United States. Life membership and subscription to one of the Society's two journals is given to one or two candidates each year, provided election will not increase the number of corresponding members above one percent of the dues-paying membership of the Society. Dr. Marc Van Montagu, Universiteit Gent, Belgium, was elected to corresponding membership in 1993.

The Stephen Hales Prize

Second oldest of ASPP's awards, The Stephen Hales Prize was established in 1927. It is a monetary award for a resident of North America, member or non-member, who has served the science of plant physiology in some noteworthy manner. The winner of this biennial award is invited to address the membership at the next annual meeting. Most recent winner was Clarence A. Ryan, Washington State University.

Charles F. Kettering Award for Excellence in Photosynthesis

The Kettering Foundation endowed this biennial monetary award in 1962. The 1992 winner was Antony Crofts of the University of Illinois.

Dennis Robert Hoagland Award

This triennial monetary award honors an individual for outstanding plant physiological investigations in support of agriculture. It was first awarded in 1985 with funds provided by Monsanto Agricultural Products Company. The immediate past winner was John Radin, USDA/ARS.

Excellence in Teaching Award

The first winner, in 1991, of the Excellence in Teaching Award was Paul B. Williams, University of Wisconsin. The monetary award is given triennially in recognition of outstanding contributions to undergraduate education.

Nominating Procedure

Making a nomination is a simple two-step procedure. As you prepare the nominating package, remember to:

- State the award for which the person is being nominated.
- Provide your name, address, phone number, and fax number.
- Provide the nominee's address, phone number, and fax number.

STEP 1:

Assemble a nomination package that includes the following items:

- A typewritten letter of nomination (three pages or fewer) in which you state the nominee's qualifications for the award (contributions relevant to the objective of the award and significance of those contributions).
- A curriculum vitae of the nominee, including education, positions held, previous honors or awards, past service to ASPP and to the profession, and a publications list.
- At least three, no more than five, supporting letters of nomination.

STEP 2:

Submit five complete copies of the nomination package to ASPP Awards, 15501 Monona Drive, Rockville, MD 20855, by the April 8 deadline.

If you have any questions about this procedure or about the award process, don't hesitate to contact ASPP executive director Ken Beam, telephone 301-251-0560, ext. 15, or fax 310-279-2996.

All-Russia Society of Plant Physiologists Hosts International Symposium

The All-Russia Society of Plant Physiologists hosted an international symposium, "Physiology of Abscisic Acid" in Pushchino on October 25-28, 1993. Professor V. I. Kefeli, president of the All-Russia Society of Plant Physiologists and director of the Institute of Soil Science and Photosynthesis of the Russian Academy of Sciences, reported on the meeting in a letter to ASPP president Russell Jones.

Dr. Kefeli emphasized that this was the third such international meeting held in the former Soviet Union in as many years. He observed, "This is very important for scientists from [the] Former Soviet Union

because at this critical time such meetings[s] are almost the only form of scientific communication with our colleagues from abroad."

More than fifty scholars participated in the symposium. Countries represented included the United Kingdom, Latvia, Yugoslavia, Japan, Ukraine, Canada, the Netherlands, Germany, and Italy. Topics covered included: biosynthesis of abscisic acid, genetics and physiological functions, molecular mechanisms of action and gene expression, and interactions with other phytohormones.

The October 1993 issue of THE PLANT CELL, devoted to plant reproduction, is an excellent teaching tool. Order today. See article on page 4 for details.

Gatherings

All announcements are subject to editing. Wherever possible, submit announcements via e-mail to jearlson@access.digex.net. Alternatively, mail submissions to Jody Carlson, *ASPP Newsletter*, 15501 Monona Drive, Rockville, MD 20855-2768. Because announcements are scanned into the computer, **faxed transmissions will not be accepted.**

FUTURE ASPP ANNUAL MEETING SITES

1994—Portland, Oregon
Saturday, July 30 through
Wednesday, August 3

1995—Charlotte, North Carolina
Saturday, July 29 through
Wednesday, August 2

1996—San Antonio, Texas
Saturday, July 27 through
Wednesday, July 31

FEBRUARY

February 18-23

AAAS 1994 Annual Meeting
San Francisco, California

More than 700 speakers will share their latest research advances in areas including health and medicine, the environmental sciences, evolution, psychology, astronomy, technology, and education. Registration deadline is January 24. For more information about the meeting, please contact the AAAS Meetings Office, 1333 H Street, N.W., Washington, DC 20005, telephone 202-326-6450.

MARCH

March 2-15

Stratospheric Ozone Depletion, Ultraviolet-B Radiation, and Responses of Terrestrial Plants
Buenos Aires, Argentina

This international course is offered by the Graduate School of the Faculty of Agronomy (Universidad de Buenos Aires) and is directed to researchers and graduate students in Plant Physiology and Ecology. Invited lecturers include: L. O. Bjorn, M. M. Caldwell, J. J. Casal, S. Madronich, R. A. Sanchez, and M. Tevini. The course will feature a general introduction to plant photobi-

ology and presentations on the following topics: Stratospheric ozone depletion and its impact on UV radiation; effects of UV radiation on biological systems; UV dosimetry and manipulation; plant responses to UV radiation, phenomenology and mechanisms, ecological and agricultural implications. Registration priority will be given to applicants from Latin American institutions. For further information and application forms, please contact the organizers: Dr. Carlos L. Ballare / Dr. Ana L. Scopel, Dept. de Ecología-IFEVA, Facultad de Agronomía, Universidad de Buenos Aires, Avda. San Martín 4453, (1417) Buenos Aires, Argentina; fax +54 1 51 1384 (alt. +54 1 501 4692), telephone +54 1 522 0903, e-mail rvrsalo@arcriba.bitnet.

March 23-26

Plasma Membrane Redox in Disease and Cell Dysfunction
Cordoba, Spain

Molecular biology and biochemistry of plasma membrane redox in relation to growth and cellular dysfunction. Meeting organized by D. J. Morré and F. L. Crane, Purdue University; P. Navas, Cordoba; G. Genga, Cluj-Napoca; M. Böttger, Hamburg. Information and application forms: Sarah Craw, Life Sciences Research Building, Purdue University, West Lafayette, IN 47907; telephone 317-494-1388, fax 317-494-4007.

March 27-30

International Workshop on Controlled Environment Lighting
Madison, Wisconsin

This workshop is aimed at bringing together researchers from various disciplines to outline the requirements for effective lighting of plants in controlled environment research. The meeting will outline and discuss the various requirements of plants for wavelengths from ultraviolet to infrared, discuss problems in duplicating solar intensities, provide review of new lamp technologies including LEDs and

microwaves, discuss effectiveness of illuminaires and procedures for reducing radiant heating. Specialists will be invited to make formal presentations, and all attendees will be encouraged to participate in the discussions and workshops. The meeting will be limited to 175 persons. The organizers are G. Deitzer, R. Langhans, H.-D. Payer, M. Roemer, J. Sager, H. Smith, A. Spomer, and T. Tibbitts. The meeting is organized by the NCR-101 Controlled Environments Technology and Use Committee of USDA and co-sponsored by the American Society of Agricultural Engineers, the American Society for Horticultural Science, the American Society for Photobiology, Int. Light. Comm. (CIE), U.S. Department of Energy, and the National Aeronautics and Space Administration. For further information contact Dr. Ted Tibbitts, Horticulture Department, University of Wisconsin, Madison, WI 53706; telephone 608-262-1816, fax 606-262-4743, e-mail twt@calshp.cals.wisc.edu.

APRIL

April 7-9

Annual Meeting
Midwest Section, ASPP
Purdue University
West Lafayette, Indiana

The annual meeting of the Midwestern Section of the American Society of Plant Physiologists will be held April 7-9, 1994, at the Stewart Center, Purdue University, West Lafayette, Indiana. The meeting will include oral presentations by undergraduate and graduate students, a banquet, and a symposium organized by Daniel Bush entitled "Hopping and popping at the plasma membrane." Scheduled speakers for the symposium and their topics are: Sarah Assmann, "Signal transduction cascades in ion channel regulation (or do you believe in the domino effect?)" and Michael Sussman, "Snap, crackle, and pop: cell-specific expression of the plasma membrane H⁺-ATPase gene

isoforms." Contact the secretary/treasurer, Ray Zielinski, Department of Plant Biology, University of Illinois, 1201 W. Gregory Dr., Urbana, IL 61801-3838; e-mail r-zielinski@uiuc.edu; telephone 217-333-6785; fax 217-244-1336.

April 13-16

Current Topics in Plant Biochemistry and Physiology: The Biology of Communication in Plants

University of Missouri-Columbia
This annual symposium is sponsored by Interdisciplinary Plant Group and the Food For 21st Century Program. General topics include: I. Communication between plants and their nonpathogenic associated microbes: Microbial population structure and dynamics on plant surfaces and root zones. Research is moving toward elucidation of chemical and genetic factors in the association. II. Communication between plants and their associated pathogens: Plant pathogens produce specific signals that may be recognized by resistance genes, leading to a cascade of cellular responses that limit the spread of the pathogen. The speakers in this section will focus on the interactions between plants and plant pathogens that determine resistance or susceptibility. III. Self-incompatibility: Communication between mating partners: molecular biology, genetics, and population level consequences of self-incompatibility. List of confirmed speakers will be provided at a later date. For further information, contact: Interdisciplinary Plant Group, 117 Schweitzer Hall, Columbia, MO 65211.

April 26-29

Plant Membrane Biology

The Phytochemical Society of Europe
Lund, Sweden
Details of this meeting may be obtained from Dr. P. Brodelius. Department of Plant Biochemistry, University of Lund, P.O. Box 7007, S-22007 Lund, Sweden.

MAY

May 1-6

Gordon Research Conference Mitochondria and Chloroplasts Volterra, Italy

Chair: Wilhelm Gruissem; vice-chair: Kathleen Newton; co-chair: Cecilia Saccone. Topics and discussants: Organellar Genome Structure and Evolution: W. Gruissem (discussion leader), J. Boynton, F. Foury, K. Ohyama, C. Saccone, W. Fangman; Replication and Expression: F. Foury (discussion leader), D. Clayton, E. Sbisà, D. Stern, S. Lerbs; RNA Editing and Transport: R. Hallick (discussion leader), R. Benne, A. Brennicke, H. Kossel, M. Gray, J. Weil; Intron Splicing and RNA Modification, A. Barkan (discussion leader), R. Hallick, N. Martin, A. Lambowitz; Regulation of mRNA Processing and Stability, A. Lambowitz (discussion leader), P. Maliga, R. Karwan, W. Gruissem; Poster discussion: K. Newton (discussion leader); Organelle Mutations in Plants, C. Saccone (discussion leader), K. Newton, A. Barkan, C. Fauron, C. Leaver; Mitochondrial Diseases and Aging, D. Clayton (discussion leader), E. Shoubbridge, A. Harding, E. Schon, Y.-H. Wei; Import and Assembly of Organellar Proteins, N. Martin (discussion leader), W. Neupert, G. Schatz, N. Hoogenraad; Nuclear Control of Organelle Functions, C. Leaver (discussion leader), J. Allen, S. Kobayashi, R. Scarpulla, R. Herrmann.

May 19-21

Pollen-Pistil Interactions 9th Annual Penn State Symposium in Plant Physiology University Park, Pennsylvania

The symposium will provide a forum for assessing our current knowledge of pollen tube growth and pollen-pistil interactions. Twenty-two talks by international leaders will be presented in five sessions: Development of Pollen and Pistils, Pollen-Stigma Interactions and Sporophytic Self-Incompatibility, Pollen Tube Growth, Pollen-Style Interactions and Gametophytic Self-Incompatibility, Fertilization and Pollen Selection. Topics include: pollen-specific gene expression, molecular and genetic analyses of pollen development, gene expression during megasporogenesis, nature and function of the pollen coat,

a thorough examination of self-incompatibility, signalling during pollination, post-pollination changes in the pistil, the role of calcium in pollen tube growth, phosphorus transport in pollen tubes, flavonols and pollen germination, in vitro fertilization, pollen selection techniques, and environmental effects on pollen performance. Although this symposium will focus on mechanisms, it should be of interest to those working at any level on plant reproduction, plant development, and plant breeding. We anticipate extensive interaction among basic and applied, academic and industrial scientists of many disciplines. Poster presentations are solicited and up to 10 travel awards of \$300 each will be available for student and postdoctoral presenters of posters. For information contact: Andrew G. Stephenson, Department of Biology, The Pennsylvania State University, University Park, PA, 16802 USA, fax 814-865-9131, e-mail: as4@psuvm.psu.edu; or Teh-hui Kao, Department of Biochemistry and Molecular Biology, fax 814-863-9416.

May 24-31

Microinjection Techniques in Cell Biology

Woods Hole, Massachusetts

This research-oriented course is intended for graduate students, postdoctoral researchers, and investigators. Limited to 24 students. Microinjection techniques have developed to a state that permits investigators to bridge the gap between in vivo physiology and in vitro biochemistry. The combination of microinjection with analytical light microscopic methodologies, electroporation, biolistic methods, electrophysiological and photometric approaches offers an unparalleled view of cellular function and mechanisms of action within the cytoplasm of intact, living cells. This short course, taught by leading practitioners, will provide an opportunity to learn techniques of microinjection into a variety of living cells through lectures, demonstrations, and extensive hands-on laboratory exercises. The student will learn to microinject single cells, including, but not limited to: cultured mammalian cells, amphibian oocytes, echinoderm blastomeres, and various plant cells. In addition, many of the latest methods of light microscopy, including the use of

fluorescence and video techniques, will be used in conjunction with microinjection. The faculty is drawn from the academic and industrial communities. Director: R. B. Silver, Cornell University. Previous faculty: K. Kindle, Cornell University; D. Kline, Kent State University; and P. Wadsworth, University of Massachusetts, Amherst. Application deadline is March 22, 1994. For admission application and information contact Admissions Coordinator, Marine Biological Laboratory, Woods Hole, MA 02543; telephone 508-548-3705, ext. 401.

May 25-28

Fifth Gatlinburg Symposium: Technology Transfer of Plant Biotechnology

University of Tennessee, Knoxville

Topics include: plant transformation for insect, herbicide, and virus resistance, value-added plants, plant gene analysis, marker-assisted breeding strategies, bioremediation, bioreactors, pharmaceutical production, and plant tissue culture. For further information and registration material, contact Peter M. Gresshof, Plant Molecular Genetics, University of Tennessee, P.O. Box 1071, Knoxville, TN 37901-1071; telephone 615-974-8841, fax 615-974-2765.

JUNE

June 4-7

1994 Congress on Cell and Tissue Culture Regulation of Cell and Tissue Differentiation Research Triangle Park North Carolina

Sessions specifically relating to plant science include: The state of the art for transformation systems: what is new, what works best, what are the current limitations, pros and cons; In vitro plant resources for valuable products; Morphogenesis: differentiation of plant cells and tissues; Morphogenesis: hormonal manipulation of differentiation; Safety of genetically engineered plants—science and perceptions. Two plant-related workshops also are planned: New advances in automation for micropropagation; Corn transformation. Abstracts for this meeting are due January 14. An abstract deposit of \$25 per abstract is required at time of

submission (students exempt). All abstract presenters will be notified of acceptance and time of presentation by April 15. To obtain an abstract form and for more information, contact: Marietta W. Ellis, Tissue Culture Association, 8815 Centre Park Drive, Suite 210, Columbia, MD 21045; telephone 410-992-0946, fax 410-992-0949.

June 12-17

VIII International Congress on Plant Tissue and Cell Culture Firenze, Italy

Contact: 8th IAPTC Congress, Secretariat, c/o Oliva Scaramuzzi, Viale g. Milton 81, 50129 Firenze, Italy; telephone 55-476377, fax 55-476393.

June 19-24

4th International Congress of Plant Molecular Biology Amsterdam, The Netherlands

The congress will take place in the RAI International Exhibition and Congress Centre, Amsterdam, The Netherlands. Plenary speakers: E. Magnien, M. Bevan, Y. Minobe, P. Quail, J. Ecker, L. Willmitzer, C. Somerville, A. Clarke, F. Ausubel, P. de Wit, J. Dénarié, E. Meyerowitz, J. Mol, J. Schell. Symposium session titles: Plant genomes; Regulation of gene expression; Epigenetics; Plant development; Signal transduction in plants; Light responses; Proteins; Regulation of metabolism; Plant-microbe interactions; Plant biotechnology; Technique development; Applications, public acceptance, environment, regulation and developing countries. Chair of the local organizing committee is Robbert Schilperoort. To obtain a copy of the second announcement and registration forms, contact: Congress Secretariat, 4th International Congress of Plant Molecular Biology, c/o RAI OBA, P.O. Box 77777, 1070 MS Amsterdam, The Netherlands; telephone 31 20 549 1212; fax 31 20 646 4469, telex 13499 raico nl.

June 26-July 1

11th International Meeting on Plant Lipids Paris, France

This meeting will be co-chaired by J.-C. Kader and P. Mazliak. It will be devoted to all aspects of structure, physiological role, and gene technology of plant lipids. Sessions will include:

fatty acid biosynthesis; membranes: structure and lipid organization in chloroplasts and other membranes, polar lipid metabolism, lipid transfer; lipid peroxidation; oil seed metabolism and development; isoprenoids; plant lipids and environment (secondary messengers, defense reactions, herbicides); lipid biotechnology and genetic engineering. A round table considering recent advances on lipid and protein analysis will be organized. Contact: J.-C. Kader, Plant Cell and Molecular Physiology Group, Université Paris 6, Tour 53, Case 154, 4 place Jussieu, 75005 Paris, France; fax 33-1-44-27-61-51.

June 26-July 1

Seventh International Symposium Molecular Plant-Microbe Interactions Edinburgh, Scotland

Contact: M. J. Daniels, The Sainsbury Laboratory, John Innes Centre, Colney Lane, Norwich NR4 7UH, U.K.; telephone (44) 603 52571, fax (44) 603 250024.

June 28-29

International Symposium on Table Grape Production Anaheim Convention Center Anaheim, California

The American Society for Enology and Viticulture is sponsoring an International Symposium on Table Grape Production in conjunction with its 45th annual meeting in Anaheim, California, June 26-29. The purpose of this symposium is to bring together scientists, growers, and other parties interested in table grape production and research to discuss recent advances in the culture, physiology, pest management, genetics, and postharvest storage of table grapes. Invited speakers will present keynote lectures on production practices and current research in the world's leading table grape producing regions. Research scientists working on topics related to table grape production are encouraged to submit abstracts for presentation at the symposium. A two day pre-symposium tour of table grape production and storage facilities in the San Joaquin and Coachella Valleys of California is planned. For information contact Nick K. Dokoozlian, University of California, Kearney Agricultural Center, 9240 S. Riverbend, Parlier, CA 93648; telephone 209-891-2500, fax 209-891-2593.

JULY

July 4-24

Arabidopsis Molecular Genetics
Cold Spring Harbor Laboratory
Cold Spring Harbor, New York
This course provides an intensive overview of current topics and techniques in *Arabidopsis* biology, with an emphasis on molecular genetics. It also introduces approaches used in yeast that have the potential to be utilized for the advancement of *Arabidopsis* molecular genetics. It is designed for scientists with experience in molecular techniques who are working or wish to work with *Arabidopsis*. Speakers will provide both an in-depth discussion of their work and an overview of their specialty. Speakers include: F. Ausubel, T. Cashmore, J. Chory, G. Coruzzi, N. Crawford, G. Drews, J. Ecker, P. Green, G. Fink, D. Marks, D. Meinke, J. Nasrallah, N. Olzewski, D. Preuss, I. Sussex, A. Telfer, A. Theologis, R. Vierstra, D. Weigel, and P. Zambryski. The laboratory sessions will cover: *Arabidopsis* genetics and development; transient gene expression assays in protoplasts; complementation of yeast mutants for cloning *Arabidopsis* genes; two hybrid system in yeast; transformation by *Agrobacterium*; in situ detection of RNA; protein import into chloroplasts; biochemical analysis of transcription factors; pulsed-field gel electrophoresis and analysis of yeast artificial chromosomes containing the *Arabidopsis* genome. Joanne Chory, Salk Institute; Joseph Ecker, University of Pennsylvania; Athanasios Theologis, University of California, Berkeley. For more information, contact Cold Spring Harbor Laboratory, 1 Bungtown Road, Cold Spring Harbor, NY 11724-2213; telephone 516-367-8345, fax 516-367-8845, e-mail meetings@cshl.org.

July 10-15

Gordon Conference
Postharvest Physiology
Plymouth, New Hampshire
Organizers: J. D. Anderson and D. Grierson. Knowledge of the processes controlling postharvest longevity is greatly needed because up to 30% of fruits and vegetables are lost after harvest, e.g., over ripening, disease, etc. Attendees at this conference will learn about the most recent fundamental research on the causes of these losses

and obtain ideas on how to prevent such losses which should save consumers money. This conference will include the following sessions and discussion leaders: Molecular Biology of Fruit Ripening, A. Bennett; Molecular Biology of Flower Senescence, R. Woodson; Fruit Softening/Cel! Wall Metabolism, D. Huber; Protection during Controlled Postharvest Handling and Storage, M. Knee; Ethylene Biosynthesis and Action, A. Mattoo; Stress Responses of Fruits and Vegetables, R. Shewfel; Controlling Postharvest Diseases, E. Chalutz; Applications of Postharvest Physiology in the Tropics, R. Paull; Future Challenges in Postharvest, A. Watada. See the February 11, 1994, issue of *Science* for information. Contact: James D. Anderson, Weed Science Laboratory, Beltsville Agricultural Research Center, Beltsville, MD 20705; telephone 301-504-6735; fax 301504- 6491.

July 17-22

Gordon Research Conference
Gravitational Effects on Living Systems
New London, New Hampshire
Sessions include: Mechanisms of sensing and responding to gravity; Amplification and transduction of the gravity signal; Analysis of gravity responses at level of single cells; Integration of gravity signal at multicellular level; Evolution/comparative physiology of gravity-sensing systems; Physiological/morphological effects of altered gravity; Microgravity research opportunities; New frontiers/challenges in gravitational biology research. More information and application forms in February 11, 1994, issue of *Science*. Contact: Stan Roux; Department of Botany; University of Texas, Austin, TX 78713; telephone 512-471-4238, fax 512-471-3878, e-mail sjrx@hermes.chpc.utexas.edu.

July 17-24

5th International Symposium
Genetics and Molecular Biology of Plant Nutrition
University of California, Davis
The symposium will offer summary papers, reports, and posters dealing with genetic and molecular biological aspects of the following and related topics: nutrient acquisition, plant nutrient requirements and responses, functional aspects and efficiency of

nutrient use, mineral composition, and tolerance of toxic ions and salts. Papers dealing with all species of crops will be welcome, as well as papers on wild species. Please refer inquiries to D. W. Rains, Department of Agronomy & Range Science, University of California, Davis, CA 95616; telephone 916-752-1711, fax 916-752-4361.

July 30-August 3

1994 Annual Meeting
American Society of Plant Physiologists
Portland, Oregon
Abstract deadline is February 28, 1994. Contact: 1994 Annual Meeting, ASPP, 15501 Monona Drive, Rockville, MD 20855-2768; telephone 310-251-0560, fax 310-279-2996.

July 31-August 4

Natural Products Research
Halifax, Nova Scotia
This will be a joint meeting of the Phytochemical Society of Europe and the American Society of Pharmacology. Contact: Professor R. F. Chandler, Director, College of Pharmacy, Dalhousie University, Halifax, Nova Scotia, Canada B3H 3J5; telephone 902-494-2097, fax 902-494-1396.

AUGUST

August 3-6

Structure, Function and Biogenesis of Chlorophyll-Protein Complexes—
A Conference Honoring the Retirement of J. P. Thornber
Sunset Village Conference Center
University of California, Los Angeles
This meeting is being organized in honor of the retirement of Professor J. P. Thornber of the Department of Biology at UCLA. The purpose of the meeting is to bring together scientists with an interest in structural and functional problems related to chlorophyll-protein complexes. Recent developments in this field will be discussed and will serve as the basis for discussions of future directions for research. Invited speakers will present lectures on the following topics: The Structure of the Bacterial Reaction Center Complex, The Structure and Function of Antenna Chlorophyll-Protein Complexes, Reaction Center Complexes in Oxygenic Organisms,

Biosynthesis of Chlorophyll-Protein Complexes, and The Structure of a Light-Harvesting Chlorophyll-Protein Complex (LHCPII). For further information, please contact: Dr. Richard Malkin, Department of Plant Biology, University of California, 111 Koshland Hall, Berkeley, CA 94720; telephone 510-642-5959, fax 510-642-4995, e-mail dickm@nature.berkeley.edu

August 3-6

Plant Growth Regulator Society of America, Annual Meeting Portland, Oregon

This meeting will be held at the Red Lion Hotel, Lloyd Center, Portland, Oregon, overlapping the ASPP annual meeting. The meetings will feature symposia and research reports on a variety of topics related to plant growth regulation. One symposium will address Genetic and Molecular Approaches in Plant Growth Regulation and will feature presentations by A. Theologis, H. Klee, R. Bensen, and T. Bleeker (Gary Gardner, U of Minnesota, organizer). A second symposium will address Roots and Plant Growth Regulation and will feature talks by P. Read, J. Riov, B. Taylor, E. Klepper, and H. Flores (Tim Davis, Texas A&M, organizer). Original research reports, which will be published in the Society's proceedings, are invited in all areas of plant growth regulation. The Society will award prizes of \$300 and \$100 for the two best student papers. For further information, contact Dr. Tom Tworokski, Program Chair, USDA, ARS, Appalachian Fruit Research Station, Kearneysville, WV 25430, telephone 304-725-3451.

August 4-6

1st International Symposium on Plant Dormancy Oregon State University, Corvallis

This interdisciplinary symposium is patterned after the NATO Advanced Research Workshop series. It will include keynote and invited speakers, contributed paper and poster sessions, extensive discussion periods, and topical workshops. It is strategically scheduled to bridge the gap between the ASPP meeting in Portland and that of the American Society for Horticultural Science in Corvallis. Session topics include: Approaches to Dormancy Research; Physiology, Biochemistry and

Gene Expression Related to (1) Temperature, (2) Hydrational Status, and (3) Photoperiodism; and Agricultural and Biotechnological Manipulation. Workshop topics include: Seed Dormancy; Bud Dormancy; Physiological, Biochemical, and Molecular Aspects of Plant Dormancy; and Control in Agricultural Cropping Systems (including breeding). Attendance will be limited by application to a maximum of about 75 participants, with a proportion of applications available to advanced graduate students and postdoctoral researchers. For additional information and/or future announcements, contact: Dr. Gregory A. Lang, 137 Julian C. Miller Hall, Louisiana State University, Baton Rouge, LA 70803-2120; telephone 504-388-1043, fax 504-388-1068.

August 7-10

91st Annual Meeting American Society of Horticultural Sciences Oregon State University, Corvallis

The meeting will take place the week following the annual ASPP meeting in Portland. The program will feature colloquia, lectures, workshops, and approximately 1000 presentations on all aspects of horticulture. The 1st International Symposium on Plant Dormancy and 2nd International Plant Breeding Symposium will be held at OSU between the ASPP and ASHS meetings. For additional information please contact Dr. Charles Boyer, Ag and Life Sciences 4017, Oregon State University, Corvallis, OR 97331-7304, telephone 503-737-5475 or e-mail boyerc@bcc.orst.edu.

August 14-19

Gordon Conference Cellular Basis of Salinity Tolerance in Plants Plymouth, New Hampshire

Organizers: M. A. Bisson and F. DuPont This new Gordon Conference is planned to explore the latest developments in cellular responses to salt stress, and to increase communication between molecular and cellular biologists and agronomists and whole-plant physiologists. Currently planned are sessions on breeding, genetics, and whole plant aspects of salt tolerance, discussion leader: E. Epstein; metabolic responses to salinity, discussion leader: J. A. C. Smith; osmoprotectants,

discussion leader: D. Rhodes; cell walls and growth responses, discussion leader: Jack Dainty; salt-induced gene expression, discussion leader: R. Bressan; hormones, discussion leader: H.-J. Bohnert; channels, discussion leader: M. A. Bisson; ATPases, discussion leader: L. Taiz; co-transport systems, discussion leader: F. DuPont. Contact: Mary A. Bisson, Department of Biological Sciences, Cooke Hall Box 601300, State University of New York at Buffalo, Buffalo NY 14260-1300; telephone 716-645-2550 or -2891, fax 716-645-2975 or -2891, e-mail biobiss@ubvms.cc.buffalo.edu.

August 29-September 1

Environmental Constraints and Oaks: Ecological and Physiological Aspects Nancy, France

This international symposium is sponsored by INRA, IUFRO, and EUROSILVA. The program will consist of six sessions, each containing invited lectures, voluntary communications, and posters. The sessions are: (1) water-stress-induced dysfunctions in oak tree physiology: effects of drought, water-logging, and associated constraints; (2) interactions between environmental constraints and pathogenesis; (3) effects of climate change and elevated CO₂ on oak physiology and ecology; (4) ecology and growth of oak stands; (5) ecological and physiological analysis of oak decline; and (6) ecological diversity and population genetics of oak species. Those interested are invited to present research results related to one of the six sessions as oral communications or posters. The proceedings will be published in a special edition of *Annales des Sciences Forestieres*. Deadline for submission of abstracts is April 16, 1994. For further information, please contact the symposium secretariat: E. Dreyer or J. Bohin, U.R. Ecophysiologie Forestiere, INRA-Nancy, F 54280, Champenoux, France; telephone 33-83-39-40-41, fax 33-83-39-40-69, e-mail quercus@nancy.inra.fr or Richard E. Dickson, Forestry Sciences Laboratory, 5985 Highway K, P.O. Box 898, Rhinelander, WI 54501; telephone 715-362-7474, fax 715-362-7816.

SEPTEMBER

September 5-9

Interdisciplinary Congress on Plant Biomechanics
Montpellier, France

Plant biomechanics is an interdisciplinary subject which contributes (a) to improve our understanding of the morphogenesis of organs and the support function of plants, (b) to analyse the relationship between mechanical functions of cultivated plants and quality aspects of crops, (c) to analyze growth, development, structure, and mechanical strength of plant systems in relation to modifications introduced by man and environment, and (d) to stimulate, in a biomimetic sense, the study of plant mechanical, structural, and responsive designs as paradigms for man-made applications. The Congress will emphasize the importance of interactions between biological, materials science and engineering aspects of plants, stressing also their relevance to agricultural, horticultural, silvicultural or industrial applications. The languages of the meeting will be French and English (a translation service will be organized during oral presentations and lectures). The program will consist of submitted papers, lectures, and roundtable discussions on adaptive mechanical design of plants, biomechanics of growth, and short-term biomechanical responses. Sponsoring organization is the French Comité National de la Recherche Scientifique. The scientific committee includes R. R. Archer, P. Baas, J. Crabbe, P. Cruziat, A. R. Ennos, B. Gardiner, D. Guitard, F. Halle, M. Jaffe, G. Jeronimidis, K. Ruel, B. Monties, V. Mosbrugger, J. C. Roland, W. Silk, T. Speck, H-Ch. Spatz, B. Thibaut, J. Vincent. To obtain further details, may contact Bernard Thibaut, LMGC "Bois," CP 81, U. Montpellier II, Place Eugene Bataillon, 34095 Montpellier Cedex, France; telephone 33 67.14.34.31, fax 33 67.54.48.52.

September 12-14

Protein Phosphorylation in Plants
Bristol, United Kingdom

Sessions will include: The role of protein phosphorylation in the regulation of plant metabolism; Cell cycle regulation; Molecular cloning of plant protein kinases; Protein phosphorylation

in signal reception and transduction. Invited speakers include: G. Hardie, C. MacKintosh, H. Nimmo, P. Gadal, C. Foyer, S. Huber, D. Inze, D. Dudits, M. Kreis, N. Halford, B. Kohorn, A. Trewavas, G. Scherer, J. R. Ecker, J. Walker. For further details, please contact P. R. Shewry, N. G. Halford, or R. Hooley, Department of Agricultural Sciences, University of Bristol, AFRC Institute of Arable Crops Research, Long Ashton Research Station, Bristol, BS18 9AF; telephone 2-75-392181; fax: 2-75-394007.

OCTOBER

October 2-6

22nd Aharon Katzir-Katchalsky Conference**Plant Molecular Biology—Potential Impact on Agriculture and the Environment**
Köln, Germany

Organizers: Jeff Schell, Ilan Chet, and Robert Fluhr. The Aharon Katzir-Katchalsky Conferences are a series of symposia on timely scientific topics. The aim of the 22nd conference is to present work in plant molecular biology that has potential agricultural and biotechnical applications. Sessions will include: Modulating Biochemical Pathways; Control of Growth; Ripening and Fertility; Natural and Engineered Resistance Genes; Environmental Interactions; Recognition and Biological Control; Signal Reception and Transduction. Contact: Secretariat 22nd AKK Conference, Aharon Katzir-Katchalsky Center, Weizmann Institute of Science, Rehovot 76100, Israel; telephone 972-8-342148, fax 972-8-474425.

October 2-6

Second International Symposium on the Applications of Biotechnology to Tree Culture, Protection, and Utilization

Minneapolis, Minnesota

This meeting is being held in conjunction with the TAPPI R&D Division Biological Sciences Symposium. Preliminary topics: commercialization of tree biotechnology; tissue culture; tree genetics, physiology and stress; tree protection (insects/diseases). Concurrent sessions with TAPPI: bioprocessing/biopulping/bioremediation; gene mapping/

molecular biology. Contributed sessions and poster presentations. For further information, please contact: Edith Franson, Executive Secretary, Tree Biotechnology Symposium, Forestry Sciences Laboratory, P.O. Box 898, Rhinelander, WI 54501; telephone 715-362-7474, fax 715-362-7816.

1995

APRIL

April 3-6, 1995

International Symposium on Weed and Crop Resistance to Herbicides
University of Cordoba, Spain

This symposium will be jointly sponsored by the European Weed Research Society and the Spanish Weed Science Society. Research on herbicide resistance mechanisms in plants is one of the most important aspects within the crop and weed-herbicide area. Identification and characterization of resistant biotypes as well as the study of their resistance mechanisms can help us to develop new strategies for weed control and to improve agricultural productivity while protecting our environment and conserving our natural resources. Important efforts are especially being directed toward the design of biopesticides and developing herbicide-tolerant crops through genetic engineering techniques. General topics: herbicide target sites and resistance mechanisms associated with them; resistance mechanisms associated with herbicide metabolism and detoxification; other resistance mechanisms; biotechnological approaches to develop herbicide resistance in crops—problems and possibilities; integrated mechanical, chemical, and biological methods for weed control—managing or avoiding resistance. Deadline for abstracts: January 30. For further information or to receive a copy of the first circular, contact Dr. J. Jorin, Departamento de Bioquímica y Biología Molecular, University of Cordoba, Apartado 3048, Cordoba, Spain; telephone 57-218439, fax 57-218563.

April 1995

Mass Spectrometry
Swansea, United Kingdom

This meeting is sponsored by the Phytochemical Society of Europe.
Contact address: Dr. C. J. Smith,
Department of Biochemistry, University
College of Swansea, Singleton Park,
Swansea SA2 8PP, UK.; telephone ++44-
(0)792-295378, fax ++44-(0)792-295447.

JULY

July 2-7, 1995

7th International Symposium on
Preharvest Sprouting in Cereals
Abashiri, Hokkaido, Japan

Specific topics will include: Physiology and molecular biology of grain development and germination; influence of environmental, physical and agronomic factors on sprouting; genetics and plant breeding; effects of sprouting damage on cereal end products. To receive a first announcement contact: Secretariat, 7th International Symposium on Preharvest Sprouting in Cereals, Kitami Agricultural Experiment Station, Kurneppu, Hokkaido 099-14, Japan, telephone 0157-47-21 46, fax 0157-47-2774 or M. K. Walker-Simmons, USDA-ARS, 209 Johnson Hall, Washington State University, Pullman, WA 99164-6420; telephone 509-335-8696, fax 509-335-8674, e-mail simmons@wsuvm1.edu.

July 4-7, 1995

9th International Rapeseed Congress
Cambridge, England

Since the last Congress in Saskatoon in 1991, interest in rapeseed has been aroused by awareness of the superior nutritional advantages of rape oil. There is also growing recognition of outlets for industrial purposes, for which the perceived benign effect on the environment is an added attraction. It is intended that the congress should cover these and other aspects of rapeseed production and utilization. Cambridge is in a major rapeseed growing area and has a distinguished background in agricultural research. The first announcement and call for papers is currently being distributed. Copies are available from the secretary: Denis Kimber, 44 Church Street, Haslingfield, Cambridge, CB3 7JE, England.

ANNUAL MEETING SYMPOSIA FALL INTO PLACE

Five Major Symposia and Six Minisymposia Planned for Portland

The program for the 1994 annual meeting in Portland, Oregon, is beginning to take shape nicely. It will include five major symposia and six minisymposia. ASPP secretary Don Ort, who serves as chair of the program committee, reports that challenging and stimulating major symposia are planned.

For the first time, one of the major symposia will have an issue orientation rather than a research orientation. The program committee decided at its spring 1993 meeting to devote one symposium each year to the general topic "Issues in Plant Biology." This year's topic will focus on plant genome sequencing and mapping and on transgenic plants. An organizer will be announced soon.

Also for the first time in 1994, the 1993 winner of the Martin Gibbs Medal will convene a symposium. When the Gibbs Medal was established by the executive committee to honor *Plant Physiology* editor emeritus Martin Gibbs, it stipulated that the winner would be invited to convene a Gibbs Medal Symposium at the succeeding year's annual meeting. Chris Somerville, first Gibbs Medal awardee,

will organize the first Gibbs Medal Symposium entitled "Molecular Basis for Phytohormone Action."

In another innovation instituted recently by the program committee, each year one of the symposia is to be organized by a representative of the editorial board of one of ASPP's two journals, *Plant Physiology* and *THE PLANT CELL*. For the summer of 1994, Brian Larkins, editor of *THE PLANT CELL*, is organizing a symposium around the subject of molecular and genetic approaches to plant biochemistry. The specific title is forthcoming.

Wendy Kuhn Silk, University of California, Davis, is the organizer of a symposium entitled "Biophysical Adaptations to Stressful Environments." Presenters and their topics will be announced later.

The fifth and final symposium is the annual President's Symposium, organized by 1994 ASPP president Russell L. Jones. His selected topic is "Unraveling the Pathway of Signal Transduction."

The topics of the six scheduled minisymposia will be announced later this spring.

CORRECTION

Incorrect contact telephone numbers for National Science Foundation program areas were printed in the November/December issue of the ASPP Newsletter. Correct numbers are listed below:

Assistant Director for Biological Sciences, 703-306-1400
Division of Environmental Biology, 703-306-1480
Ecological Studies, 703-306-1479
Systematics and Population Biology, 703-306-1481
Long-term Ecological Research, 703-306-1483

Division of Molecular and Cellular Biosciences, 703-306-1440
Genetics, 703-306-1441
Biochemistry & Biophysics, 703-306-1443
Cell Biology, 703-306-1442

Division of Integrative Biology and Neurosciences, 703-306-1420
Developmental Mechanisms, 703-306-1417
Integrative Plant Biology, 703-306-1421
Ecological and Evolutionary Physiology, 703-306-1421

Division of Biological Instrumentation and Resources, 703-306-1470
Special Projects, 703-306-1469
(DOE-NSF-USDA joint program in plant biology)
(BIO Research Training Groups program)
(Postdoctoral Fellowships program)
(Biological Databases program)
Instrumentation & Instrument Development, 703-306-1472

SEE YOU IN PORTLAND!