

# Plant Biology 2006

# Boston

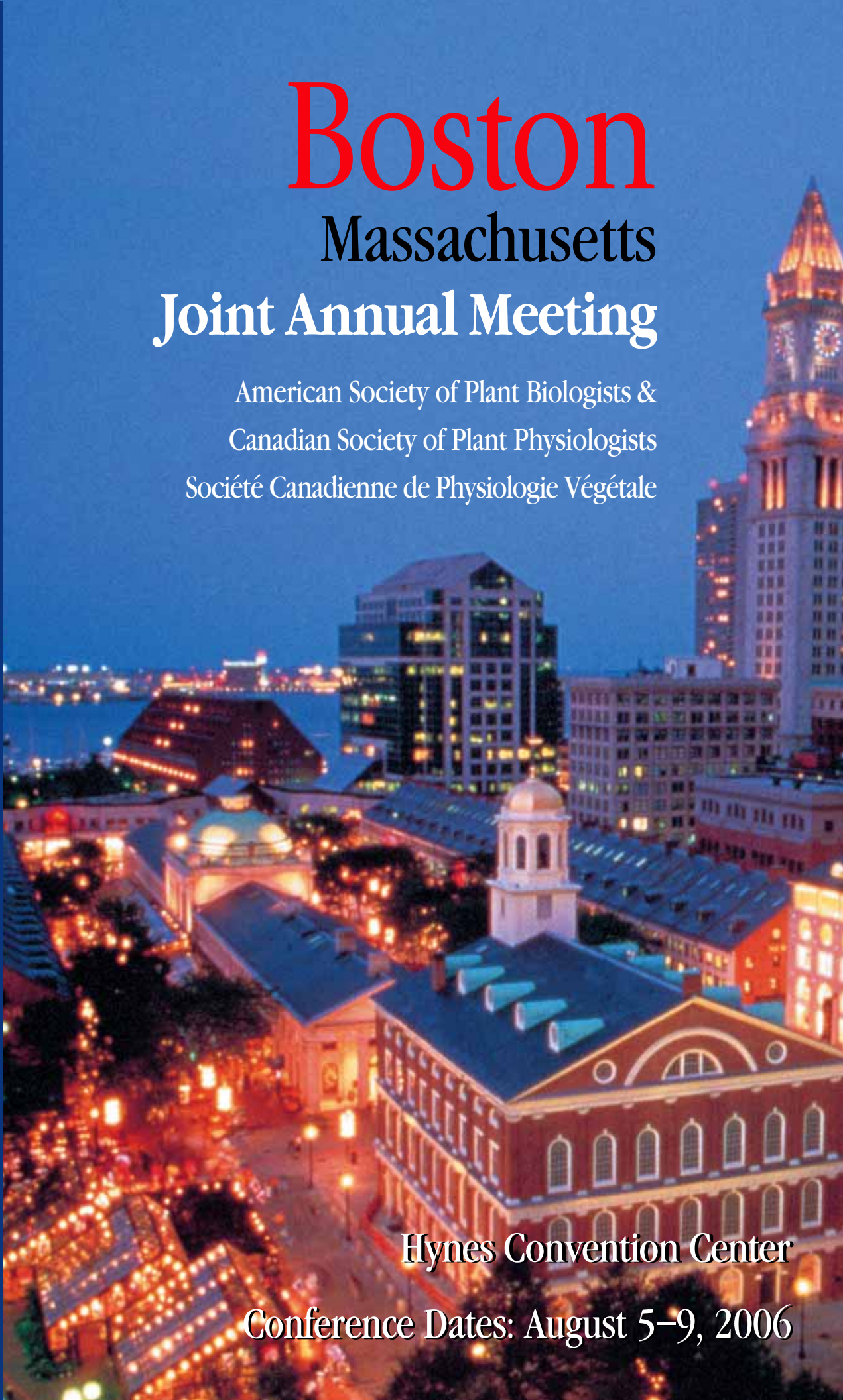
## Massachusetts

### Joint Annual Meeting

American Society of Plant Biologists &  
Canadian Society of Plant Physiologists  
Soci t  Canadienne de Physiologie V g tale

Hynes Convention Center

Conference Dates: August 5–9, 2006



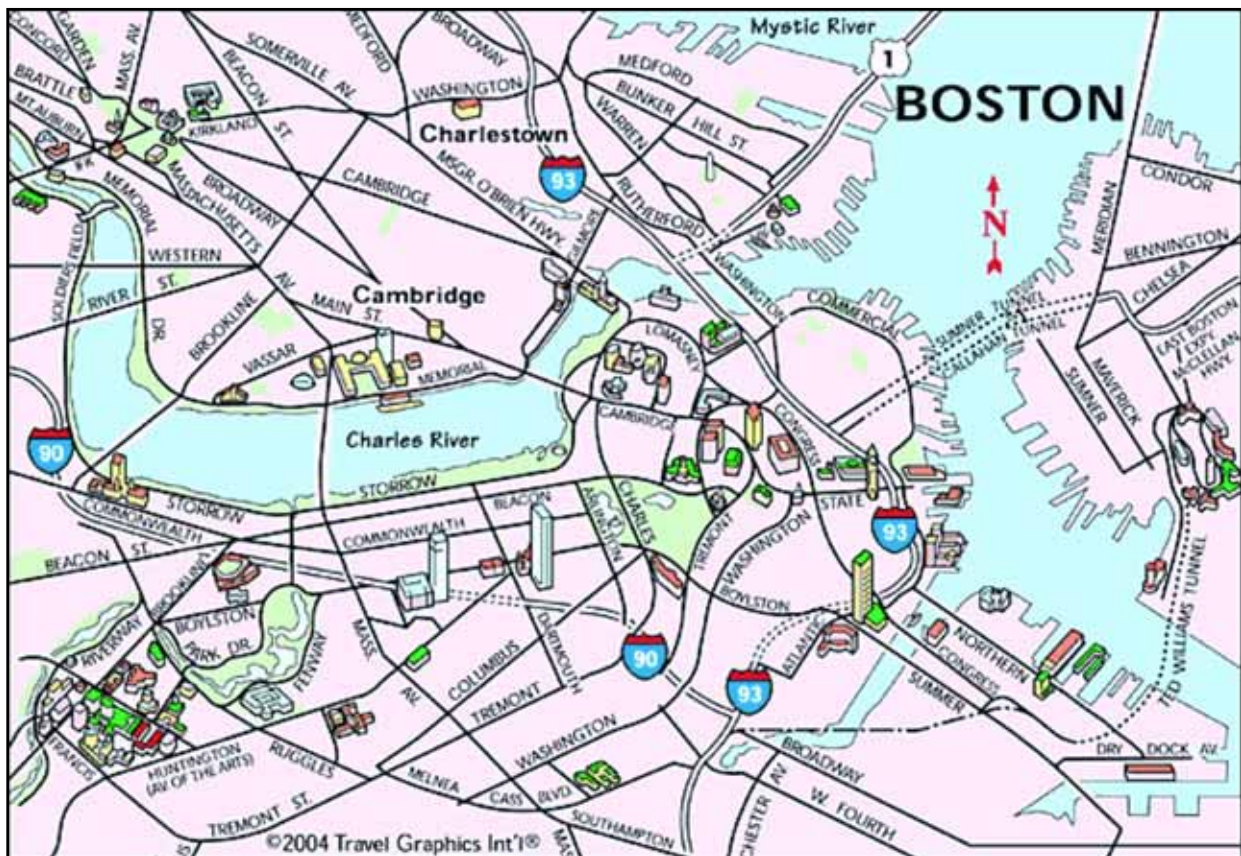
# Plant Biology 2006

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Société Canadienne de Physiologie Végétale

### Getting to know Boston

Boston bills itself as “America’s Walking City,” and walking is by far the easiest way to get around. Legend has it that the street pattern originated as a network of cow paths, but the layout owes more to 17th-century London and to Boston’s original shoreline. To orient yourself, take a look at the map.



Famous for everything from the Red Sox and Paul Revere to Cheers and clam “chowdah,” Boston is a popular city for visitors and locals. Part United States history lesson, part modern metropolis with attractions to suit every taste and interest. Plus, it’s incredibly easy to get around either on foot or by the user-friendly public transportation system called the “T”.

Boston has many great neighborhoods and the city's rich ethnic heritage covers a spectrum wider than many U.S. cities. There are over 140 languages spoken by residents from over 80 different countries. All this adds to the richness of Boston's cultural diversity providing visitors with the best of the old and the new.

This year's meeting is in the "Boston Back Bay" which has been one of the most popular neighborhoods since its creation out of a landfill in the 19th century. The area is filled with great architecture (ideal for just taking a long walk). It lies between the Public Garden, the Charles river, Kenmore Square and Huntington Avenue.

For more information on Boston visit: [www.bostonusa.com](http://www.bostonusa.com)



*Beacon Hill Street*

## The Weather

The average temperature during August is a high of 84(F) 26(C) and a low of 64(F) 17(C)

## Traveling There – ASPB'S Discount Airline Program

Over 40 airlines serve Logan International Airport with many direct and non-stop flights daily from all over the world. In fact this year we have arranged with several airlines for discounts for those traveling to Plant Biology 2006 – Visit our Web site: <http://www.aspb.org/meetings/pb-2006/airtravel.cfm>

Amtrak also runs trains direct from New York and Washington, D. C. to Boston's Back Bay Station which is .5 miles from the Hynes Center, Hilton Back Bay, and Boston Marriott Copley Plaza.

## Transportation to and from Boston's Logan Airport

### By Taxi

Journey time from downtown Boston is approximately 30 minutes, depending on traffic.

Taxi fare is about \$30 USD

### By Bus/Van Shuttle

A number of companies run services to and from the airport (some offer student discounts), including:

**Back Bay Coach** operates a shared van service from the airport to many Boston hotels. (617) 746-9909



*Bunker Hill Monument*



**City Transportation** operates from Boston hotels. (617) 561-9000

**Logan/Boston Hotel Shuttle** has services from many downtown hotels to Logan. Reservations: (877) 315-4700

**JC Transportation**, at (800) 517-2281, offers group rates from Logan International Airport. A shuttle leaves every 20 minutes from every terminal to the Boston Hotels, which include the Hilton Back Bay and the Boston Marriott. They also offer student discounts (call for current rates)

## Famous “T” (Subway System)

You can also travel from the airport via Boston’s subway for about \$1.25 USD each way. For planning your subway travel visit: <http://www.mbta.com/>

## Features and Highlights

### Plants Mitigating Global Change

**Organizer:** **Stephen P. Long**, *University of Illinois*

**Chris Somerville**, *Stanford University*

**Gerry Tuscan**, *Oakridge National Laboratories*

**Rick Dixon**, *The Samuel Noble Foundation*

The major purpose of this year’s opening symposium is to create awareness of the considerable potential of crops and croplands (especially in the US) for bioenergy (beyond corn ethanol) and increased carbon sequestration; and the role that biotechnology has to play in the accelerated development of new crops and trees for this purpose. We would like to remind attendees that this may be a key application of plant molecular biology over the next two decades. The major focus will be plants both as renewable energy sources and on manipulation of pathways so that plant root mass may be higher and residues less easily biodegraded - so more likely to result in carbon sequestration in soils.

### Symposium on Medicinal Plants and Ethnobotany

In contrast to western medicine, for many centuries indigenous cultures have treated ailments using a cornucopia of plants with medicinal value. These medicinal properties are often due to a unique chemistry produced in plants as a mechanism to survive biotic and abiotic stresses. Novel chemistry corresponds to an underlying genome, which together if further investigated, would reveal yet to be discovered drugs for daunting diseases, novel enzymes for industrial applications, and corresponding genes with metabolic engineering potential in agriculture and medicine. The field of ethnobotany explores the use of plants

for medicinal or economic value and thereby provides clues for new areas of promise in plant research as the field moves beyond model organisms.

**Speakers:** **Eloy Rodriguez**, *Cornell U.*

**Alfredo Gomez-Beloz**, *Center for World Indigenous Studies*

**Camille Tipton**, *City University of New York and The New York Botanical Garden*

**Kevin Walker**, *Michigan State U.*

**Jill Chavez**, *Cornell U.*

**Session Chair:** **Eleanore Wurtzel**, *Lehman College, City University of New York*

## **Fast Plants in Your Class**

Join Paul Williams, the father of Fast Plants, and selected K-12 teachers in a 4-hour workshop on growing and using Fast Plants, rapid-cycling Brassicas, in your classroom. This hands-on workshop will introduce you to the latest growing methods and genetic stocks for investigating growth, development and reproduction, nutrition, Mendelian and non-Mendelian and quantitative genetics, physiology, tropisms, growth regulators, and photosynthesis. K-12 teachers attending the workshop will provide perspectives on what works and what is needed for plant science in their classroom. All resources used in the workshop will be referenced to [www.fastplants.org](http://www.fastplants.org). The workshop is limited to 24 participants, including invited teachers.

## **Using Case Studies to Augment Science Teaching**

**Susannah Gal**

*Associate Professor, Biological Sciences*

*Binghamton University, New York*

Much of scientific classroom material is presented to students without providing them ways of seeing the applicability of the material to their every day life. Case studies are a way to cover content and put a personal spin on the topic to make the learning fun and personally rewarding. A group at SUNY Buffalo has collected a large number of these cases useable in many different scientific courses including plant biology, biotechnology, molecular biology and biochemistry (see <http://ublib.buffalo.edu/libraries/projects/cases/case.html>). This workshop will introduce participants to these cases by having them go through one as a student. This active learning approach will be discussed with regard to the other cases available at SUNY-Buffalo so that participants can consider incorporating one or more in future classes.

Susannah Gal has written two cases for the SUNY-Buffalo collection. She has used these cases in molecular biology and cell biology classes for 5 years and feels they are a great way to engage the students in learning the course material. This workshop has been made possible with support from the National Science Foundation under Grant No. 0341279. Any opinions, findings and conclusions or recommendations expressed are those of the workshop leader and do not necessarily reflect the views of the National Science Foundation.

## Preparing Digital Art

**Mike Hepp**

*The Sheridan Group*

Submitting papers for publication in the “Digital Age” is faster and more convenient than ever. However, preparing digital figures can be a challenge. Given the different kinds of software available and the variety of figure types, it’s difficult to know how to create figures that will provide the quality needed for publication.

Mike Hepp from The Sheridan Group, which produces *Plant Physiology* and *The Plant Cell*, will present an overview of the best ways to create and submit your figures. This presentation will give you an understanding of digital art from the ground up, including tips on how to design figures with the proper resolution, file type, and color space.

The session will also address the use of preflight tools available online and integrated through Bench>Press, the peer review system used by ASPB’s journals.

Bring your questions! There will be plenty of time to share your own experiences creating digital art.



*Fenway Park*

## Events:

**Opening Reception and Mixer In Exhibit Hall** – Complimentary for attendees;  
Non-registered guests \$10

**“Boston Tea Party”** – Complimentary reception sponsored by ASPB Sections – Meet  
the Editor of Plant Physiology, Don Ort – Complimentary for attendees

**Undergraduate Networking Poster Session** – Complimentary for attendees

**Small Colleges/Primarily Undergraduate Institutions (PUI) Networking  
Breakfast** (Pre-register - attendance is limited) \$10 per person

**Minority Affairs Committee Sponsored Speaker and Luncheon** (Pre-register -  
attendance is limited) \$20 per person; Post-docs & students: \$12 per person (subsidized)

**Career Workshop I: Where Are the Jobs?**

\$10 per person; (Attendance is very limited - must pre-register - register for only one  
career workshop)

**Career Workshop II: Getting and Keeping a Job**

\$10 per person; (Attendance is very limited - must pre-register - register for only one  
career workshop)

**Women in Plant Biology Committee Sponsored Speaker and Luncheon**

(Pre-register - attendance is limited) \$20 per person; Post-docs & students: \$12 per  
person (subsidized)

**Plant Runners Stampede – 5k Fun Run** (Each participant receives a complimenta-  
ry Plant Biology 2006 T-shirt–limited to 30 people.) \$30 per person - Jump start your  
day with a 5-km run

**Final Farewell Reception** – Complimentary for attendees; Non-registered guests \$10  
Beer, snacks, and music...say goodbye to all your colleagues



*Commonwealth Avenue*

# The Daily Schedule

## SATURDAY August 5

7:00 AM	9:00 PM	Registration Open with Coffee
7:00 AM	9:00 PM	Speaker Ready Room Open
9:00 AM	1:00 PM	Plant Cell Ed Board
9:00 AM	5:00 PM	Exhibitor & Poster Setup
11:00 AM	Noon	Undergraduate Networking Poster Session
11:00 AM	Noon	ASPB Section Tea Party
1:00 AM	2:00 PM	President's Opening Address & Awards Ceremony
2:00 PM	4:00 PM	ASPB Awardees of Hales, Bogorad & Shull Symposium <i>Speakers: Bob Buchanan - 2005 Hales Award, 2006 Bogorad Award Winner, Krishna Niyogi - 2005 Shull Award</i>
4:00 PM	4:20 PM	Coffee Break
4:20 PM	6:20 PM	Plants Mitigating Global Change
7:30 PM	8:30 PM	Perspectives of Science Leaders
8:30 PM	10:30 PM	Opening Reception/Mixer in Exhibit Hall

## SUNDAY, August 6

7:00 AM	8:30 AM	Small Colleges/PUI Networking Breakfast
7:00 AM	6:00 PM	Registration Open
7:00 AM	6:00 PM	Speaker Ready Room Open
7:00 AM	11:00 PM	Posters Open
8:30 AM	11:40 AM	Major Symposium: Gibbs Medal, Genome Scale Biology <i>Organizer: Joseph Ecker</i>
9:30 AM	6:00 PM	Exhibits Open
12:00 PM	2:00 PM	Minority Affairs Luncheon
2:00 PM	5:10 PM	Major Symposium: Legumes - Genomes to Biology <i>Organizer: Douglas R. Cook</i>
3:40 PM	4:10 PM	Coffee Break
5:10 PM	7:10 PM	Exclusive Poster & Exhibit Session All even number abstracts 5:10 - 6:10 PM; odd number abstracts 6:10 - 7:10 PM

6:00 PM	7:00 PM	USDA Reception in Exhibit Hall
7:10 PM	9:40 PM	Education Workshop
7:10 PM	11:00 PM	Career Workshop I: Where Are the Jobs?
7:10 PM	11:00 PM	Career Workshop II: Getting and Keeping a Job
8:40 PM	10:10 PM	Digital Art Workshop

## MONDAY August 7

7:00 AM	11:00 PM	Posters Open
8:00 AM	4:30 PM	Registration Open
8:00 AM	4:30 PM	Speaker Ready Room Open
8:30 AM	11:40 AM	CSPP's President's Symposium: Tree Physiology & Genomics <i>Organizer: Dr. Robert D. Guy</i>
9:30 AM	2:00 PM	Exhibits Open
12:00 PM	2:00 PM	WIPB Luncheon
12:30 PM	2:00 PM	TAIR Workshop I
2:00 PM	3:40 PM	Minority Affairs Symposium: Medicinal Plants and Ethnobotany Minisymposium <i>Organizer: Elli Wurtzel</i>
2:00 PM	3:40 PM	Mini Symposia (4)
3:40 PM	4:10 PM	Coffee Break
4:10 PM	5:50 PM	Mini Symposia (5)
7:00 PM	8:30 PM	Grantsmanship Workshop
7:00 PM	8:30 PM	Case Studies in Classrooms
7:00 PM	8:30 PM	Application of Protoplast Systems Workshop - Jen Sheen
8:30 PM	11:00 PM	Exclusive Poster & Exhibit Session All odd number abstracts 9:00 - 10:00 PM; even number abstracts 10:00 - 11:00 PM



*Old State House*

## **TUESDAY August 8**

6:00 AM	7:45 AM	Plant Runners Stampede - 5 K Fun Run
7:00 AM	11:00 PM	Posters Open
8:00 AM	4:00 PM	Speaker Ready Room Open
8:00 AM	4:00 PM	Registration Open
8:30 AM	11:40 AM	Major Symposium: Ion Channels and Cellular Signaling <i>Organizer: Julian I. Schroeder</i>
9:30 AM	2:00 PM	Exhibits Open
12:30 PM	2:00 PM	TAIR Workshop II
2:00 PM	7:00 PM	Exhibitor Break Down
2:00 PM	3:40 PM	Mini Symposia (5)
3:40 PM	4:10 PM	Coffee Break
4:10 PM	5:50 PM	Mini Symposia (5)
7:00 PM	11:00 PM	Final Party – Disco Night! Wear your 70's clothes

## WEDNESDAY, August 9

7:00 AM	2:00 PM	Posters Open (remove posters by 2 pm)
8:00 AM	12:00 PM	Speaker Ready Room Open
8:00 AM	12:00 PM	Registration Open
8:30 AM	10:10 AM	Mini-Symposia (5)
10:10 AM	10:40 AM	Coffee Break
10:40 AM	12:20 PM	Mini Symposia (4)
12:30 PM	2:00 PM	CSSP Annual Business Meeting
1:00 PM	2:00 PM	ASPB Annual Business Meeting
2:00 PM	5:10 PM	ASPB's President's Symposium: Plant Responses to the Environment <i>Organizer: Michael F. Thomashow</i>



*Arnold Arboretum*

**See you in Boston** – Don't miss the sessions, the networking, and a chance to enjoy a great city . . . Register online at: <http://www.aspb.org/meetings/pb-2006/>

# Plant Biology 2006

**Joint Annual Meeting**